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Appendix C.1: General Biological Assessment



**GENERAL BIOLOGICAL ASSESSMENT
FOR
ASSESSOR'S PARCEL NUMBERS
3064-581-02 & 03**

**CITY OF HESPERIA
SAN BERNARDINO COUNTY, CALIFORNIA**

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1.0 Introduction

Hernandez Environmental Services (HES) was retained by EPD Solutions, Inc. to perform a General Biological Assessment (GBA) on an approximately 18.26-acre site comprised of San Bernardino County Assessor's Parcel Numbers (APNs) 3064-581-02 and 03. The purpose of the GBA is to document the presence/absence of sensitive resources that may be present on the site, to document existing habitats, and generally address biological questions that may be needed for project approval. This GBA will present the results obtained from the field survey and will provide recommendations that may be needed to mitigate potential biological impacts from project activities.

1.1 Project Location

The proposed project site is located west of Interstate 15 Freeway on the northwest corner of the intersection of Poplar Street and Mesa Linda Street within the City of Hesperia, San Bernardino County, California (Figures 1 and 2, *Location Map* and *Vicinity Map*). Specifically, the project site is located within Section 22, Township 4 North, Range 5 West, San Bernardino Base and Meridian (SBB&M) of the *Baldy Mesa* United States Geological Survey (USGS) 7.5-minute topographic quadrangle. The project site center point latitude and longitude are 34°25'06.3370" North and 117°23'30.7785" West.

1.2 Project Description

The proposed project consists of the construction of a warehouse and associated offices, trailer stalls, auto stalls, and landscaping. The total impact area for the proposed development is 18.26 acres (Figure 3, *Project Plans*).

2.0 Methodology

2.1 Literature Review

HES conducted a literature review and reviewed aerial photographs and topographic maps of the project location and surrounding areas. The following USGS quads were used to query the California Natural Diversity Database (CNDDB): *Baldy Mesa*, *Phelan*, *Shadow Mountains SE*, *Adelanto*, *Victorville*, *Hesperia*, *Silverwood Lake*, *Cajon*, and *Telegraph Peak*. The United States Fish and Wildlife Service (USFWS) County Endangered Species Lists and CNPS Rare Plant Inventory were reviewed to obtain species information for the project area.

2.2 Field Survey

On October 27, 2021, HES conducted a field survey of the 18.26-acre project site. Ambient

temperature at 1:45 PM was 67° Fahrenheit, sunny, with winds ranging from 0 to 7 miles per hour from the north. The purpose of the field survey was to document the existing habitat conditions, obtain plant and animal species information, view the surrounding uses, assess the potential for state and federal waters, assess the potential for wildlife movement corridors, and assess for the presence of critical habitat constituent elements.

The entire 18.26-acre project site was surveyed. Linear transects approximately 50 feet apart were walked for 100 percent coverage. All species observed were recorded and Global Positioning System (GPS) way points were taken to delineate specific habitat types, species locations, state or federal waters, or any other information that would be useful for the assessment of the project site. A comprehensive list of all plant and wildlife species that were detected during the field survey within the project site is included in Appendix A, *Observed Species List*. Sensitive plant and wildlife species with the potential to occur within the project area are listed in Appendix B, *Potential Species List*. Representative site photographs were taken and are included within Appendix C, *Site Photographs*.

3.0 Results

3.1 Environmental Setting

The project site consists of disturbed native desert scrub characterized by Joshua tree woodland alliance habitat. The project site is bordered by vacant land in all directions, a dirt path to the west and north, and Mesa Linda Street to the east. An ephemeral stream traverses the site. The stream is an unnamed tributary that contributes to the Oro Grande Wash, which flows north toward the Mojave River and eventually flows into Soda Dry Lake in the Mojave Desert. The project site is flat with elevations ranging from 1,092 feet above mean sea level (AMSL) to 1,096 feet AMSL.

3.2 Soils

According to the USDA Web Soil Survey, soil at the project site is classified as Hesperia loamy fine sand (134), 2 to 5 percent slopes (Appendix D, *Soils Map*).

3.3 Habitat Communities

Two habitat types were observed within the project site, including 15.71 acres of disturbed Joshua tree woodland alliance and 2.55 acres of rabbitbrush (*Ericameria nauseosa*) dominant riparian habitat (Figure 4, *Habitat Map*).

Disturbed Joshua Tree Woodland Alliance

Approximately 15.71 acres of disturbed Joshua tree woodland alliance habitat occurs within the

project site. This habitat type is characterized by the Joshua tree (*Yucca brevifolia*) that emerges over a shrub or grass layer. The canopy and shrub layer are open. Other species found in this habitat are Nevada ephedra (*Ephedra nevadensis*), shortpod mustard (*Hirschfeldia incana*), California juniper (*Juniperus californica*), and prickly Russian thistle (*Salsola tragus*).

Rabbitbrush Dominant Riparian

Approximately 2.55 acres of rubber rabbitbrush dominant riparian habitat occurs within the project site. This habitat is characterized by an ephemeral stream and associated riparian vegetation. Other species found in this habitat include the Joshua tree and shortpod mustard.

3.4 Sensitive Biological Resources

A total of 30 sensitive species of plants and 51 sensitive species of animals has the potential to occur on or within the vicinity of the project location. These include those species listed or candidates for listing by the U. S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW) and California Native Plant Society (CNPS) and Bureau of Land Management (BLM). All habitats utilized by these species was evaluated during the site visit and a determination has been made for the presence or probability of presence in this report. This section will address those species listed as Candidate, Rare, Threatened, or Endangered under the state and federal endangered species laws or directed to be evaluated under other state, county, or municipal regulations. Other special status species will be reported in Appendix B, *Potential Species List*.

3.4.1 Special Status Plants

Two plant species are listed as state and/or federally Threatened, Endangered, Candidate, Rare, or as 1B.1 in the CNPS Rare Plant Inventory. One other sensitive species has a potential to exist on the project site. The following is a description of these species:

Mojave tarplant

Mojave tarplant (*Deinandra mohavensis*) is a state listed Endangered Species and is ranked 1B.3 in the CNPS Rare Plant Inventory. This species is typically found in low sand bars in riverbeds and most commonly in riparian or ephemeral grassy areas. Its habitat includes chaparral, coastal scrub, and riparian scrub. No habitat for this species is present on the project site. **This species is not present.**

Jokerst's monardella

Jokerst's monardella (*Monardella australis* ssp. *jokerstii*) is ranked 1B.1 in the CNPS Rare Plant Inventory. This species is typically found along steep slopes between breccia or along alluvial benches near drainages and washes. It inhabits coniferous forest and chaparral habitats. No habitat for this species is present on the project site. **This species is not present.**

Western Joshua tree

Western Joshua tree (*Yucca brevifolia*) is listed as a Candidate Species under the California Endangered Species Act (CESA), which requires authorization under CESA for any take of the species (including removal of western Joshua tree or similar actions). This species is generally found at moderate elevations in the Mojave Desert between creosote bush scrub and pinyon-juniper woodlands. Suitable habitat is present on the project site. This species is present.

3.4.2 Other Sensitive Plants

Booth's evening-primrose

Booth's evening-primrose (*Eremothera boothii* ssp. *boothii*) is ranked 2B.3 in the CNPS Rare Plant Inventory. It is found in Joshua tree woodland and pinyon and juniper woodland. Suitable habitat for this species is present on the project site. **This species has the potential to be present.**

3.4.3 Sensitive Wildlife

A total of nineteen wildlife species are listed as state and/or federal threatened, endangered, or candidate species. Sensitive species which have a potential to occur will also be discussed in this section. All sensitive species within a 5-mile radius of project area were reviewed and a complete list of those species are discussed in in Appendix B, *Potential Species List*.

Tricolored blackbird

Tricolored blackbird (*Agelaius tricolor*) is a state listed Threatened Species and listed by the CDFW as a Species of Special Concern. Its habitat includes freshwater marsh, marsh and swamp, swamp, and wetland. This species is largely endemic to California and is most numerous in and around Central Valley. This species requires open accessible water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony. There is no habitat for this species on the project site. **This species is not present.**

Arroyo toad

Arroyo toad (*Anaxyrus californicus*) is a federally listed Endangered Species and a CDFW Species of Special Concern. The most favorable breeding habitat for this species consists of slow-moving shallow pools, nearby sandbars, and adjacent stream terraces. Its habitat includes desert wash, riparian scrub, riparian woodland, south coast flowing waters, and south coast standing waters. There is no habitat for this species on the project site. **This species is not present.**

Coastal whiptail

Coastal whiptail (*Aspidoscelis tigris stejnegeri*) is a CDFW Species of Special Concern. It is

typically found in hot, dry, flat open spaces in deserts or semi-arid areas. Suitable habitat for this species is present on the project site. **This species has the potential to be present.**

Burrowing owl

Burrowing owl (*Athene cunicularia*) is a CDFW Species of Special Concern. Its habitat includes coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, and valley and foothill grassland. This species is typically found in open and dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. It is a subterranean nester and is dependent upon burrowing mammals, most notably the California ground squirrel. Suitable habitat for this species is present on the project site. Focused burrowing owl surveys were performed on site in 2022 (see Appendix H, *Focused Burrowing Owl Survey Report*). No burrowing owl sign or burrowing owl were found to occur on site, and it was determined that burrowing owl are not currently occupying the site. **This species is not present.**

Swainson's hawk

Swainson's hawk (*Buteo swainsoni*) is a state listed Threatened Species. This species favors open grasslands for foraging but also occurs in agricultural settings. It relies on scattered stands of trees near agricultural fields and grasslands for nesting sites. Its habitats include great basin grassland, riparian forest, riparian woodland, and valley and foothill grassland. The project site does not contain suitable habitat for this species. **This species is not present.**

Southern rubber boa

Southern rubber boa (*Charina umbratica*) is a state Threatened Species. It is known to inhabit a variety of forest habitats from the San Bernardino and San Jacinto Mountains. This species resides near streams or wet meadows and requires loose, moist soil for burrowing. The project site does not contain suitable habitat for this species. **This species is not present.**

Western yellow-billed cuckoo

Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) is a federally listed Threatened and state listed Endangered Species. This species typically nests in riparian jungles of willows, often mixed with cottonwoods, with a lower story of blackberry, nettles, or wild grape. It is found in riparian forest habitat. The project site does not contain suitable habitat for this species. **This species is not present.**

Southwestern willow flycatcher

Southwestern willow flycatcher (*Empidonax traillii extimus*) is a federally and state listed Endangered Species. It is found in riparian woodland habitat in southern California. The project site does not contain suitable habitat for this species. **This species is not present.**

Quino checkerspot butterfly

Quino checkerspot butterfly (*Euphydryas editha quino*) is a federally listed Endangered Species. It is found in chaparral and coastal sage scrub. This species requires high densities of food plants, including *Plantago erecta*, *P. insularis*, and *Orthocarpus purpurescens*. The project site does not have suitable habitat for this species. **This species is not present.**

Desert tortoise

The desert tortoise (*Gopherus agassizii*) is a state and federally Threatened Species. It is found in different types of desert habitats from sandy flats to rocky foothills. It prefers alluvial fans, washes, and canyons with friable soils. Suitable habitat for this species is present on the project site. Focused surveys for this species completed by HES biologists determined the desert tortoise is not present on the project site (see Appendix G, *Desert Tortoise Presence/Absence Report*). **This species is not present.**

Bald eagle

Bald eagle (*Haliaeetus leucocephalus*) is a state listed Endangered and CDFW Fully Protected Species. This species is found in lower montane coniferous forest and old-growth. They nest in large old-growth or tress with open branches, especially ponderosa pine. The project site does not contain suitable habitat for this species. **This species is not present.**

Loggerhead shrike

Loggerhead shrike (*Lanius ludovicianus*) is a CDFW Species of Special Concern. This species prefers open country for hunting, with perches for scanning, and dense shrubs and brush for nesting. Its habitat includes broadleaved upland forest, desert wash, Joshua tree woodland, Mojavean desert scrub, pinon and juniper woodlands, riparian woodland, and Sonoran Desert scrub. Suitable habitat for this species is present on the project site. **This species has the potential to be present.**

Coast horned lizard

Coast horned lizard (*Phrynosoma blainvillii*) is a CDFW Species of Special Concern. This species is found in coastal sage scrub, coastal bluff scrub, chaparral, cismontane woodland, desert wash, pinon and juniper woodlands, riparian scrub, riparian woodland, and valley and foothill grassland. This species thrives in open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants and other insects. Suitable habitat for this species is present on the project site. **This species has the potential to be present.**

California red-legged frog

California red-legged frog (*Rana draytonii*) is a federally listed Threatened Species and a CDFW

Species of Special Concern. Its habitat includes aquatic, artificial flowing waters, artificial standing waters, freshwater marsh, marsh and swamp, riparian forest, riparian scrub, riparian woodland, Sacramento, and San Joaquin flowing and standing waters, and south coast. It requires 11 to 20 weeks for larval development and must have access to estivation habitat. It is commonly found in lowlands and foothills, in or near permanent sources of deep water, with dense, shrubby, or emergent riparian vegetation. The project site does not contain suitable habitat for this species. **This species is not present.**

Southern mountain yellow-legged frog

Southern mountain yellow-legged frog (*Rana muscosa*) is a federally and state listed Endangered Species and a CDFW Watch List Species. It is found in aquatic habitat. This species is always encountered within a few feet of water. Tadpoles may require two to four years to complete their aquatic development. The project site does not contain suitable habitat for this species. **This species is not present.**

Mojave tui chub

Mojave tui chub (*Siphateles bicolor mohavensis*) is a federally and state Endangered Species and a CDFW Fully Protected Species. It inhabits pools, ponds, or sloughs in the Mojave River basin and needs vegetation for spawning. The project site does not contain suitable habitat for this species. **This species is not present.**

Le Conte's thrasher

Le Conte's thrasher (*Toxostoma lecontei*) is a CDFW Species of Special Concern. This species nests in dense, spiny shrub or densely branched cactus in desert wash habitats. It also resides in alkali desert scrub and succulent scrub habitats. Suitable habitat for this species is present on the project site. **This species has the potential to be present.**

Least Bell's vireo

Least Bell's vireo (*Vireo bellii pusillus*) is a federally and state listed Endangered Species. This species is found in riparian forest, riparian scrub, and riparian woodland. Nesting habitat of this species is restricted to willow and/or mulefat dominated riparian scrub along permanent or nearly permanent streams. The project site does not contain suitable habitat for this species. **This species is not present.**

Mojave ground squirrel

The Mojave ground squirrel (*Xerospermophilus mohavensis*) is a state Threatened Species. It is found in Chenopod scrub, Joshua tree woodland and Mojavean Desert scrub. It prefers sandy to gravelly soils, avoids rocky areas, and uses burrows at the base of shrubs for cover. Its nests are found in burrows. Suitable habitat for this species is present on the project site. Focused surveys

for Mohave ground squirrel (MGS) were performed on site in 2022. No MGS were observed or captured during the 2022 focused MGS survey. It was determined that implementation of the proposed project will not result in the loss of individual MGS or adversely affect local or regional MGS populations (see Appendix I, *Mohave Ground Squirrel Habitat Assessment Survey Results*). **This species is not present.**

3.5 Critical Habitat

The proposed project site is not located within any designated federal critical habitat. The closest federal critical habitat is arroyo toad critical located 6.77 miles south of the project site, across Interstate 15 Freeway and Highway 138.

3.6 Migratory Nesting Birds

Migratory non-game native bird species are protected under the federal Migratory Bird Treaty Act. Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests. The entire 9.77-acre study area has shrubs that can be used by nesting songbirds during the nesting bird season of February 1 to September 15.

3.7 Wildlife Movement Corridors

Wildlife movement corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbances. The project site was evaluated for its function as a wildlife corridor that species would use to move between wildlife habitat zones. Usually, mountain canyons or riparian corridors are used by wildlife as corridors. The project site is flat and surrounded by paved and dirt roads and vacant land. No wildlife movement corridors were found to be present on the project site.

3.8 Other City, County, Regional, State, or Federal Conservation Plans

The project site is within the Desert Renewable Energy Conservation Plan, but it is not within any major land allocations for conservation of a specific species or resource. The project is required to comply with the California Desert Native Plants Act and the City of Hesperia Protected Native Vegetation Policy. A Desert Native Plants Survey for the City of Hesperia was conducted onsite on October 27, 2021. The survey found a total of 25 protected native desert plants consisting of the Joshua tree. See Appendix E, *Desert Native Plant Survey Report*.

3.9 Jurisdictional Waters

The approximately 18.26-acre project site contains 2.55 acres of ephemeral stream and associated rabbitbrush dominant riparian habitat that falls under CDFW jurisdiction, as well as

0.49 acre of ephemeral stream that falls under Waters of the United States and Waters of the State jurisdiction.

4.0 Project Impacts

4.1 Impacts to Habitat Types

The proposed project will impact approximately 18.26 acres, including 15.71 acres of disturbed Joshua tree woodland alliance and 2.55 acres of rabbitbrush dominant riparian habitat (Figure 5, *Impact Map*).

4.2 Impacts to Sensitive Species

4.2.1 Impacts to Sensitive Plants

Booth's evening-primrose

Booth's evening-primrose is ranked 2B.3 in the CNPS Rare Plant Inventory. The project site contains potential suitable habitat for this species in the Joshua tree woodland alliance habitat. Implementation of the proposed project has the potential to impact this species.

Western Joshua Tree

Western Joshua tree is listed as a Candidate Species under the California Endangered Species Act (CESA). The project site does contain suitable habitat for this species. Therefore, implementation of the proposed project will impact this species on the project site. A take may be authorized by the CDFW under a 2081 incidental take permit. The Project activities described above are expected to result in incidental take of 25 individuals of the Covered Species include removal of individuals and roots; clearing vegetation; grading and placing of fill; compacting dirt and building a single-family residential development. The proposed Project activities will directly impact approximately 12.6 acres of habitat associated with the 25 individual Joshua trees.

4.2.2 Impacts to Sensitive Wildlife

Coastal whiptail

Coastal whiptail is a CDFW Species of Special Concern. The project site contains potential suitable habitat for this species in the dry desert habitat. Implementation of the proposed project has the potential to impact this species.

Loggerhead shrike

Loggerhead shrike is a CDFW Species of Special Concern. The project site contains potential suitable habitat for this species in the Joshua tree woodland alliance habitat. Implementation of the proposed project has the potential to impact this species.

Coast horned lizard

Coast horned lizard is a CDFW Species of Special Concern. The project site contains potential suitable habitat for this species in the juniper woodland habitat. Implementation of the proposed project has the potential to impact this species.

Le Conte's thrasher

Le Conte's thrasher is a CDFW Species of Special Concern. The project site contains potential suitable habitat for this species in the desert scrub habitat. Implementation of the proposed project has the potential to impact this species.

4.3 Impacts to Critical Habitat

The project site is not located within designated federal critical habitat. The closest federal critical habitat is arroyo toad critical located 6.77 miles south of the project site, across Interstate 15 Freeway and Highway 138. No impacts to critical habitat are expected to occur.

4.4 Impacts to Migratory Nesting Birds

Migratory nongame native bird species are protected under the federal Migratory Bird Treaty Act. Additionally, Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests. If vegetation removal and other ground disturbance activities can be conducted outside of the recognized nesting bird season (February 15 through September 15), impacts to nesting birds is not expected.

If work cannot be avoided during the nesting bird season, prior to initiation of project activities that would remove vegetation or otherwise disturb nesting activity (for instance, mobilization of heavy equipment), work associated with project activities have the potential to impact nesting birds.

4.5 Impacts to Jurisdictional Waters

Impacts to the 2.55 acres of CDFW jurisdictional waters will require a 1602 Streambed Alteration Agreement from the CDFW. Impacts to the 0.49 acre of WUS will require a USACE Section 404 permit and Regional Water Quality Control Board (RWQCB) Section 401 Water Quality Certification under the Clean Water Act. Impacts to the 0.49 acres of Waters of the State are covered by Section 401 State Water Quality Certification from the RWQCB.

5.0 Recommendations

Based upon the findings of this report, it is recommended that the following measures be implemented as part of the project to avoid, minimize, or compensate for the anticipated impacts from project activities:

The following species listed are considered protected species under the California Endangered Species Act (CESA; Fish & G. Code § 2050 et seq.) and/or the Endangered Species Act (ESA; 16 U.S.C. § 1531 et seq.); as State-listed rare plant species; or any other species for which take is prohibited under state or federal law. shall be mitigated by having a qualified biological monitor present on the site during all ground disturbing activities to ensure no direct or indirect take of these species.

5.1 SENSITIVE PLANT SPECIES

Western Joshua tree

A focused survey for the western Joshua tree and additional desert native plants was conducted by an approved biologist on October 27, 2021, to determine the presence or absence of species on the project site and potential impacts resulting from implementation of the proposed project. The survey identified 25 Joshua trees onsite and 17 Joshua trees offsite but within 186 feet of the project impact boundary.

The western Joshua tree is listed as a Candidate Species and protected from unauthorized take under CESA Section 2081. The western Joshua tree has full protection under CESA and any take of the species (including removal of western Joshua tree or similar actions) will require authorization under CESA. A take may be authorized by the CDFW under a 2081 incidental take permit. Impacts to Joshua tree can be mitigated through the purchase of land credits within Antelope Valley Conservation Bank or other CDFW approved mitigation bank that are established to permanently protect a population of Joshua tree. Alternatively, the project can provide for both the permanent protection and management of purchased lands containing western Joshua tree.

Booth's evening primrose

Focused surveys for Booth's evening primrose shall be conducted by an approved biologist prior to any ground disturbing activities to determine the presence or absence of the species on the project site and potential impacts resulting from implementation of the proposed project.

Sensitive Plant Species	Blooming Period
Booth's evening primrose	June-August

In the case that Booth's evening-primrose is found to occur on site, impacts to the species can be mitigated through the purchase of land credits within the Antelope Valley Conservation Bank or other CDFW approved mitigation bank with documented occurrences of Booth's evening-primrose. Alternatively, the project can provide for both the permanent protection and management of purchased lands suitable for planting Booth's evening-primrose. A habitat mitigation and monitoring plan (HMMP) that outlines the methods for planting, restoration, and management activities will be required.

5.2 SENSITIVE WILDLIFE

Due to the presence of suitable burrowing owl habitat on site, a qualified biologist shall conduct a preconstruction survey within 30 days prior to the initiation of construction to ensure no burrowing owl have colonized on site.

Coast horned lizard and coastal whiptail shall be mitigated by having a qualified biological monitor present on the site during all ground disturbing activities that would remove vegetation or otherwise disturb potential habitat. If the species occurs onsite during project activities, the biologist will have the authority to stop work to allow the species time to evacuate the project site. If coast horned lizard or coastal whiptail is encountered and cannot be avoided until they voluntarily leave the work area, the biological monitor can determine if relocation is appropriate. Relocation will consist of the biological monitor safely capturing the coast horned lizard or whiptail and placing them in a bucket or corralling them into a bucket. The lizard will then be placed in adjacent suitable habitat that is not to be impacted by the proposed project in a shaded area.

5.3 NESTING BIRDS

If ground disturbing and vegetation clearing activities cannot be avoided during the nesting bird season (February 15 through September 15), a qualified biologist should conduct a pre-construction nesting bird survey within all areas of breeding/nesting habitat within and adjacent to the project site prior to initiation of project activities that would remove vegetation or otherwise disturb nesting activity (for instance, mobilization of heavy equipment). Surveys should be conducted not more than 3 days prior to initiation of activities.

If nesting birds are encountered, a qualified biologist will establish an avoidance buffer zone around the nest (buffer zones vary according to species involved and shall be determined by the

qualified biologist). No activities that would adversely affect the nest shall occur within the buffer zone until the qualified biologist has determined the nest is no longer active and the young are no longer dependent on the nest.

5.4 STATE AND FEDERAL DRAINAGES

USACE, CDFW, and RWQCB jurisdictional waters are regulated by federal, state, and local governments under a no-net-loss policy, and all impacts are considered significant and should be avoided to the greatest extent possible. To ensure no-net-loss of state and federal waters impacts to onsite jurisdictional waters and associated habitat will be mitigated for at a minimum of 1:1. The final mitigation ratio will be determined through consultation with the agencies during the permitting process. Impacts to jurisdictional waters require mitigation through habitat creation, restoration, or enhancement as determined by consultation with the regulatory agencies during the permitting process. Any unavoidable impacts to jurisdictional areas can be mitigated for through the purchase of credits at an existing mitigation bank or in lieu fee program. Best management practices outlined in the project permits will also ensure the proposed project does not result in indirect impacts to offsite jurisdictional waters.

- Prior to any impacts to CDFW jurisdictional areas the project applicant shall obtain a 1602 Streambed Alteration Agreement from the CDFW and comply with all conditions of approval outlined in the agreement.
- Prior to any impacts to Waters of the United States the project applicant shall obtain a USACE Section 404 permit and RWQCB Section 401 Water Quality Certification under the Clean Water Act.
- Prior to any impacts to Waters of the State the project applicant will need to obtain a Section 401 State Water Quality Certification from the Lahontan RWQCB to mitigate impacts to state beneficial uses of state and federal waters.

6.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.



Date 11-29-2021 Signed

PROJECT MANAGER

Fieldwork Performed By:

Sarah Vasquez

ASSOCIATE BIOLOGIST

Sarah Gulyas

ASSOCIATE BIOLOGIST

7.0 REFERENCES

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FIGURES

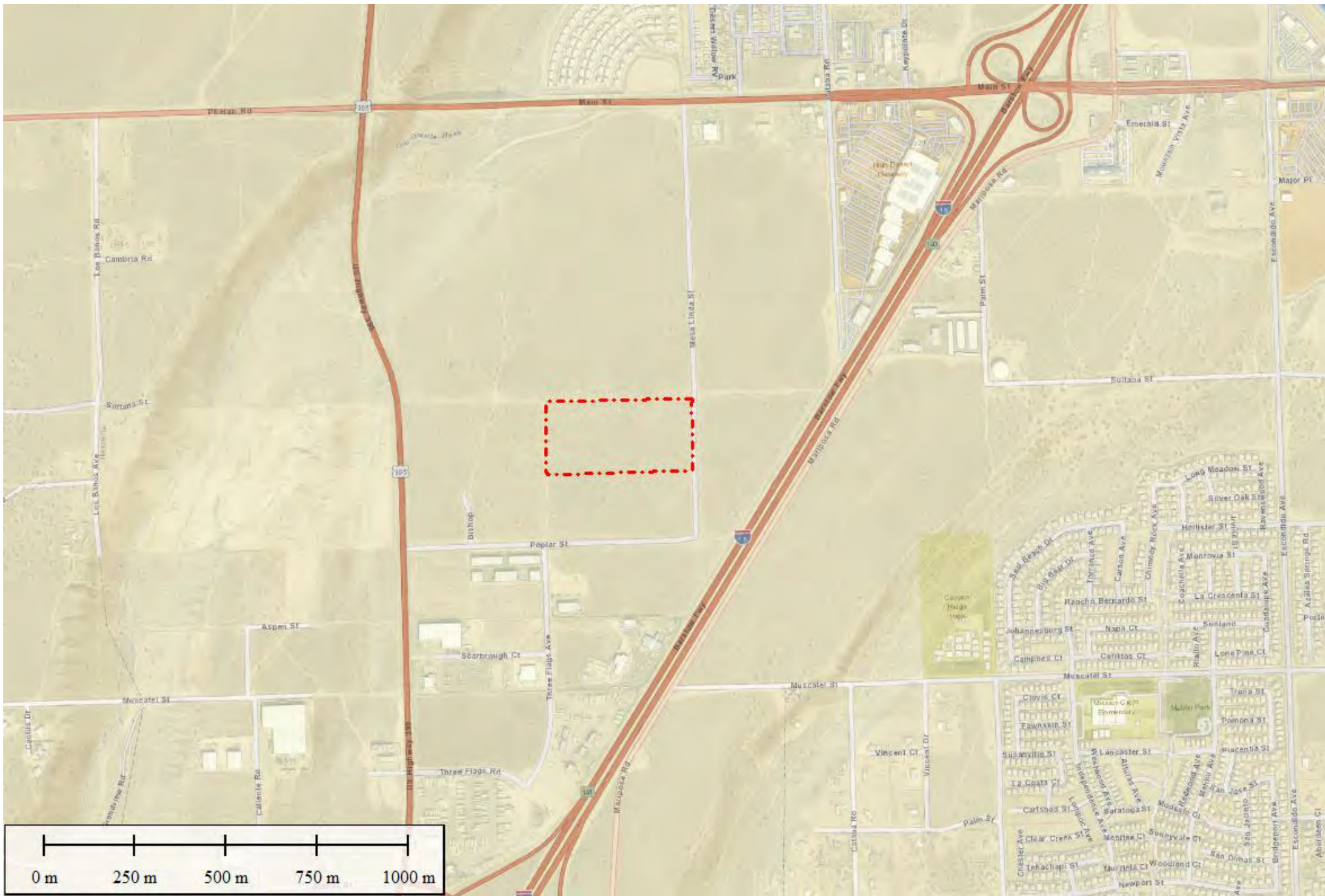


Figure 1
 Location Map
 APNs 3064-581-02 & 03
 City of Hesperia, San Bernardino County, California

Legend
 Project Site Boundary



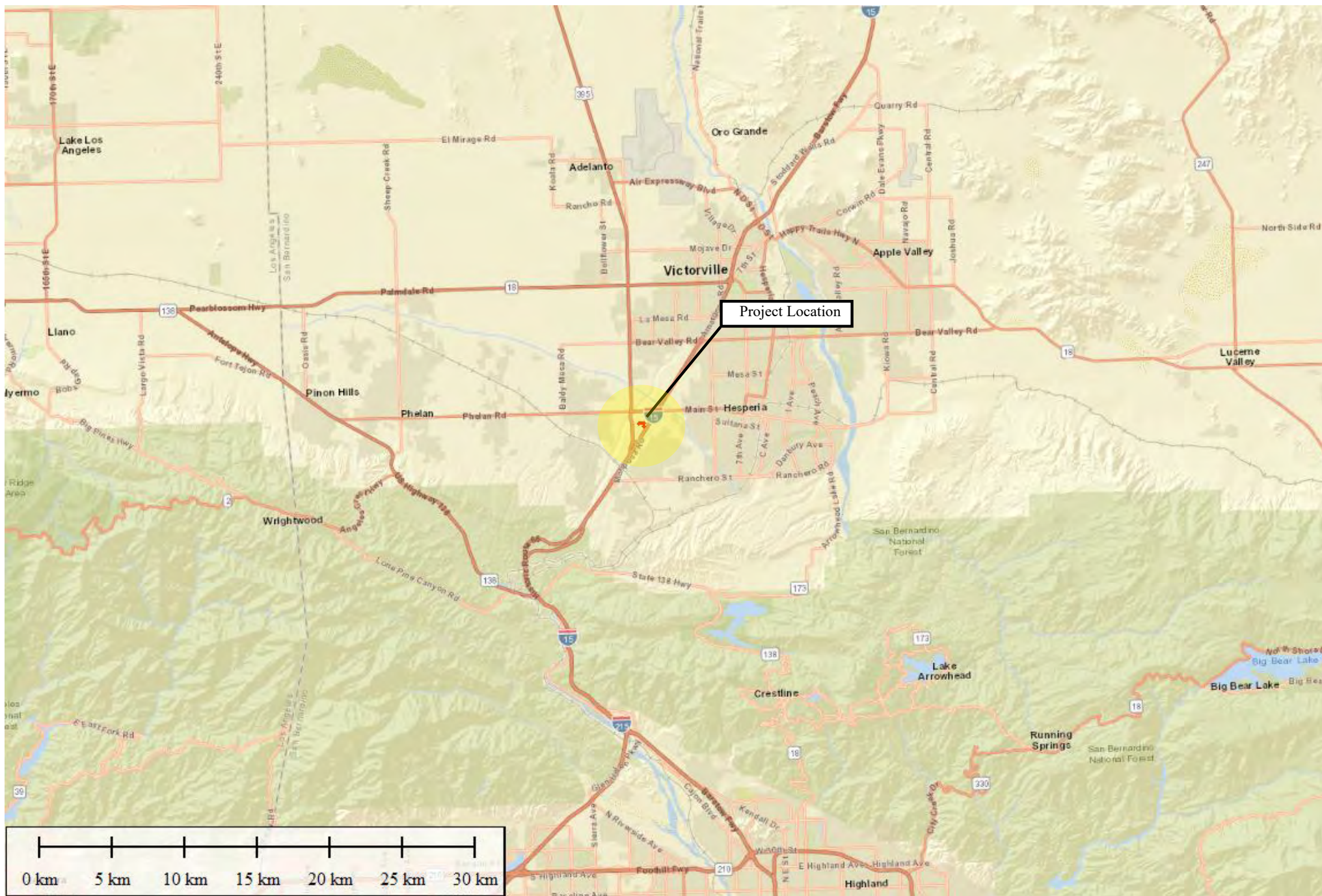


Figure 2
 Vicinity Map
 APNs 3064-581-02 & 03
 City of Hesperia, San Bernardino County, California

Legend

 Project Site Boundary



GROSS INDUSTRIAL SITE AREA:	796,544 SF / 18.28 AC
NET INDUSTRIAL SITE AREA:	764,891 SF / 17.55 AC

BUILDING AREA:	
FOOTPRINT	402,900 SF
MEZZANINE:	3,000 SF
TOTAL:	405,900 SF

GROSS COVERAGE: 50.95 %
NET COVERAGE: 53.06 %

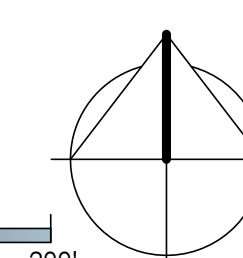
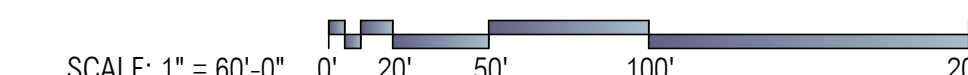
AUTO PARKING REQUIRED:	
0 TO 10,000 SF @ 1/500 SF	20 STALLS
ABV 10K @ 1/2500 SF	160 STALLS
TOTAL PARKING	180 STALLS

PARKING PROVIDED:	
STANDARD STALLS	174 STALLS
ACCESSIBLE STALLS	6 STALLS
TOTAL STALLS	180 STALLS

DOCK LOADING POSITIONS 55 DOCKS

TRAILER PARKING STALLS 56 TRAILERS

LANDSCAPE PROVIDED 129,129 SF / 16.88 % (NET)



SULTANA STREET / MESA LINDA STREET

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Figure 4

Habitat Map

APNs 3064-581-02 & 03

City of Hesperia, San Bernardino County, California

Legend



Project Site Boundary



Disturbed Joshua Tree Woodland Alliance
(15.71 Acres)



Rabbitbrush Dominant Riparian
(2.55 Acres)



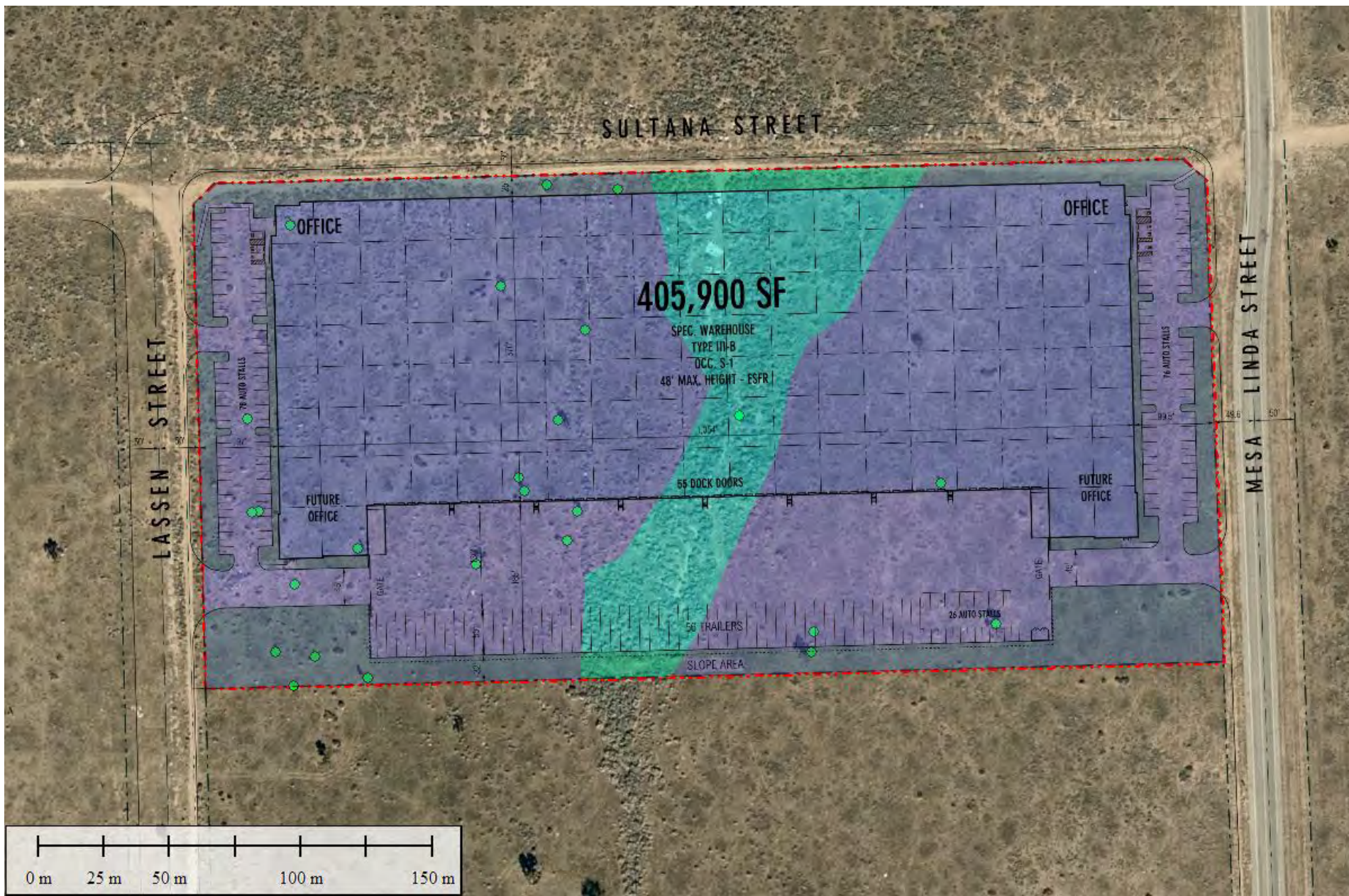


Figure 5

Impact Map

APNs 3064-581-02 & 03

City of Hesperia, San Bernardino County, California

Legend



Project Site Boundary



Impacts to Disturbed Joshua Tree Woodland Alliance
(15.71 Acres)



Impacts to Rabbitbrush Dominant Riparian
(2.55 Acres)



APPENDIX A

Observed Species List

Plant List

Scientific Name	Common Name
<i>Ambrosia acanthicarpa</i>	Flatspine bur ragweed
<i>Bromus diandrus</i>	Great brome
<i>Bromus rubens</i>	Red brome
<i>Bromus tectorum</i>	Downy brome
<i>Ericameria nauseosa</i>	Rubber rabbitbrush
<i>Ephedra nevadensis</i>	Nevada ephedra
<i>Hirschfeldia incana</i>	Shortpod mustard
<i>Juniperus californica</i>	California juniper
<i>Kali tragus</i>	Prickly Russian thistle
<i>Krameria bicolor</i>	White ratany
<i>Larrea tridentata</i>	Creosote bush
<i>Pectis papposa</i>	Manybristle chinchweed
<i>Prunus andersonii</i>	Desert peach
<i>Scutellaria mexicana</i>	Bladder sage
<i>Trichostema lanceolatum</i>	Valley vinegar weed
<i>Yucca brevifolia</i>	Joshua tree

Wildlife List

Scientific Name

Common Name

Aphelocoma californica

Scrub jay

Campylorhynchus brunneicapillus

Cactus wren

Corvus corax

Common raven

Geomyidae sp.

Pocket gopher

Haemorhous mexicanus

House finch

Hirundo rustica

Barn swallow

Lepus californicus

Black-tailed jackrabbit

Otospermophilus beecheyi

California ground squirrel

Sayornis saya

Say's phoebe

Zenaida macroura

Mourning dove

Zonotrichia leucophrys

White-crowned sparrow

APPENDIX B

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/Absence
<i>Asclepias nyctaginifolia</i>	Mojave milkweed	Dicots	None	None	2B.1	Mojavean desert scrub Pinon & juniper woodlands	Mojavean desert scrub, pinyon and juniper woodland.	775-1605 m.	No habitat for this species is present on the project site. This species is not present.
<i>Astragalus lentiginosus</i> var. <i>antonius</i>	San Antonio milk-vetch	Dicots	None	None	1B.3	Lower montane coniferous forest Upper montane coniferous forest	Lower montane coniferous forest, upper montane coniferous forest.	Dry slopes in open yellow pine forest. 1520-2575 m.	No habitat for this species is present on the project site. This species is not present.
<i>Botrychium ascendens</i>	upswept moonwort	Ferns	None	None	2B.3	Lower montane coniferous forest Meadow & seep	Lower montane coniferous forest, meadows and seeps.	Grassy fields, coniferous woods near springs and creeks. 1115-3265 m.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/Absence
Botrychium crenulatum	scalloped moonwort	Ferns	None	None	2B.2	Bog & fen Lower montane coniferous forest Marsh & swamp Meadow & seep Upper montane coniferous forest Wetland	Bogs and fens, meadows and seeps, upper montane coniferous forest, lower montane coniferous forest, marshes and swamps.	Moist meadows, freshwater marsh, and near creeks. 1185-3110 m.	No habitat for this species is present on the project site. This species is not present.
Calochortus palmeri var. palmeri	Palmer's mariposa-lily	Monocots	None	None	1B.2	Chaparral Lower montane coniferous forest Meadow & seep	Meadows and seeps, chaparral, lower montane coniferous forest.	Vernally moist places in yellow-pine forest, chaparral. 195-2530 m.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/Absence
Calochortus plummerae	Plummer's mariposa-lily	Monocots	None	None	4.2	Chaparral Cismontane woodland Coastal scrub Lower montane coniferous forest Valley & foothill grassland	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest.	Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	No habitat for this species is present on the project site. This species is not present.
Canbya candida	white pygmy-poppy	Dicots	None	None	4.2	Joshua tree woodland Mojavean desert scrub Pinon & juniper woodlands	Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland.	Gravelly, sandy, granitic places. 600-1460 m.	No habitat for this species is present on the project site. This species is not present.
Castilleja lasiorhyncha	San Bernardino Mountains owl's-clover	Dicots	None	None	1B.2	Chaparral Meadow & seep Pavement plain Riparian woodland Upper montane coniferous forest Wetland	Meadows and seeps, pebble plain, upper montane coniferous forest, chaparral, riparian woodland.	Mesic to drying soils in open areas of stream and meadow margins or in vernal wet areas. 1140-2320 m.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/Absence
Chorizanthe xanti var. leucotheca	white-bracted spineflower	Dicots	None	None	1B.2	Coastal scrub Mojavean desert scrub Pinon & juniper woodlands	Mojavean desert scrub, pinyon and juniper woodland, coastal scrub (alluvial fans).	Sandy or gravelly places. 365-1830 m.	No habitat for this species is present on the project site. This species is not present.
Claytonia peirsonii ssp. peirsonii	Peirson's spring beauty	Dicots	None	None	1B.2	Subalpine coniferous forest Upper montane coniferous forest	Upper montane coniferous forest, subalpine coniferous forest.	Granitic scree slopes, often with a sandy or fine soil component and granitic cobbles. 1510-2745 m.	No habitat for this species is present on the project site. This species is not present.
Deinandra mohavensis	Mojave tarplant	Dicots	None	Endangered	1B.3	Chaparral Coastal scrub Riparian scrub	Riparian scrub, coastal scrub, chaparral.	Low sand bars in river bed; mostly in riparian areas or in ephemeral grassy areas. 640-1645 m.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/Absence
<i>Diplacus mohavensis</i>	Mojave monkeyflower	Dicots	None	None	1B.2	Desert wash Joshua tree woodland Mojavean desert scrub	Joshua tree woodland, Mojavean desert scrub.	Dry sandy or rocky washes along the Mojave River. 660-1270 m.	No habitat for this species is present on the project site. This species is not present.
<i>Eremothera boothii</i> ssp. <i>boothii</i>	Booth's evening-primrose	Dicots	None	None	2B.3	Joshua tree woodland Pinon & juniper woodlands	Joshua tree woodland, pinyon and juniper woodland.	285-2290 m.	Suitable habitat for this species is present on the project site. This species has the potential to be present.
<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Los Angeles sunflower	Dicots	None	None	1A	Freshwater marsh Marsh & swamp Salt marsh Wetland	Marshes and swamps (coastal salt and freshwater).	35-1525 m.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/Absence
Heuchera parishii	Parish's alumroot	Dicots	None	None	1B.3	Alpine boulder & rock field Limestone Lower montane coniferous forest Subalpine coniferous forest Upper montane coniferous forest	Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest, alpine boulder and rock field.	Rocky places. Sometimes on carbonate. 1340-3505 m.	No habitat for this species is present on the project site. This species is not present.
Lilium parryi	lemon lily	Monocots	None	None	1B.2	Lower montane coniferous forest Meadow & seep Riparian forest Upper montane coniferous forest Wetland	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest.	Wet, mountainous terrain; generally in forested areas; on shady edges of streams, in open boggy meadows and seeps. 625-2930 m.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/Absence
Linanthus concinnus	San Gabriel linanthus	Dicots	None	None	1B.2	Chaparral Lower montane coniferous forest Upper montane coniferous forest	Lower montane coniferous forest, upper montane coniferous forest, chaparral.	Dry rocky slopes, often in Jeffrey pine/canyon oak forest. 1310-2560 m.	No habitat for this species is present on the project site. This species is not present.
Loeflingia squarrosa var. artemisiarum	sagebrush loeflingia	Dicots	None	None	2B.2	Desert dunes Great Basin scrub Sonoran desert scrub	Great Basin scrub, Sonoran desert scrub, desert dunes.	Sandy flats and dunes. Sandy areas around clay slicks w/Sarcobatus, Atriplex, Tetradymia, etc. 700-1615 m.	No habitat for this species is present on the project site. This species is not present.
Lycium parishii	Parish's desert-thorn	Dicots	None	None	2B.3	Coastal scrub Sonoran desert scrub	Coastal scrub, Sonoran desert scrub.	-3-570 m.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/Absence
Monardella australis ssp. jokerstii	Jokerst's monardella	Dicots	None	None	1B.1	Chaparral Lower montane coniferous forest	Lower montane coniferous forest, chaparral.	Steep scree or talus slopes between breccia. Secondary alluvial benches along drainages and washes. 210-1740 m.	No habitat for this species is present on the project site. This species is not present.
Muhlenbergia californica	California muhly	Monocots	None	None	4.3	Chaparral Coastal scrub Lower montane coniferous forest Meadow & seep	Coastal scrub, chaparral, lower montane coniferous forest, meadows and seeps.	Usually found near streams or seeps. 100-2000 m.	No habitat for this species is present on the project site. This species is not present.
Opuntia basilaris var. brachyclada	short-joint beavertail	Dicots	None	None	1B.2	Chaparral Joshua tree woodland Mojavean desert scrub Pinon & juniper woodlands	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland.	Sandy soil or coarse, granitic loam. 425-2015 m.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/Absence
Oreonana vestita	woolly mountain-parsley	Dicots	None	None	1B.3	Lower montane coniferous forest Subalpine coniferous forest Upper montane coniferous forest	Subalpine coniferous forest, upper montane coniferous forest, lower montane coniferous forest.	High ridges; on scree, talus, or gravel. 800-3370 m.	No habitat for this species is present on the project site. This species is not present.
Orobanche valida ssp. valida	Rock Creek broomrape	Dicots	None	None	1B.2	Chaparral Pinon & juniper woodlands	Chaparral, pinyon and juniper woodland.	On slopes of loose decomposed granite; parasitic on various chaparral shrubs. 975-1985 m.	No habitat for this species is present on the project site. This species is not present.
Pedimelum castoreum	Beaver Dam breadroot	Dicots	None	None	1B.2	Desert wash Joshua tree woodland Mojavean desert scrub	Joshua tree woodland, Mojavean desert scrub.	Sandy soils; washes and roadcuts. 605-1485 m.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/Absence
Schoenus nigricans	black bog-rush	Monocots	None	None	2B.2	Marsh & swamp Wetland	Marshes and swamps.	Often in alkaline marshes. 120-1525 m.	No habitat for this species is present on the project site. This species is not present.
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	Dicots	None	None	1B.2	Chaparral Cismontane woodland Lower montane coniferous forest	Chaparral, cismontane woodland, lower montane coniferous forest.	In gravelly soils on streambanks or in mesic sites in oak or pine woodland. 425-2000 m.	No habitat for this species is present on the project site. This species is not present.
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	Riparian	None	None		Riparian woodland			Not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/Absence
<i>Symphyotrichum defoliatum</i>	San Bernardino aster	Dicots	None	None	1B.2	Cismontane woodland Coastal scrub Lower montane coniferous forest Marsh & swamp Meadow & seep Valley & foothill grassland	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland.	Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 3-2045 m.	No habitat for this species is present on the project site. This species is not present.
<i>Symphyotrichum greatae</i>	Greata's aster	Dicots	None	None	1B.3	Broadleaved upland forest Chaparral Cismontane woodland Lower montane coniferous forest Riparian woodland	Chaparral, cismontane woodland, broadleaved upland forest, lower montane coniferous forest, riparian woodland.	Mesic canyons. 335-2015 m.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Accipiter cooperii	Cooper's hawk	Birds	None	None	CDFW_WL-Watch List IUCN_LC-Least Concern	Cismontane woodland Riparian forest Riparian woodland Upper montane coniferous forest	Woodland, chiefly of open, interrupted or marginal type.	Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	No habitat for this species is present on the project site. This species is not present.
Agelaius tricolor	tricolored blackbird	Birds	None	Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	Freshwater marsh Marsh & swamp Swamp Wetland	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Anaxyrus californicus	arroyo toad	Amphibians	Endangered	None	CDFW_SSC-Species of Special Concern IUCN_EN-Endangered	Desert wash Riparian scrub Riparian woodland South coast flowing waters South coast standing waters	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.	Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Antrozous pallidus	pallid bat	Mammals	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	Chaparral Coastal scrub Desert wash Great Basin grassland Great Basin scrub Mojavean desert scrub Riparian woodland Sonoran desert scrub Upper montane coniferous forest Valley & foothill grassland	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Aquila chrysaetos	golden eagle	Birds	None	None	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest Cismontane woodland Coastal prairie Great Basin grassland Great Basin scrub Lower montane coniferous forest Pinon & juniper woodlands Upper montane coniferous forest Valley & foothill grassland	Rolling foothills, mountain areas, sage-juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Artemisiospiza belli belli	Bell's sage sparrow	Birds	None	None	CDFW_WL-Watch List USFWS_BCC-Birds of Conservation Concern	Chaparral Coastal scrub	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	No habitat for this species is present on the project site. This species is not present.
Asio otus	long-eared owl	Birds	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Cismontane woodland Great Basin scrub Riparian forest Riparian woodland Upper montane coniferous forest	Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses.	Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	None	None	CDFW_SSC- Species of Special Concern		Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas.	Ground may be firm soil, sandy, or rocky.	Suitable habitat for this species is present on the project site. This species has the potential to be present.
Athene cunicularia	burrowing owl	Birds	None	None	BLM_S-Sensitive CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern USFWS_BCC- Birds of Conservation Concern	Coastal prairie Coastal scrub Great Basin grassland Great Basin scrub Mojavean desert scrub Sonoran desert scrub Valley & foothill grassland	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Suitable habitat for this species is present on the project site. This species has the potential to be present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Batrachoseps gabrieli	San Gabriel slender salamander	Amphibians	None	None	IUCN_DD-Data Deficient USFS_S-Sensitive	Talus slope	Known only from the San Gabriel Mtns. Found under rocks, wood, and fern fronds, and on soil at the base of talus slopes.	Most active on the surface in winter and early spring.	No habitat for this species is present on the project site. This species is not present.
Bombus crotchii	Crotch bumble bee	Insects	None	None			Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Buteo swainsoni	Swainson's hawk	Birds	None	Threatened	BLM_S-Sensitive IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Great Basin grassland Riparian forest Riparian woodland Valley & foothill grassland	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.	Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	No habitat for this species is present on the project site. This species is not present.
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	Mammals	None	None	CDFW_SSC-Species of Special Concern	Desert wash Pinon & juniper woodlands Sonoran desert scrub	Desert border areas in eastern San Diego County in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc.	Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Charina umbratica	southern rubber boa	Reptiles	None	Threatened	USFS_S-Sensitive	Meadow & seep Riparian forest Riparian woodland Upper montane coniferous forest Wetland	Known from the San Bernardino and San Jacinto mtns; found in a variety of montane forest habitats. Snakes resembling C. umbratica reported from Mt. Pinos and Tehachapi mtns group with C. bottae based on mtDNA. Further research needed.	Found in vicinity of streams or wet meadows; requires loose, moist soil for burrowing; seeks cover in rotting logs, rock outcrops, and under surface litter.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	Threatened	Endangered	BLM_S-Sensitive NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	Riparian forest	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	Broadleaved upland forest Chaparral Chenopod scrub Great Basin grassland Great Basin scrub Joshua tree woodland Lower montane coniferous forest Meadow & seep Mojavean desert scrub Riparian forest Riparian woodland Sonoran desert scrub Sonoran thorn woodland Upper montane coniferous	Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Diadophis punctatus modestus	San Bernardino ringneck snake	Reptiles	None	None	USFS_S-Sensitive		Most common in open, relatively rocky areas. Often in somewhat moist microhabitats near intermittent streams.	Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous veg.	No habitat for this species is present on the project site. This species is not present.
Empidonax traillii extimus	southwestern willow flycatcher	Birds	Endangered	Endangered	NABCI_RWL-Red Watch List	Riparian woodland	Riparian woodlands in Southern California.		No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Emys marmorata	western pond turtle	Reptiles	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	Aquatic Artificial flowing waters Klamath/North coast flowing waters Klamath/North coast standing waters Marsh & swamp Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowing waters South coast standing waters Wetland	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Euchloe hyantis andrewsi	Andrew's marble butterfly	Insects	None	None		Lower montane coniferous forest	Inhabits yellow pine forest near Lake Arrowhead and Big Bear Lake, San Bernardino Mtns, San Bernardino Co, 5000-6000 ft.	Hostplants are Streptanthus bernardinus and Arabis holboellii var pinetorum; larval foodplant is Descurainia richardsonii.	No habitat for this species is present on the project site. This species is not present.
Eumops perotis californicus	western mastiff bat	Mammals	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern WBWG_H-High Priority	Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Roosts in crevices in cliff faces, high buildings, trees and tunnels.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Euphydryas editha quino	quino checkerspot butterfly	Insects	Endangered	None		Chaparral Coastal scrub	Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties.	Hills and mesas near the coast. Need high densities of food plants Plantago erecta, P. insularis, and Orthocarpus purpureus.	No habitat for this species is present on the project site. This species is not present.
Glaucomys oregonensis californicus	San Bernardino flying squirrel	Mammals	None	None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	Broadleaved upland forest Lower montane coniferous forest	Known from black oak or white fir dominated woodlands between 5200 - 8500 ft in the San Bernardino and San Jacinto ranges. May be extirpated from San Jacinto range.	Needs cavities in trees/snags for nests and cover. Needs nearby water.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Gopherus agassizii	desert tortoise	Reptiles	Threatened	Threatened	IUCN_VU-Vulnerable	Joshua tree woodland Mojavean desert scrub Sonoran desert scrub	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat.	Require friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred.	Suitable habitat for this species is present on the project site. Focused surveys determined this species is not present on site.
Haliaeetus leucocephalus	bald eagle	Birds	Delisted	Endangered	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	Lower montane coniferous forest Oldgrowth	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water.	Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Helminthoglypta mohaveana	Victorville shoulderband	Mollusks	None	None	IUCN_NT-Near Threatened	Aquatic Great Basin flowing waters	Known only from along the Mojave River in San Bernardino County.	Found among granite boulders and at the base of rocky cliffs.	No habitat for this species is present on the project site. This species is not present.
Helminthoglypta taylori	westfork shoulderband	Mollusks	None	None		Riparian woodland	Vicinity of the Mojave River.	Under logs and leaves.	No habitat for this species is present on the project site. This species is not present.
Icteria virens	yellow-breasted chat	Birds	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Riparian forest Riparian scrub Riparian woodland	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses.	Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Juniperella mirabilis	juniper metallic wood-boring beetle	Insects	None	None			Larvae develop in juniper in Santa Rosa Mts. in Southern California.		No habitat for this species is present on the project site. This species is not present.
Lanius ludovicianus	loggerhead shrike	Birds	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest Desert wash Joshua tree woodland Mojavean desert scrub Pinon & juniper woodlands Riparian woodland Sonoran desert scrub	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes.	Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Suitable habitat for this species is present on the project site. This species has the potential to be present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Lasiurus cinereus	hoary bat	Mammals	None	None	IUCN_LC-Least Concern WBWG_M-Medium Priority	Broadleaved upland forest Cismontane woodland Lower montane coniferous forest North coast coniferous forest	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding.	Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	No habitat for this species is present on the project site. This species is not present.
Microtus californicus mohavensis	Mohave river vole	Mammals	None	None	CDFW_SSC-Species of Special Concern	Riparian scrub	Occurs only in weedy herbaceous growth in wet areas along the Mojave River. May be found in some irrigated pastures.	Burrows into soft soil. Feeds on leafy parts of grasses, sedges and herbs. Clips grasses to form runways from burrow.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Neotamias speciosus speciosus	lodgepole chipmunk	Mammals	None	None		Chaparral Upper montane coniferous forest	Summits of isolated Piute, San Bernardino, and San Jacinto mountains. Usually found in open- canopy forests.	Habitat is usually lodgepole pine forests in the San Bernardino Mts and chinquapin slopes in the San Jacinto Mts.	No habitat for this species is present on the project site. This species is not present.
Ovis canadensis nelsoni	desert bighorn sheep	Mammals	None	None	BLM_S- Sensitive CDFW_FP-Fully Protected USFS_S- Sensitive	Alpine Alpine dwarf scrub Chaparral Chenopod scrub Great Basin scrub Mojavean desert scrub Montane dwarf scrub Pinon & juniper woodlands Riparian woodland Sonoran desert scrub	Widely distributed from the White Mtns in Mono Co. to the Chocolate Mts in Imperial Co.	Open, rocky, steep areas with available water and herbaceous forage.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Palaeoxenus dohrni	Dohrn's elegant eucnemid beetle	Insects	None	None					No habitat for this species is present on the project site. This species is not present.
Pandion haliaetus	osprey	Birds	None	None	CDF_S-Sensitive CDFW_WL-Watch List IUCN_LC-Least Concern	Riparian forest	Ocean shore, bays, freshwater lakes, and larger streams.	Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Chaparral Cismontane woodland Coastal bluff scrub Coastal scrub Desert wash Pinon & juniper woodlands Riparian scrub Riparian woodland Valley & foothill grassland	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Suitable habitat for this species is present on the project site. This species has the potential to be present.
Piranga rubra	summer tanager	Birds	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Riparian forest	Summer resident of desert riparian along lower Colorado River, and locally elsewhere in California deserts.	Requires cottonwood-willow riparian for nesting and foraging; prefers older, dense stands along streams.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Plebejus saepiolus aureolus	San Gabriel Mountains blue butterfly	Insects	None	None	USFS_S-Sensitive	Lower montane coniferous forest	Type locality is a wet meadow seep in yellow pine forest.	Foodplant is Trifolium wormskioldii.	No habitat for this species is present on the project site. This species is not present.
Plebulina emigdionis	San Emigdio blue butterfly	Insects	None	None	USFS_S-Sensitive		Found in desert canyons and along riverbeds in Inyo, Kern, Los Angeles, and San Bernardino counties.	Host plant is Atriplex canescens; maybe Lotus purshianus also.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Rana draytonii	California red-legged frog	Amphibians	Threatened	None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	Aquatic Artificial flowing waters Artificial standing waters Freshwater marsh Marsh & swamp Riparian forest Riparian scrub Riparian woodland Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowing waters South coast standing waters Wetland	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Rana muscosa	southern mountain yellow-legged frog	Amphibians	Endangered	Endangered	CDFW_WL-Watch List IUCN_EN-Endangered USFS_S-Sensitive	Aquatic	Disjunct populations known from southern Sierras (northern DPS) and San Gabriel, San Bernardino, and San Jacinto Mtns (southern DPS). Found at 1,000 to 12,000 ft in lakes and creeks that stem from springs and snowmelt. May overwinter under frozen lakes.	Often encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Rhinichthys osculus ssp. 8	Santa Ana speckled dace	Fish	None	None	AFS_TH- Threatened CDFW_SSC- Species of Special Concern USFS_S- Sensitive	Aquatic South coast flowing waters	Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system.	Requires permanent flowing streams with summer water temps of 17- 20 C. Usually inhabits shallow cobble and gravel riffles.	No habitat for this species is present on the project site. This species is not present.
Setophaga petechia	yellow warbler	Birds	None	None	CDFW_SSC- Species of Special Concern USFWS_BCC- Birds of Conservation Concern	Riparian forest Riparian scrub Riparian woodland	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada.	Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Siphateles bicolor mohavensis	Mohave tui chub	Fish	Endangered	Endangered	AFS_EN-Endangered CDFW_FP-Fully Protected	Aquatic Artificial flowing waters Artificial standing waters	Endemic to the Mojave River basin, adapted to alkaline, mineralized waters.	Needs deep pools, ponds, or slough-like areas. Needs vegetation for spawning.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Taxidea taxus	American badger	Mammals	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Alkali marsh Alkali playa Alpine Alpine dwarf scrub Bog & fen Brackish marsh Broadleaved upland forest Chaparral Chenopod scrub Cismontane woodland Closed-cone coniferous forest Coastal bluff scrub Coastal dunes Coastal prairie Coastal scrub Desert dunes Desert wash Freshwater marsh Great Basin grassland Great Basin	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Thamnophis hammondi	two-striped gartersnake	Reptiles	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	Marsh & swamp Riparian scrub Riparian woodland Wetland	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation.	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	No habitat for this species is present on the project site. This species is not present.
Toxostoma lecontei	Le Conte's thrasher	Birds	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	Desert wash Mojavean desert scrub Sonoran desert scrub	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats.	Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	Suitable habitat for this species is present on the project site. This species has the potential to be present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered	IUCN_NT-Near Threatened NABCI_YWL-Yellow Watch List	Riparian forest Riparian scrub Riparian woodland	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	No habitat for this species is present on the project site. This species is not present.
Vireo vicinior	gray vireo	Birds	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_YWL-Yellow Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	Chaparral	Dry chaparral; west of desert, in chamise-dominated habitat; mountains of Mojave Desert, associated with juniper and Artemisia.	Forage, nest, and sing in areas formed by a continuous growth of twigs, 1-5 ft above ground.	No habitat for this species is present on the project site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Xerospermophilus mohavensis	Mohave ground squirrel	Mammals	None	Threatened	BLM_S-Sensitive IUCN_VU-Vulnerable	Chenopod scrub Joshua tree woodland Mojavean desert scrub	Open desert scrub, alkali scrub and Joshua tree woodland. Also feeds in annual grasslands. Restricted to Mojave Desert.	Prefers sandy to gravelly soils, avoids rocky areas. Uses burrows at base of shrubs for cover. Nests are in burrows.	Suitable habitat for this species is present on the project site. This species has the potential to be present.

APPENDIX C



View of disturbed Joshua tree woodland alliance habitat from the northeast. Facing southwest.



View of disturbed Joshua tree woodland alliance habitat from the northeast. Facing southwest.



View of rabbitbrush riparian habitat within ephemeral stream on site. Joshua tree present within riparian habitat. Facing north.



View of disturbed Joshua tree woodland alliance from the middle of the side where ephemeral stream occurs. Facing west.



View of disturbed Joshua tree woodland alliance habitat from the northwest. Facing southeast.



View of rabbitbrush riparian habitat along ephemeral stream. Disturbed Joshua tree woodland alliance surrounding the riparian habitat on both sides. Facing north.



View of beginning of onsite ephemeral stream from the north. Facing south.



View of onsite ephemeral stream from the north. Facing southeast. Rabbitbrush riparian habitat surrounds.



View of several Joshua trees in disturbed Joshua tree woodland alliance habitat from the middle of site. Facing west.

APPENDIX D

Soil Map—San Bernardino County, California, Mojave River Area



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County, California, Mojave River Area

Survey Area Data: Version 13, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 26, 2019—Jul 8, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
134	HESPERIA LOAMY FINE SAND, 2 TO 5 PERCENT SLOPES	18.1	100.0%
Totals for Area of Interest		18.1	100.0%

APPENDIX E



**JOSHUA TREE SURVEY REPORT
FOR
ASSESSOR'S PARCEL NUMBERS
3064-581-02 & 03**

**CITY OF HESPERIA
SAN BERNARDINO COUNTY, CALIFORNIA**

Prepared for:

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NOVEMBER 2021

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FIGURES

- Figure 1 – Location Map
- Figure 2 – Vicinity Map
- Figure 3 – Project Plans
- Figure 4 – Joshua Tree Location Map

1.0 Introduction

Pursuant to the City of Hesperia Municipal Code chapter 16.24, Protected Plants, all species of the *Agavaceae* family (*Yuccas*, *Nolinas*, *Century Plants*.), all species of cactus, including chollas (*Cylindropuntia* spp.), smoketree (*Dalea spinosa*), all species of the mesquites (*Prosopis*), creosote rings 10 feet or more in diameter, all Joshua trees, and all plants protected or regulated by the California Desert Native Plants Act (California Food and Agricultural Code 80001 *et. seq.*) shall not be removed except under a removal permit issued by the agricultural commissioner. Prior to ground disturbance, a protected Joshua Tree Survey needs to be prepared. According to the City of Hesperia Planning Division the next step in the process of obtaining a Desert Native Plant Permit is to do as follows:

“Pursuant to the provisions of Section 2074.2 of the Fish and Game Code, the California Fish and Game Commission (Commission), at its September 22, 2020, meeting, accepted for consideration the petition submitted to list the western Joshua tree (*Yucca brevifolia*) as threatened or endangered under the California Endangered Species Act. Pursuant to subdivision (e)(2) of Section 2074.2 of the Fish and Game Code, the Commission determined that the amount of information contained in the petition, when considered in light of the California Department of Fish and Wildlife's (Department) written evaluation report, the comments received, and the remainder of the administrative record, would lead a reasonable person to conclude there is a substantial possibility the requested listing could occur. Based on that finding and the acceptance of the petition, the Commission is also providing notice that the western Joshua tree is a candidate species as defined by Section 2068 of the Fish and Game Code.”

Hernandez Environmental Services (HES) was retained by EPD solutions, Inc. to perform a Joshua Tree Survey Report on the 18.26 acres of Assessor's Parcel Numbers (APNs) 3064-581-02 and 03 in Hesperia, San Bernardino County, California.

1.1 Purpose

As required by the City of Hesperia and pursuant to Municipal Code chapter 16.24, the purpose of this report is to provide information to the City of Hesperia on protected plants that may be removed, damaged, or encroached by the proposed project. Encroachment is here defined as alteration that buries any portion of a native tree, significantly undercuts the root system, or otherwise disturbs the ground within the dripline of the native tree.

1.2 Project Location

The proposed project site is located west of Interstate 15 Freeway on the northwest corner of the

intersection of Poplar Street and Mesa Linda Street within the City of Hesperia, San Bernardino County, California (Figures 1 and 2, *Location Map* and *Vicinity Map*). Specifically, the project site is located within Section 22, Township 4 North, Range 5 West, San Bernardino Base and Meridian (SBB&M) of the *Baldy Mesa* United States Geological Survey (USGS) 7.5-minute topographic quadrangles. The project site center point latitude and longitude are 34°25'06.3370" North and 117°23'30.7785" West.

1.3 Project Description

The proposed project consists of the construction of a warehouse and associated offices, trailers, and auto stalls. The total impact area for the proposed development is 18.26 acres (Figure 3, *Project Plans*).

2.0 Methodology

HES conducted a survey and evaluation of onsite native desert plants on October 27, 2021. The entire project site was traversed on foot. Protected native desert plant locations were mapped using a sub-meter Geographical Positioning System (GPS). Tree height was measured and diameter at breast height was obtained using a measuring tape.

3.0 Results

A total of 25 protected Joshua trees (*Yucca brevifolia*) were surveyed. Protected plant locations on the project site are displayed on Figure 4, *Joshua Tree Location Map*. The height and quantity of trees recorded is described in Table 1.

Table 1

Height of Covered Species	Number of Covered Species
Less than 2 feet	0
2 – 8 feet	12
Greater than 8 feet	13
Total	25

4.0 Recommendations

Based upon the findings of this report, it is recommended that the following measures be implemented as part of the project to avoid, minimize, or compensate for the anticipated impacts from project activities:

- Prior to the initiation of Joshua tree removal, obtain California Endangered Species Act (CESA) Incidental Take Permit No. 2081.
- Obtain mitigation land within Antelope Valley Conservation Bank in the northern portion of the Antelope Valley in Kern County established to permanently protect a population of Joshua tree.
- The permittee shall purchase land at \$25,000 per credit from a CDFW-approved mitigation or conservation bank or shall provide for the permanent protection and management of Habitat Management lands.
- Before starting project activities, the permittee shall designate a representative responsible for communications with CDFW and overseeing compliance with the ITP.
- Name, qualifications, business address, and contact information of a biological monitor (designated botanist) shall be submitted to CDFW at least 30 days prior to project activities. The designated botanist shall be responsible for monitoring project activities to help minimize and fully mitigate or avoid incidental take of Joshua trees.
- An education program (Worker Environmental Awareness Program-WEAP) shall be conducted for all persons employed or working in the project area before performing any work.
- A trash abatement program shall be in place before starting project activities and throughout the duration of the project to ensure that trash and food are contained in animal proof containers.
- The boundaries of the project site shall be clearly delineated, in consultation with the designated botanist, prior to project activities with posted signs, posting stakes, flags, and/or rope or cord.
- Project-related personnel shall access the project area using existing routes, or routes identified in the project description, and shall not cross Joshua tree habitat outside or on route to the project area.
- The designated botanist shall have authority to immediately stop any activity that does not comply with the ITP, and/or to order any reasonable measure to avoid unauthorized take of an individual Joshua tree.

5.0 Certification

I hereby certify that the statements furnished above, the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: November 29th, 2021

Signed: 

Juan J. Hernandez
Principal Biologist

FIGURES

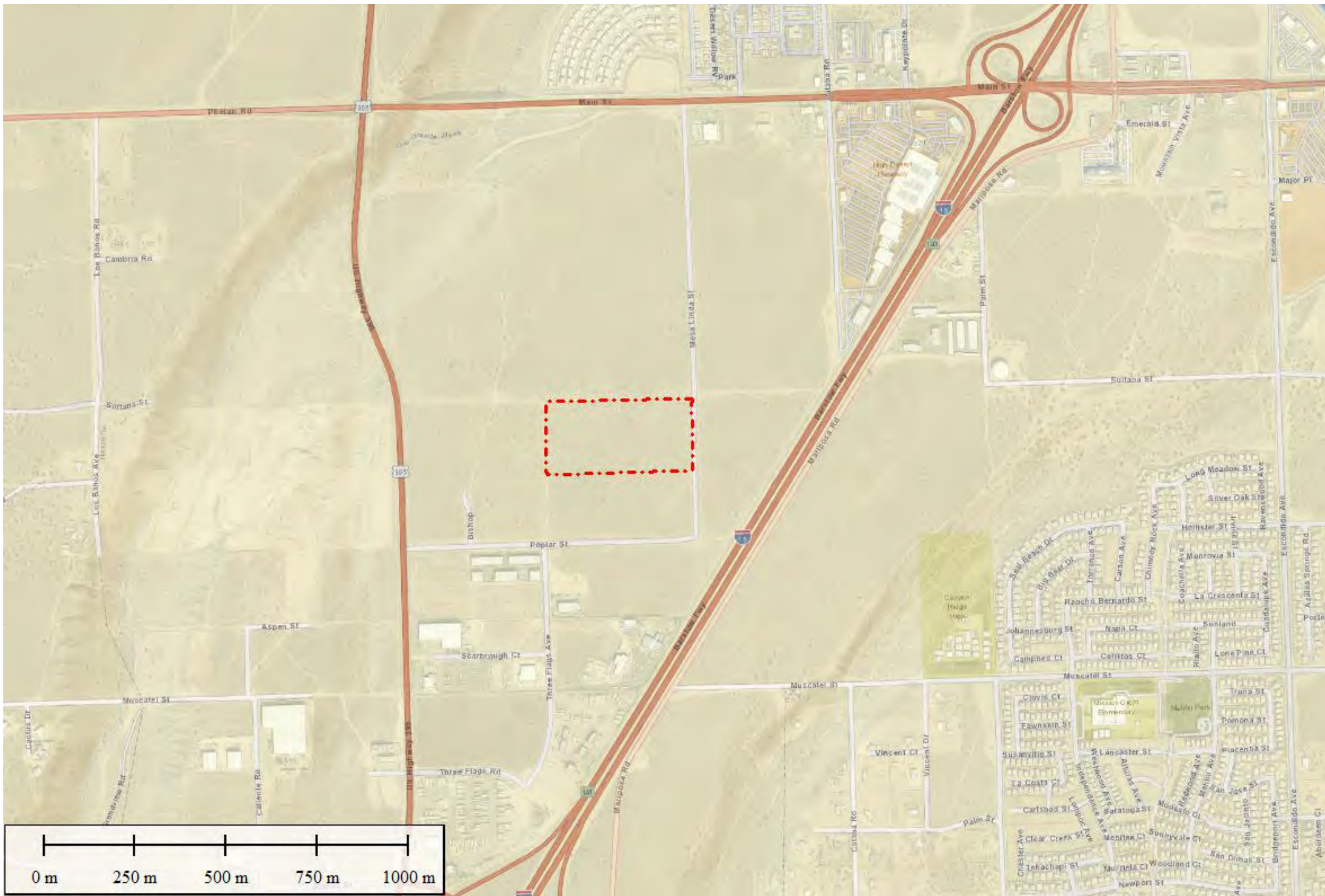


Figure 1
 Location Map
 APNs 3064-581-02 & 03
 City of Hesperia, San Bernardino County, California

Legend
 Project Site Boundary



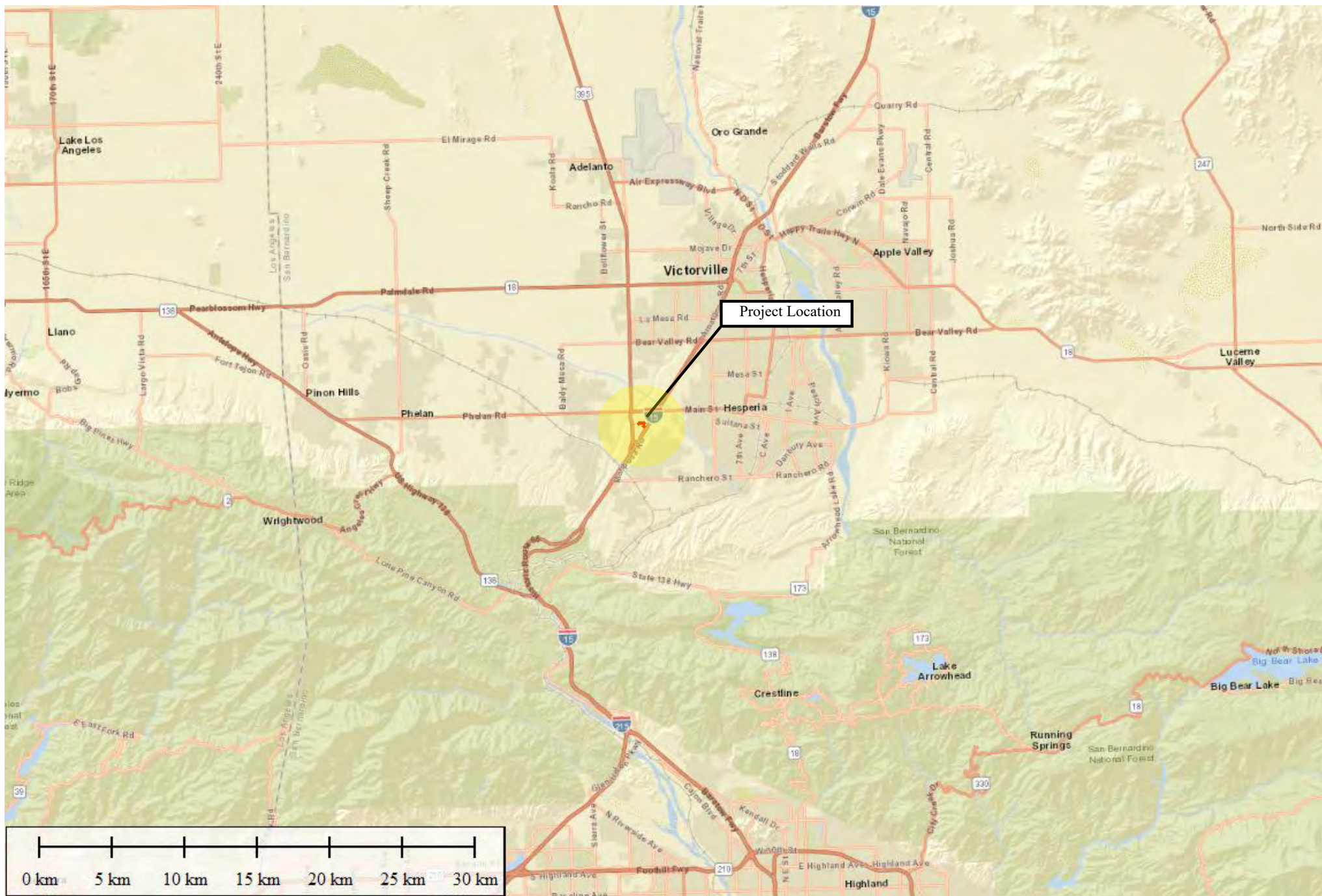


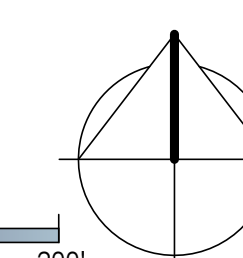
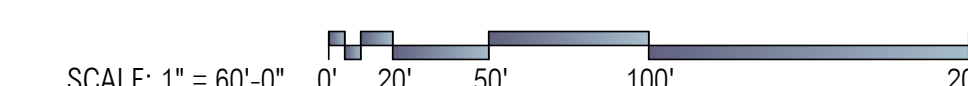
Figure 2
 Vicinity Map
 APNs 3064-581-02 & 03
 City of Hesperia, San Bernardino County, California

Legend

 Project Site Boundary



GROSS INDUSTRIAL SITE AREA:	796,54 SF / 18.28 AC.
NET INDUSTRIAL SITE AREA:	764,891 SF / 17.55 AC.
BUILDING AREA:	
FOOTPRINT	402,900 SF
MEZZANINE:	3,000 SF
TOTAL:	405,900 SF
GROSS COVERAGE:	
NET COVERAGE:	50.95 %
	53.06 %
AUTO PARKING REQUIRED:	
0 TO 10,000 SF @ 1/500 SF	20 STALLS
ABV 10K @ 1/2500 SF	160 STALLS
TOTAL PARKING	180 STALLS
PARKING PROVIDED:	
STANDARD STALLS	174 STALLS
ACCESSIBLE STALLS	6 STALLS
TOTAL STALLS	180 STALLS
DOCK LOADING POSITIONS	
	55 DOCKS
TRAILER PARKING STALLS	
	56 TRAILERS
LANDSCAPE PROVIDED	129,129 SF / 16.88 % (NET)



SULTANA STREET / MESA LINDA STREET

RGA

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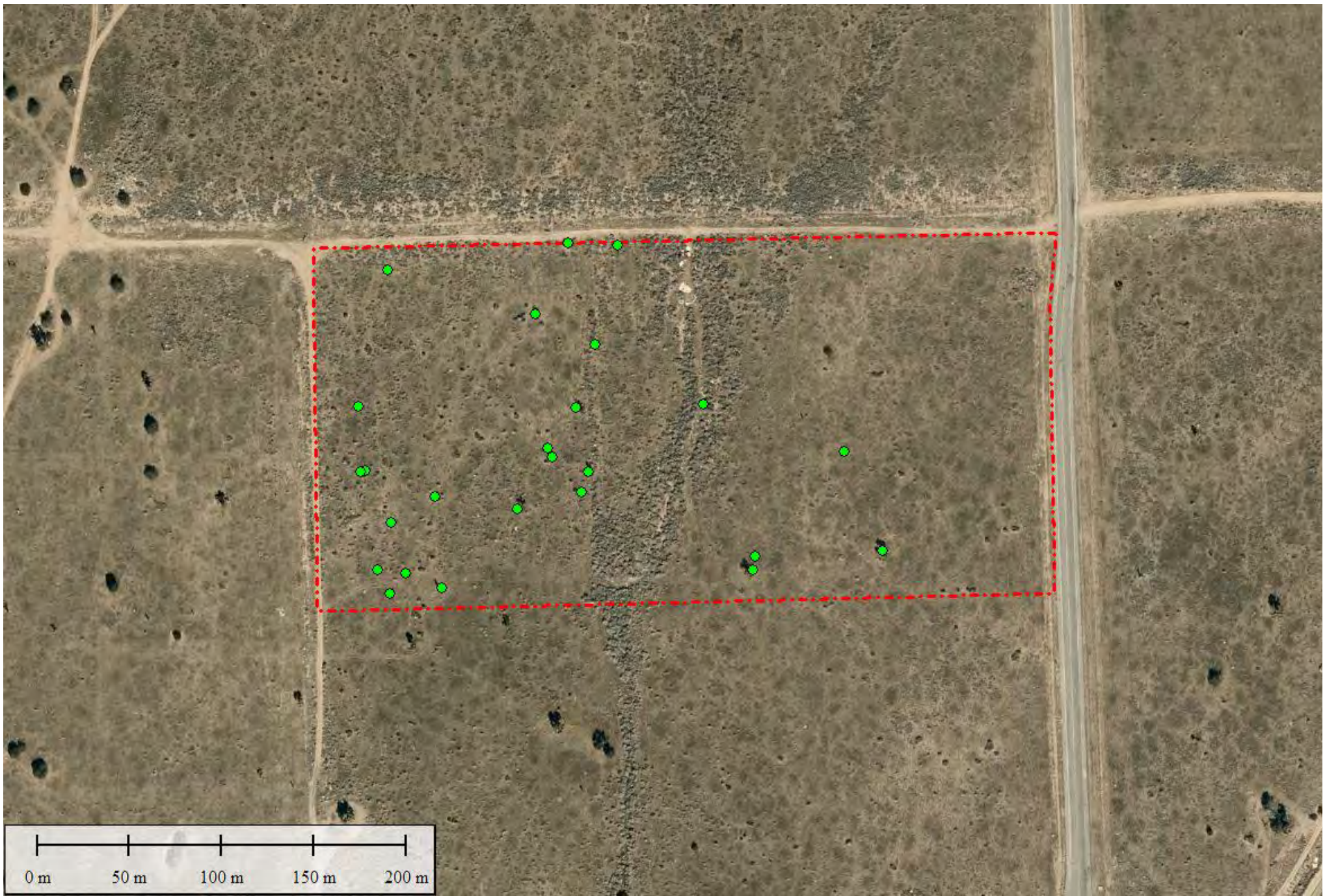
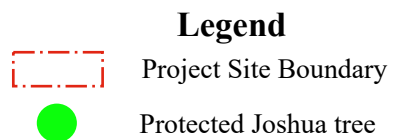


Figure 4
Joshua Tree Location Map
APNs 3064-581-02 and 03
City of Hesperia, County of San Bernardino, California



APPENDIX F



**JURISDICTIONAL DELINEATION
FOR
ASSESSOR'S PARCEL NUMBERS
3064-581-02 & 03**

**CITY OF HESPERIA
SAN BERNARDINO COUNTY, CALIFORNIA**

Prepared for:

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Prepared by:

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NOVEMBER 2021

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- Appendix A – Site Photographs
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1.0 Introduction

Hernandez Environmental Services (HES) was contracted by EPD Solutions, Inc. to prepare a Jurisdictional Delineation (JD) for an approximately 18.26-acre project site located within the City of Hesperia, San Bernardino County, California in compliance with the requirements of the Lahontan Regional Water Quality Control Board (RWQCB).

1.1 Purpose

The purpose of this JD is to:

- Determine if any state or federal jurisdictional waters are present within the project site boundaries;
- Quantify any impacts to jurisdictional waters due to the proposed project, if possible;
- Determine if the project will require state or federal permits for impacts to jurisdictional waters; and,
- Recommend mitigation measures to offset impacts to state or federal jurisdictional waters.

1.2 Project Site Location

The 18.26-acre project site is located west of Interstate 15 Freeway on the northwest corner of the intersection of Poplar Street and Mesa Linda Street within the City of Hesperia, San Bernardino County, California. The site consists of San Bernardino County Assessor's Parcel Numbers (APNs) 3064-581-02 and 03. Specifically, the project site is located within Section 22, Township 4 North, Range 5 West, San Bernardino Base and Meridian (SBB&M) of the *Baldy Mesa* United States Geological Survey (USGS) 7.5' topographic quadrangle. The center point latitude and longitude for the project site are 34°25'06.3370" North and 117°23'30.7785" West (Figures 1 and 2, *Location Map* and *Vicinity Map*).

1.3 Project Description

The proposed project consists of the construction of a warehouse and associated offices, trailer stalls, auto stalls, and landscaping. The total impact area for the proposed development is 18.26 acres (Figure 3, *Project Plans*).

2.0 Regulatory Background

2.1 California Department of Fish and Wildlife Lake and Streambed Alteration Agreement

The California Department of Fish and Wildlife (CDFW) is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the California Fish and Game Code (F&GC), requires that the CDFW be consulted if a proposed development project has the potential to detrimentally effect a river, stream, or lake and thereby fish or wildlife resources that depend on a river, stream, or lake for continued viability (F&GC

Division 2, Chapter 5, section 1600-1616). A Section 1602 Lake or Streambed Alteration Agreement is required, should the CDFW determine that the proposed project may do one or more of the following:

- Substantially divert or obstruct the natural flow of any river, stream or lake;
- Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or
- Deposit debris, waste or other materials that could pass into any river, stream or lake.

For the purposes of clarification, a stream is defined by CDFW as “a body of water that flows perennially or episodically and that is defined by the area in which water currently flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators.” The historic hydrologic regime is defined as circa 1800 to the present (CDFW 2010).

2.2 United States Army Corps of Engineers Clean Water Act 404 Permit

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States (WUS) and regulating quality standards for surface waters. Under Section 404 of the CWA, the United States Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into wetlands and WUS, which includes tidal waters, interstate waters, and “all other waters, interstate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce or which are tributaries to waters subject to the ebb and flow of the tide” (33 C.F.R. 328.3(a)), pursuant to provisions of Section 404 of the Clean Water Act. Section 404 requires a permit from the USACE or authorized state for the discharge of dredged or fill material into WUS, including wetlands.

For purposes of Section 404 of the CWA, the lateral limits of jurisdiction over non-tidal WUS extend to the ordinary high-water mark (OHWM), in the absence of adjacent wetlands. Under 33 CFR 328.3(e), the USACE defines the term OHWM as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.”

According to the EPA and USACE, “wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” Water

saturation (hydrology) largely determines how the soil develops and the types of plant and animal communities living in and on the soil. Wetlands may support both aquatic and terrestrial species. The prolonged presence of water creates conditions that favor the growth of specially adapted plants (hydrophytes) and promote the development of characteristic wetland (hydric) soils. The EPA and the Corps use the 1987 Corps of Engineers Wetlands Delineation Manual and Regional Supplements to define wetlands for the CWA Section 404 permit program. To qualify for wetlands status, vegetation, soils, and hydrologic parameters must all be met.

For the purposes of this section, the term “fill” is defined as material placed in waters of the United States where the material has the effect of:

- Replacing any portion of a WUS with dry land; or
- Changing the bottom elevation of any portion of a WUS.

Examples of such fill material include, but are not limited to rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure in the WUS. The term fill material does not include trash or garbage.

The definition of “discharge of dredged material” is defined as any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the WUS. The term includes, but is not limited to, the following:

- The addition of dredged material to a specified discharge site located in WUS;
- The runoff or overflow, associated with a dredging operation, from a contained land or water disposal area; and
- Any addition, including redeposit other than incidental fallback, of dredged material, including excavated material, into WUS which is incidental to any activity, including mechanized land clearing, ditching, channelization, or other excavation.

The term discharge of dredged material does not include the following:

- Discharges of pollutants into WUS resulting from the onshore subsequent processing of dredged material that is extracted for any commercial use (other than fill). These discharges are subject to section 402 of the CWA even though the extraction and deposit of such material may require a permit from the Corps or applicable State.
- Activities that involve only the cutting or removing of vegetation above the ground (e.g., mowing, rotary cutting, and chain-sawing) where the activity neither substantially disturbs the root system nor involves mechanized pushing, dragging, or other similar activities that redeposit excavated soil material.

- Incidental fallback.

2.3 Regional Water Quality Control Board Clean Water Act /Porter-Cologne Act

The State Water Resources Control Board (State Water Board) and the RWQCB (collectively Water Boards) have the authority to regulate discharges of dredged or fill material to waters of the state under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne). CWA Section 401 water quality certifications are issued to applicants for a federal license or permit for activities that may result in a discharge into WUS, including but not limited to the discharge or dredged or fill material (as defined in Section 2.2 above). Waste discharge requirements under Porter-Cologne are issued for discharges of dredged or fill material to waters of the state.

In accordance with Porter-Cologne (Water Code, § 13000 et seq.), the Water Boards are authorized to regulate discharges of waste, which includes discharges of dredged or fill material, that may affect the quality of waters of the state. The Water Code defines waters of the state broadly to include “any surface water or groundwater, including saline waters, within the boundaries of the state.” Waters of the state includes all WUS. On April 2, 2019, the State Water Board adopted State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), which contained a wetland definition and wetland delineation procedures. The Procedures state that “an area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes or the area lacks vegetation.” The following wetlands are waters of the state:

1. Natural wetlands;
2. Wetlands created by modification of a surface water of the state;
3. Artificial wetlands that meet any of the following criteria:
 - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
 - b. Specifically identified in a water quality control plan as a wetland or other water of the state;
 - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape;
 - d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the

following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):

- i. Industrial or municipal wastewater treatment or disposal,
- ii. Settling of sediment,
- iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
- iv. Treatment of surface waters,
- v. Agricultural crop irrigation or stock watering,
- vi. Fire suppression,
- vii. Industrial processing or cooling,
- viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
- ix. Log storage,
- x. Treatment, storage, or distribution of recycled water, or
- xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits);
- xii. Fields flooded for rice growing.

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.

3.0 Methodology

3.1 Literature Review

Prior to the site visit, a literature review was conducted to aid in determining the potential for permanent, intermittent, or ephemeral drainages, wetlands, and riparian vegetation. Project background documents, topographic maps, satellite imaging, soils maps, and land use maps were examined to establish an accurate project site location, project description, potential for onsite drainages and wetlands, records of on-site vegetation, watershed, soils, and surrounding land uses.

3.2 Field Survey

On October 27, 2021, HES conducted a field survey of the 18.26-acre project site. Field surveys were conducted to delineate jurisdictional limits of WUS, waters of the State, CDFW resources, and riparian or wetlands resources associated with jurisdictional drainages.

Jurisdictional drainages were identified by looking for features such as a bed, bank, or channel. Where riparian vegetation was present, the drip line of the outer edge of the vegetation was used as the measuring criteria. Furthermore, the presence of an OHWM was recorded. Where the presence of an OHWM was evident, a measurement was taken for the width of the OHWM, and the measurement was recorded. Where changes in plant community composition were apparent, the area was examined for the possibility of wetlands. Whether or not adjacent to WUS, the potential wetland area was evaluated for the presence of the three wetland indicators: hydrology, hydric soils and hydrophytic vegetation.

4.0 Results

4.1 Environmental Setting

The project site consists of disturbed native desert scrub characterized by Joshua tree woodland alliance habitat. The project site is bordered by vacant land in all directions, a dirt path to the west and north, and Mesa Linda Street to the east. An ephemeral stream traverses the site (Appendix A, Site Photographs). The stream is an unnamed tributary that contributes to the Oro Grande Wash, which flows north toward the Mojave River and eventually flows into Soda Dry Lake in the Mojave Desert. The project site is flat with elevations ranging from 1,092 feet above mean sea level (AMSL) to 1,096 feet AMSL.

4.2 Existing Hydrological Features

The project site contains one ephemeral feature that flows throughout the middle of the project area. Following is a description of the onsite drainage:

Drainage A

Drainage A runs through the middle of the site from south to north. It is an unnamed feature that is tributary to the Oro Grande Wash, which flows north into the Mojave River. The Mojave River flows northwest to southeast through the Mojave Desert and San Bernardino Mountains and ends at Soda Dry Lake in Baker, California. The stream located within the project site is approximately 2.55 acres (725.16 linear feet). This ephemeral stream is characterized by rabbitbrush (*Chrysothamnus viscidiflorus*) dominant riparian habitat.

4.3 Soils

According to the USDA Web Soil Survey, soil at the project site is classified as Hesperia loamy fine sand (134), 2 to 5 percent slopes (Appendix D, *Soils Map*).

4.4 Hydrology

The project site is located within the South Lahontan hydrologic basin plan. The project is also in the Mojave hydrologic unit. The project site is traversed by an ephemeral drainage that flows from south to north through the project area. The onsite stream eventually flows into the Oro Grande Wash, connecting to the Mojave River and flowing east toward Soda Dry Lake.

4.5 California Department of Fish and Wildlife Jurisdiction

The project site contains approximately 2.55 acres (725.16 linear feet) of ephemeral stream and associated riparian habitat dominated by rabbitbrush that would be regulated under Section 1602 of the Fish and Game Code (Figure 4, *CDFW Jurisdiction Map*).

The proposed development is expected to impact 2.55 acres of ephemeral stream and associated riparian habitat that is regulated under Section 1602 of the Fish and Game Code (Figure 5, *Impacts to CDFW Jurisdiction Map*). Impacts to this drainage will require a 1602 Streambed Alteration Agreement from the CDFW.

4.6 Waters of the United States

The project site contains approximately 0.30 acre (712.14 linear feet) of ephemeral stream that is considered non-wetland Waters of the United States (WUS) which is regulated by the USACE Sections 404 of the CWA (Figure 6, *Waters of the U.S. Map*). The stream located on site is tributary to the Oro Grande Wash and to the Mojave River, draining into Soda Dry Lake.

The proposed development is expected to impact 0.30 acre of ephemeral stream that is considered Waters of the U.S. Impacts to WUS will require a USACE Section 404 permit and RWQCB Section 401 Water Quality Certification under the Clean Water Act (Figure 7, *Impacts to Waters of the U.S. Map*). The WUS are located within the ephemeral feature located in the center of the project area. WUS were delineated by identifying the OHWM.

4.7 Regional Water Quality Control Board Jurisdiction

The project site contains approximately 0.30 acre (712.14 linear feet) of ephemeral stream that would be considered Waters of the State subject to Porter-Cologne (Figure 8, *Waters of the State Map*). Beneficial uses for minor surface waters in the Upper Mojave Hydrologic Area have been identified by the Lahontan Basin Plan as Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Ground Water Recharge (GWR), Hydropower Generation (POW), Water Contact Recreation (REC-1), Noncontact Water Recreation (REC-2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), and Wildlife Habitat (WILD).

The proposed development is expected to impact 0.30 acre of ephemeral stream that is considered Waters of the State. Impacts to Waters of the State are covered by Section 401 State Water Quality Certification from the RWQCB (Figure 9, *Impacts to Waters of the State Map*).

5.0 Recommendation

USACE, CDFW, and RWQCB jurisdictional waters are regulated by federal, state, and local governments under a no-net-loss policy, and all impacts are considered significant and should be avoided to the greatest extent possible. Impacts to jurisdictional waters require mitigation through habitat creation, restoration, or enhancement as determined by consultation with the regulatory agencies during the permitting process. Any impacts to CDFW jurisdiction would require a Section 1602 Streambed Alteration Agreement from CDFW. Any impacts to WUS would require a Section 404 permit authorization from the USACE, as well as a 401 State Water Quality Certification from the RWQCB. Any impacts to waters of the State are covered by Section 401 State Water Quality Certification from the RWQCB.

6.0 Certification

“CERTIFICATION: *I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this jurisdictional delineation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.”*



DATE 11/29/21 SIGNED

Project Manager

Fieldwork Performed By:

Juan Hernandez

PRINCIPAL BIOLOGIST

Sarah Vasquez

ASSOCIATE BIOLOGIST

Sarah Gulyas

ASSOCIATE BIOLOGIST

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FIGURES

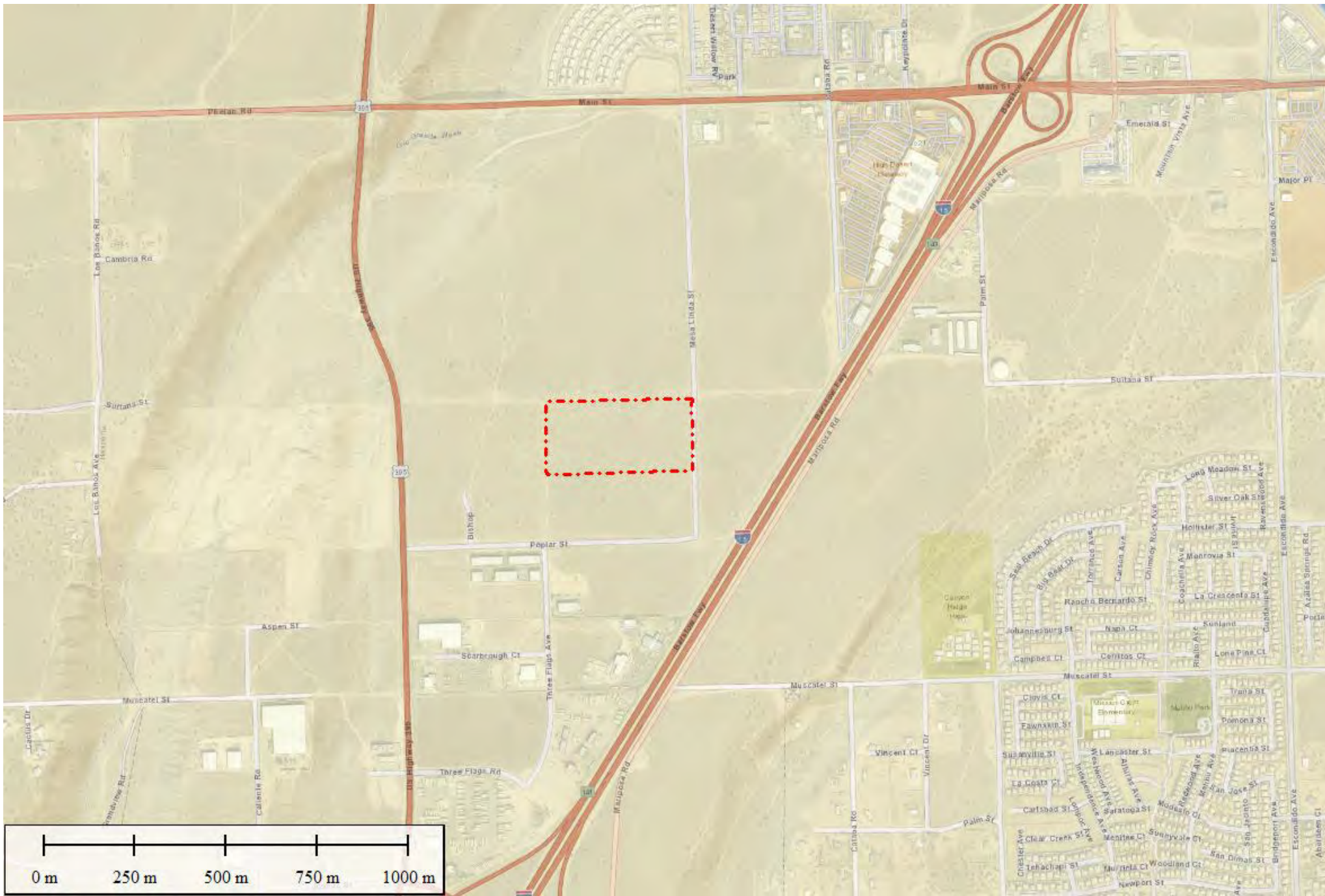


Figure 1
 Location Map
 APNs 3064-581-02 & 03
 City of Hesperia, San Bernardino County, California

Legend
 Project Site Boundary



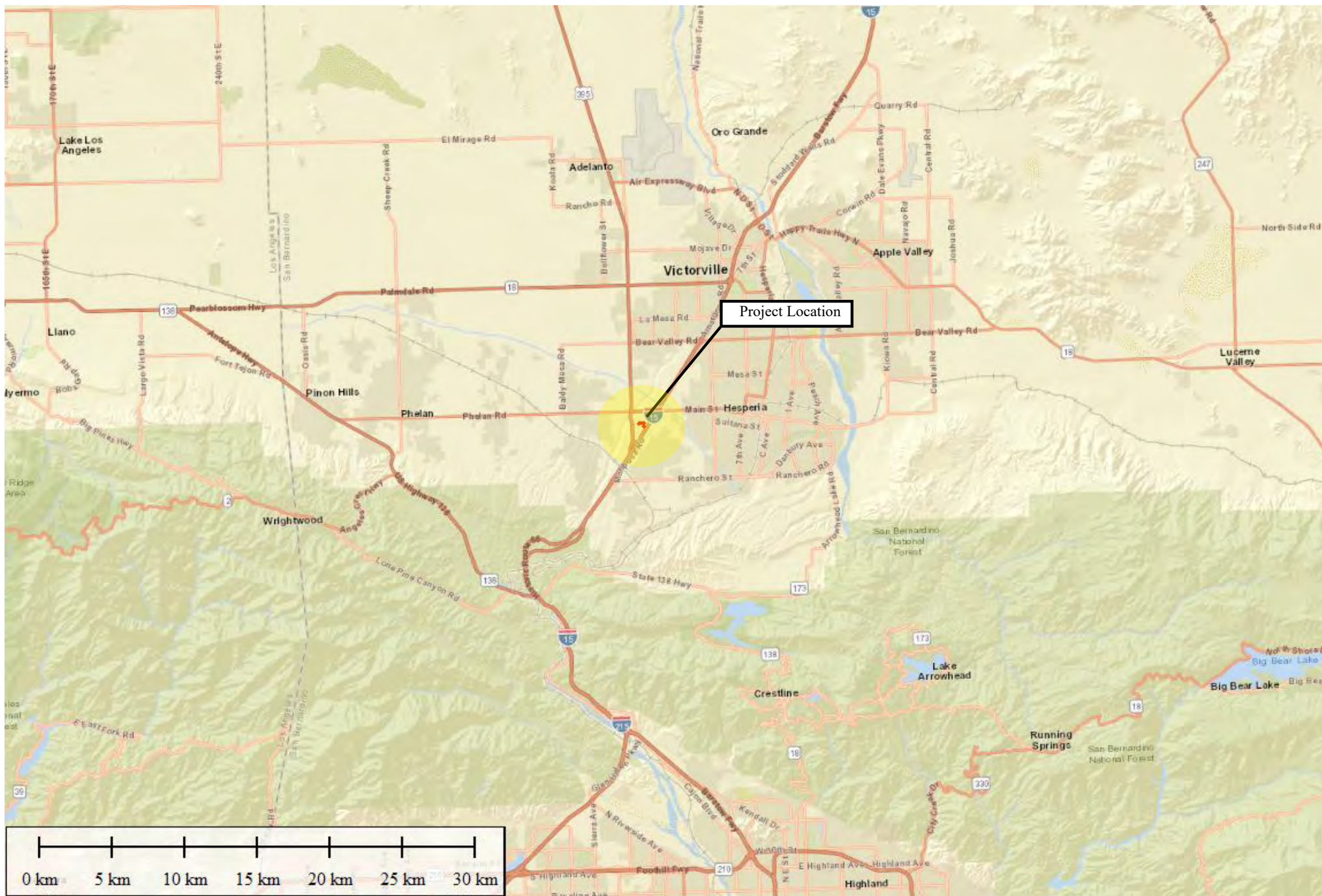


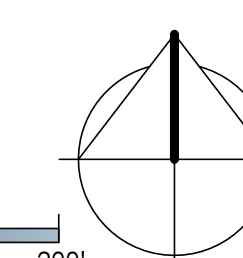
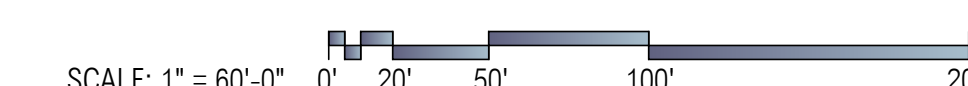
Figure 2
 Vicinity Map
 APNs 3064-581-02 & 03
 City of Hesperia, San Bernardino County, California

Legend

 Project Site Boundary



GROSS INDUSTRIAL SITE AREA:	796,54 SF / 18.28 AC.
NET INDUSTRIAL SITE AREA:	764,891 SF / 17.55 AC.
BUILDING AREA:	
FOOTPRINT	402,900 SF
MEZZANINE:	3,000 SF
TOTAL:	405,900 SF
GROSS COVERAGE:	
NET COVERAGE:	50.95 %
	53.06 %
AUTO PARKING REQUIRED:	
0 TO 10,000 SF @ 1/500 SF	20 STALLS
ABV 10K @ 1/2500 SF	160 STALLS
TOTAL PARKING	180 STALLS
PARKING PROVIDED:	
STANDARD STALLS	174 STALLS
ACCESSIBLE STALLS	6 STALLS
TOTAL STALLS	180 STALLS
DOCK LOADING POSITIONS	
	55 DOCKS
TRAILER PARKING STALLS	
	56 TRAILERS
LANDSCAPE PROVIDED	129,129 SF / 16.88 % (NET)



SULTANA STREET / MESA LINDA STREET

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Figure 4

CDFW Jurisdiction Map

APNs 3064-581-02 & 03

City of Hesperia, San Bernardino County, California

Legend



Project Site Boundary



CDFW Jurisdiction
(2.55 Acres)



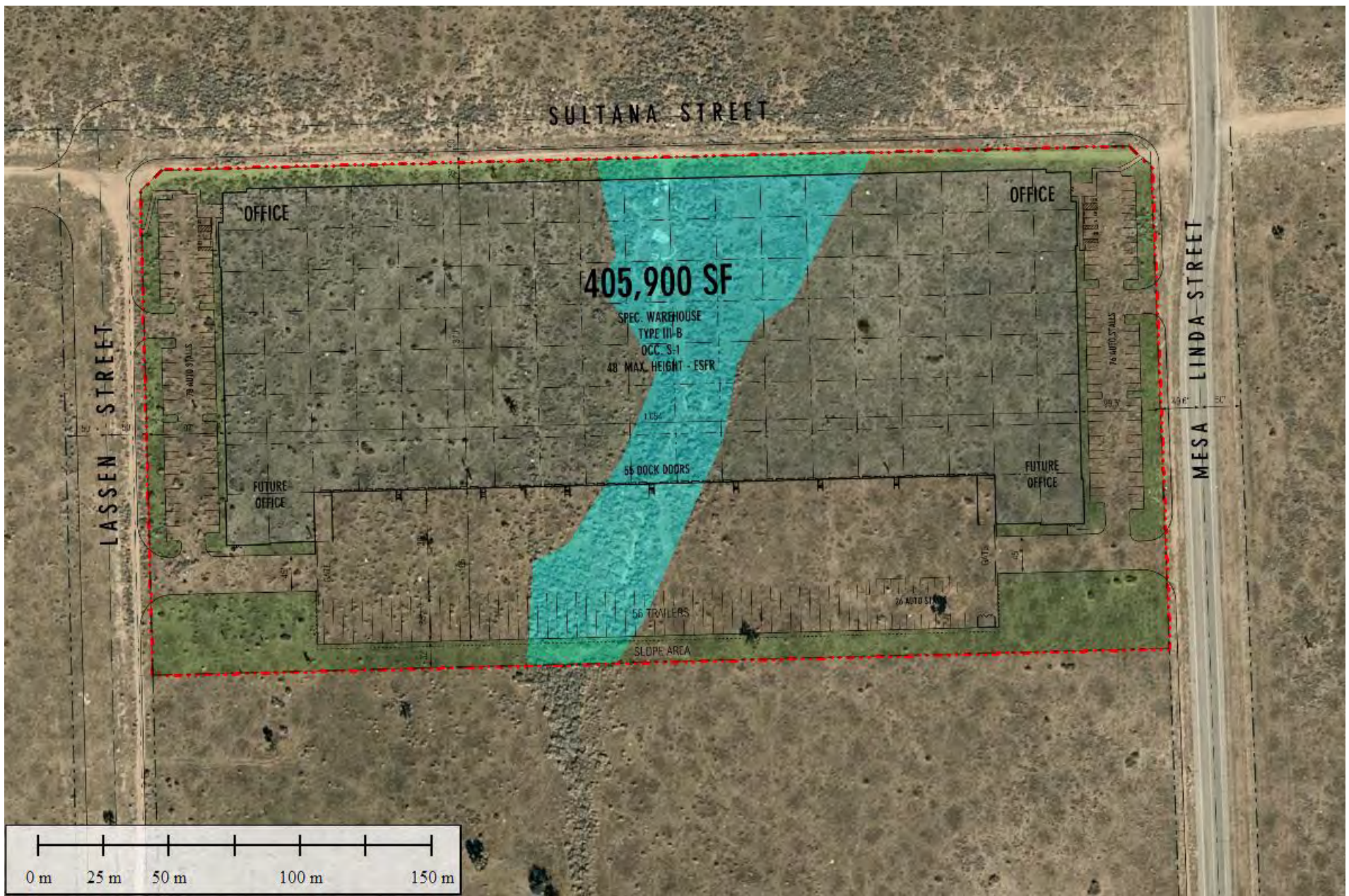


Figure 5

Impacts to CDFW Jurisdiction Map

APNs 3064-581-02 & 03

City of Hesperia, San Bernardino County, California

Legend



Project Site Boundary



Impacts to CDFW Jurisdiction
(2.55 Acres)



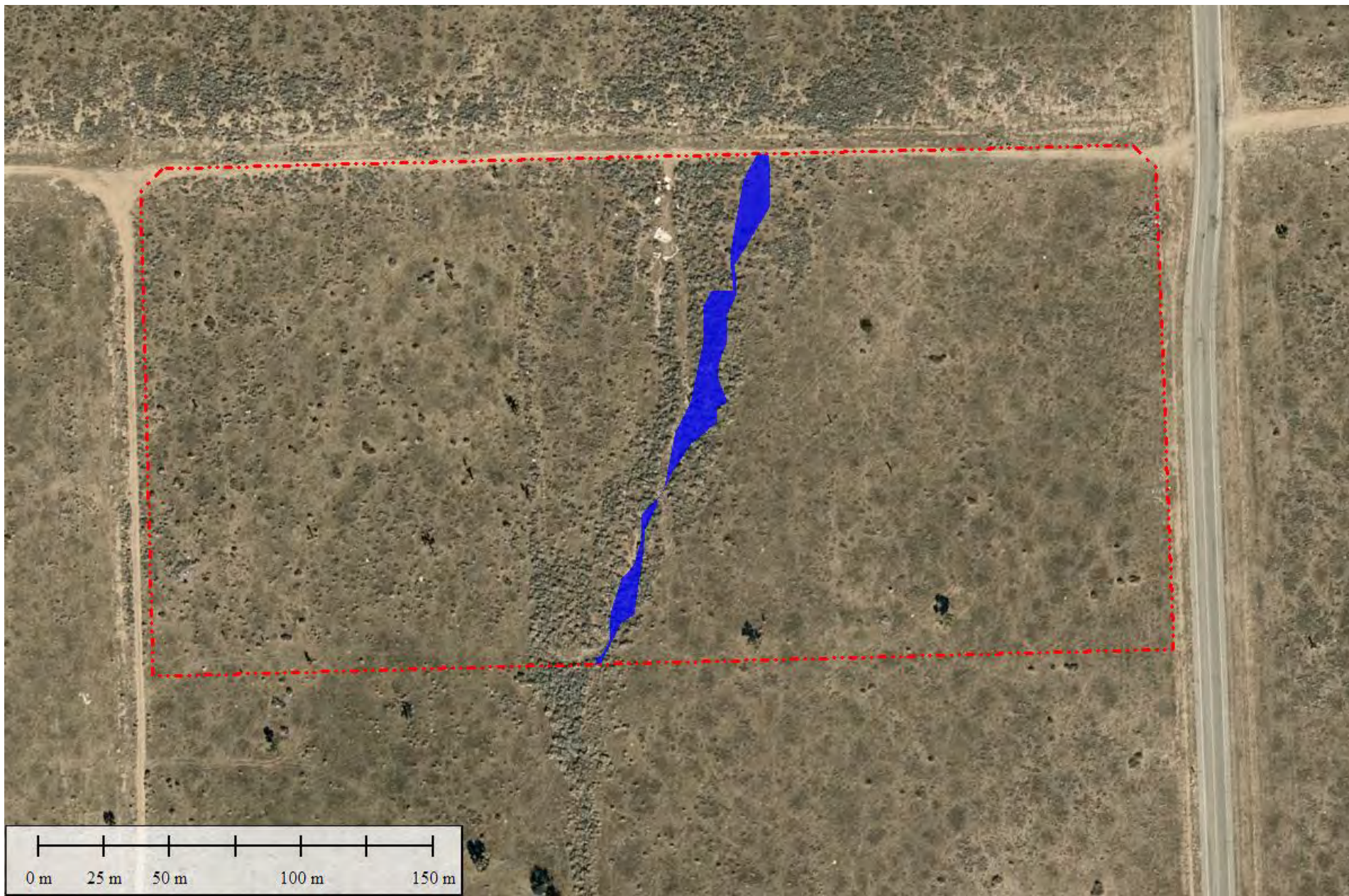


Figure 6

Waters of the United States Map
APNs 3064-581-02 & 03
City of Hesperia, San Bernardino County, California

Legend



Project Site Boundary

Waters of the United States
(0.30 Acre)





Figure 7

Impacts to Waters of the United States Map

APNs 3064-581-02 & 03

City of Hesperia, San Bernardino County, California

Legend



Project Site Boundary



Impacts to Waters of the United States
(0.30 Acre)



N



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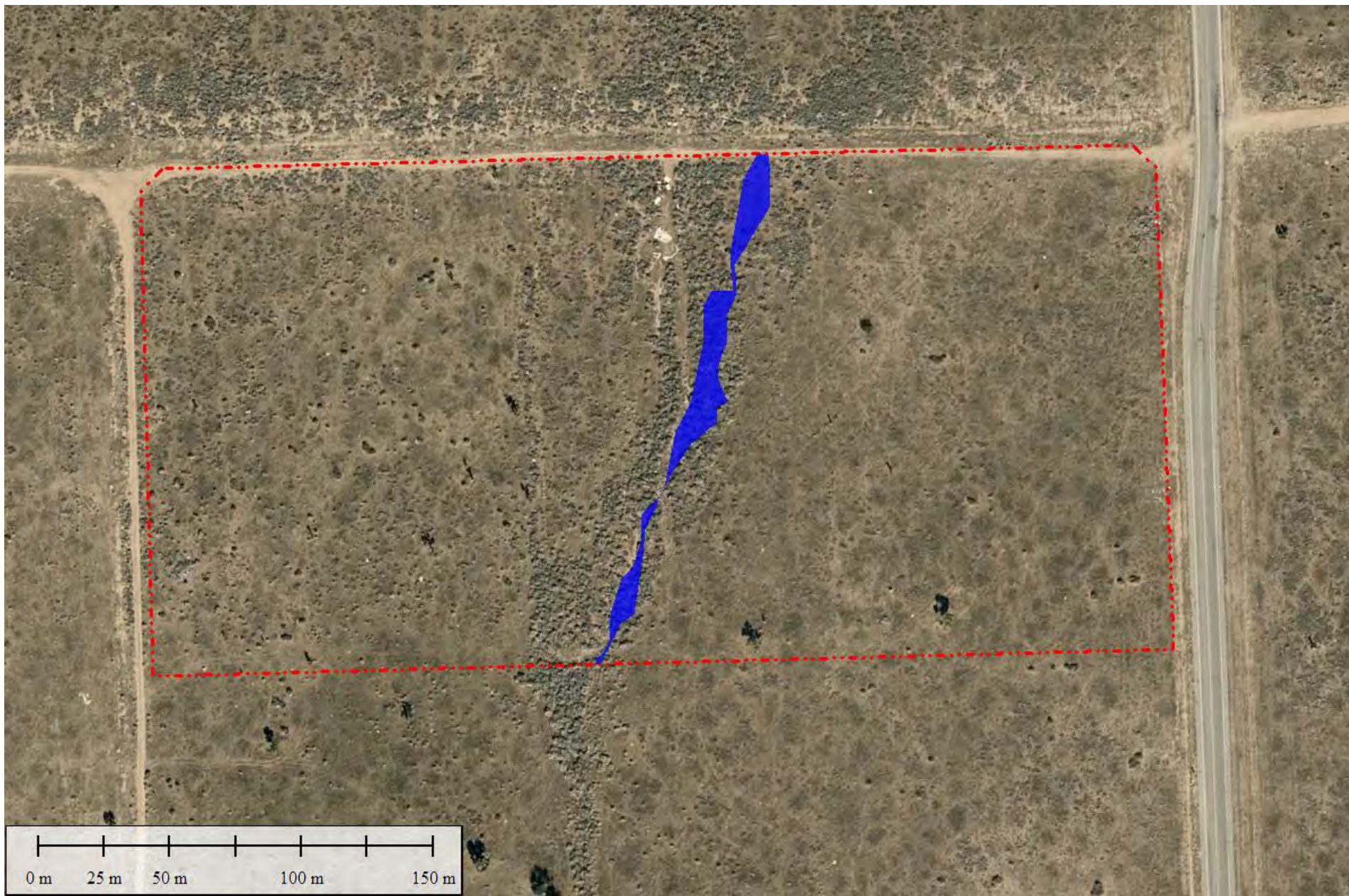


Figure 8

Waters of the State Map

APNs 3064-581-02 & 03

City of Hesperia, San Bernardino County, California

Legend



Project Site Boundary



Waters of the State
(0.30 Acre)





Figure 9

Impacts to Waters of the State Map

APNs 3064-581-02 & 03

City of Hesperia, San Bernardino County, California

Legend



Project Site Boundary



Impacts to Waters of the State
(0.30 Acre)



N



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APPENDIX A



View of disturbed Joshua tree woodland alliance habitat from the northeast. Facing southwest.



View of disturbed Joshua tree woodland alliance habitat from the northeast. Facing southwest.



View of rabbitbrush riparian habitat within ephemeral stream on site. Joshua tree present within riparian habitat. Facing north.



View of disturbed Joshua tree woodland alliance from the middle of the side where ephemeral stream occurs. Facing west.



View of disturbed Joshua tree woodland alliance habitat from the northwest. Facing southeast.



View of rabbitbrush riparian habitat along ephemeral stream. Disturbed Joshua tree woodland alliance surrounding the riparian habitat on both sides. Facing north.



View of beginning of onsite ephemeral stream from the north. Facing south.



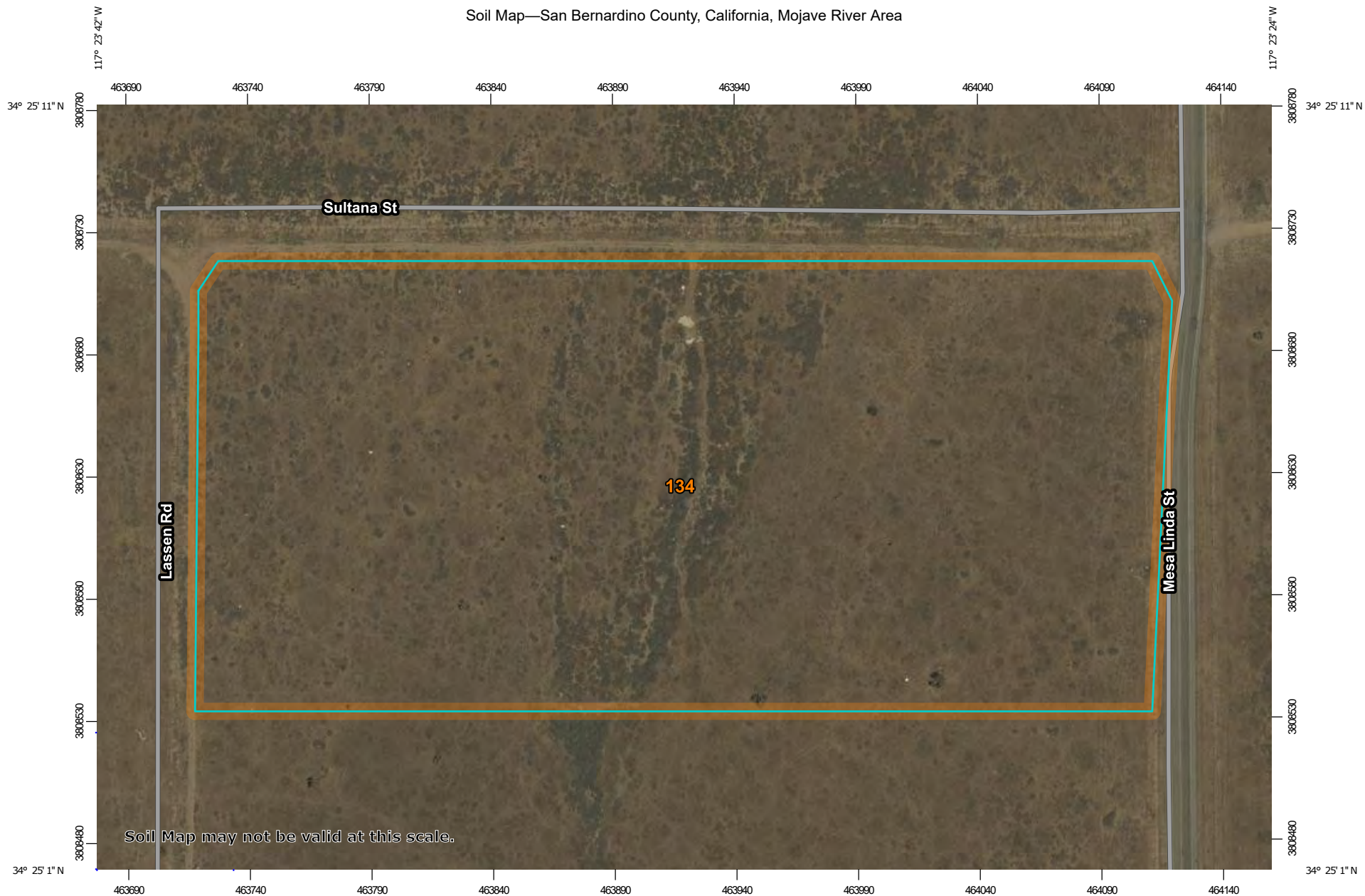
View of onsite ephemeral stream from the north. Facing southeast. Rabbitbrush riparian habitat surrounds.



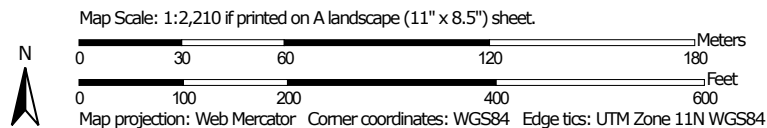
View of several Joshua trees in disturbed Joshua tree woodland alliance habitat from the middle of site. Facing west.

APPENDIX B

Soil Map—San Bernardino County, California, Mojave River Area



Soil Map may not be valid at this scale.



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

11/8/2021
Page 1 of 3

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County, California, Mojave River Area

Survey Area Data: Version 13, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 26, 2019—Jul 8, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
134	HESPERIA LOAMY FINE SAND, 2 TO 5 PERCENT SLOPES	18.1	100.0%
Totals for Area of Interest		18.1	100.0%

APPENDIX G



**DESERT TORTOISE PRESENCE/ABSENCE REPORT
FOR
ASSESSOR'S PARCEL NUMBERS
3064-581-02 & 03**

**CITY OF HESPERIA
SAN BERNARDINO COUNTY, CALIFORNIA**

Prepared for:

**EPD Solutions, Inc.
2 Park Plaza Suite 1120
Irvine, CA 92614**

Prepared by:

**Hernandez Environmental Services
17037 Lakeshore Drive
Lake Elsinore, California 92530
(909) 772-9009**

NOVEMBER 2021

TABLE OF CONTENTS

TABLE OF CONTENTS.....	1
1.0 Introduction.....	2
1.1 Project Site Location	2
2.0 Methodology	2
2.1 Literature Review	2
2.2 Field Survey	2
3.0 Existing Conditions and Results	3
3.1 Environmental Setting.....	3
3.2 Desert Tortoise Survey Results	3
4.0 Discussion	3
5.0 Recommendations	3
6.0 Certification	4
6.0 References	5

FIGURES

Figure 1 - Location Map

Figure 2 - Vicinity Map

Figure 3 – Desert Tortoise Survey Area Map

APPENDICES

Appendix A – Site Photographs

1.0 Introduction

Hernandez Environmental Services (HES) was contracted by EPD Solutions, Inc. to conduct desert tortoise (*Gopherus agassizii*) presence/absence surveys for San Bernardino County Assessor's Parcel Numbers (APN) 3064-581-02 and 03 located in the City of Hesperia, San Bernardino County, California. The proposed project consists of the construction of a warehouse and associated offices, trailers, and auto stalls.

HES conducted a presence/absence survey following the guidelines in the October 26, 2018, *Preparing For Any Action That May Occur Within The Range Of The Mojave Desert Tortoise* guidelines. The proposed project is approximately 18.26 acres. The total impact area for the proposed development is 18.26 acres.

1.1 Project Site Location

The proposed project site is located west of Interstate 15 Freeway on the northwest corner of the intersection of Poplar Street and Mesa Linda Street within the City of Hesperia, San Bernardino County, California (Figures 1 and 2, *Location Map* and *Vicinity Map*). Specifically, the project site is located within Section 22, Township 4 North, Range 5 West, San Bernardino Base and Meridian (SBB&M), of the *Baldy Mesa* United States Geological Survey (USGS) 7.5-minute topographic quadrangle. Project center point latitude and longitude are 34°25'06.3370" North and 117°23'30.7785" West.

2.0 Methodology

2.1 Literature Review

HES conducted a literature search and reviewed aerial photographs and topographic maps of the project location and surrounding areas. HES followed the protocol for site assessment and presence/absence surveys described in the USFWS October 26, 2018, *Preparing For Any Action That May Occur Within The Range Of The Mojave Desert Tortoise*.

2.2 Field Survey

On November 16, HES biologists surveyed the entire 18.26-acre project area and a 500-foot buffer around the project site boundary (Figure 3, *Desert Tortoise Survey Area Map*). Survey conditions were as follows:

Date	Time	Temperature (Fahrenheit)	Weather Conditions
November 16, 2021	12:45 P.M. to 1:45 P.M.	72 degrees	Sunny, clear skies with 0 to 11 miles per hour winds from the northeast

Linear transects spaced approximately 10 meters apart were walked using UTM as guidelines for 100 percent coverage. Tortoise, tortoise sign, and areas of interest observed were recorded and Global Positioning System (GPS) way points were recorded.

3.0 Existing Conditions and Results

3.1 Environmental Setting

The 18.26-acre action area reflects the arid conditions, limited rainfall, and generally poor soils of the Mojave Desert. The project site exhibits a dominant habitat of disturbed Joshua tree woodland alliance. Plant species composition varies depending upon the location. The elevation of the action area ranged from 1,092 feet above mean sea level (AMSL) to 1,096 feet AMSL. The peak blooming season for desert vegetation typically occurs during the months of February, March, and April, and in years of abundant annual rainfall.

3.2 Desert Tortoise Survey Results

No tortoise burrows, tortoise scat, or tortoise species were found during the field survey within project boundaries or within a 500-foot buffer area. The entire project area was surveyed for 100 percent coverage. A 500-foot buffer area around the project boundaries was also surveyed due to potential suitable habitat.

4.0 Discussion

Based on the October 26, 2018, *Preparing For Any Action That May Occur Within The Range Of The Mojave Desert Tortoise* guidelines, the action area is considered a “smaller project”. A smaller project is one that is smaller than 500 acres. For smaller projects, the number of tortoises affected is likely to be too small for statistical treatment; the goal with surveying these areas is to determine whether desert tortoise is likely to be present and to determine any areas of concentrated use (October 26, 2018, Guidelines). Based on our results, we have determined that the desert tortoise does not occupy the site and this species has a low probability of being present throughout the project site.

5.0 Recommendations

Hernandez Environmental Services recommends the following be done to preserve the desert tortoise:

- Biological monitors shall complete a pre-construction survey prior to ground disturbing activities.
- If desert tortoise is found, the project will need to consult with the California Department of Fish and Game and the United States Fish and Wildlife Service.
- Biological monitors shall be present during construction activities to avoid potential “take” on desert tortoise.

6.0 Certification

CERTIFICATION: *"I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief."*



DATE 11/29/2021 SIGNED _____

PROJECT MANAGER

Fieldwork Performed By:

Sarah Vasquez

ASSOCIATE BIOLOGIST

Sarah Gulyas

ASSOCIATE BIOLOGIST

6.0 References

California Department of Fish and Game, 2019. Special Animals List.

Hickman, J. C., ed. 1993. The Jepson Manual: Higher Plants of California. University of California Press.

Munz, P.A., 1974. A Flora of Southern California. University of California Press, Berkeley, California.

Peterson, R. 1990 *A Field Guide to Western Birds*. Houghton Mifflin Company, Boston, MA.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens 2009 *A Manual of California Vegetation, 2nd edition*. California Native Plant Society Press, Sacramento, CA.

U.S Fish and Wildlife Service, 2019. Endangered and Threatened Wildlife and Plants. <https://www.fws.gov/endangered/species/us-species.html>.

U.S Fish and Wildlife Service, October 26, 2018, *Preparing For Any Action That May Occur Within The Range Of The Mojave Desert Tortoise* guidelines.

FIGURES

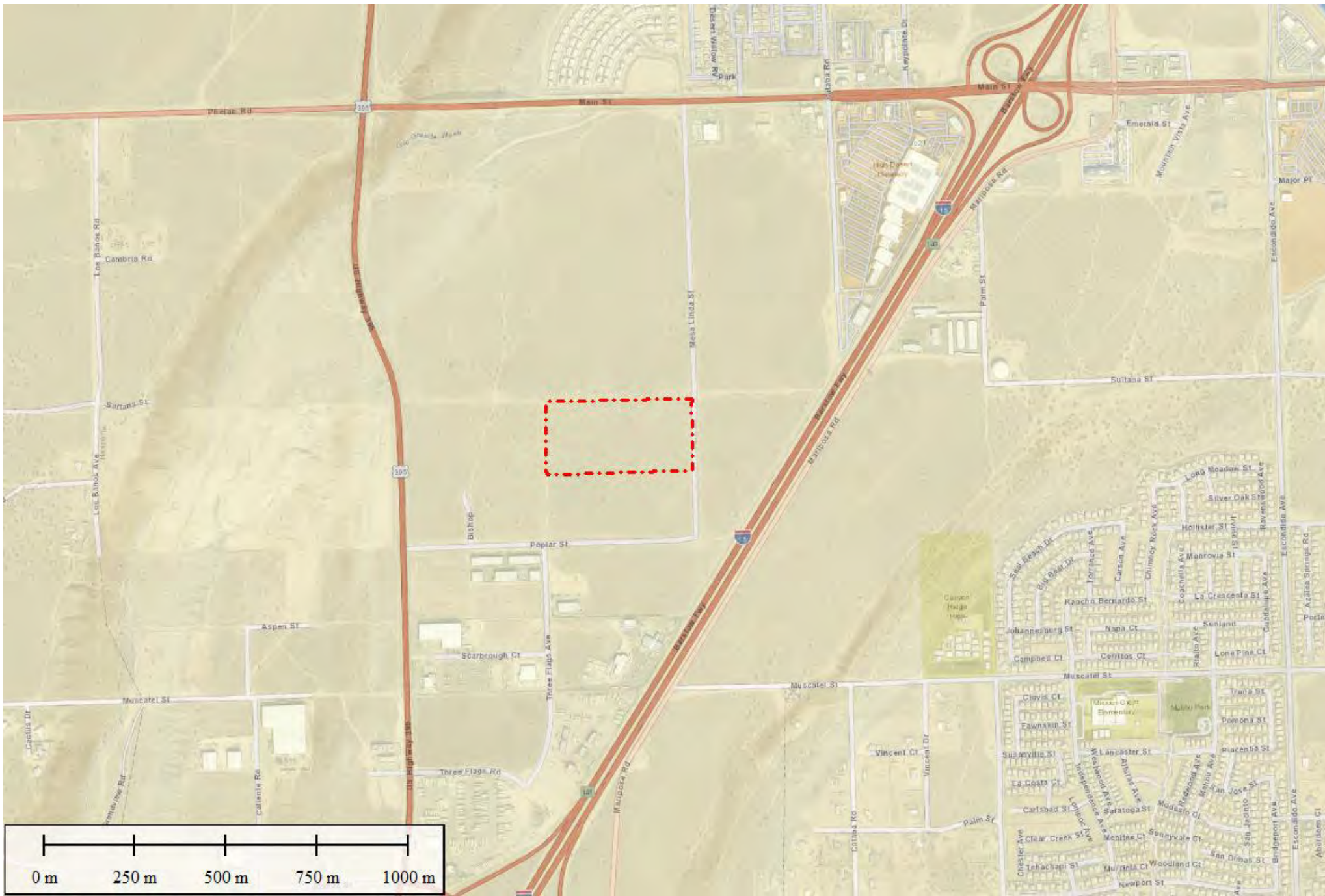


Figure 1
 Location Map
 APNs 3064-581-02 & 03
 City of Hesperia, San Bernardino County, California

Legend
 Project Site Boundary



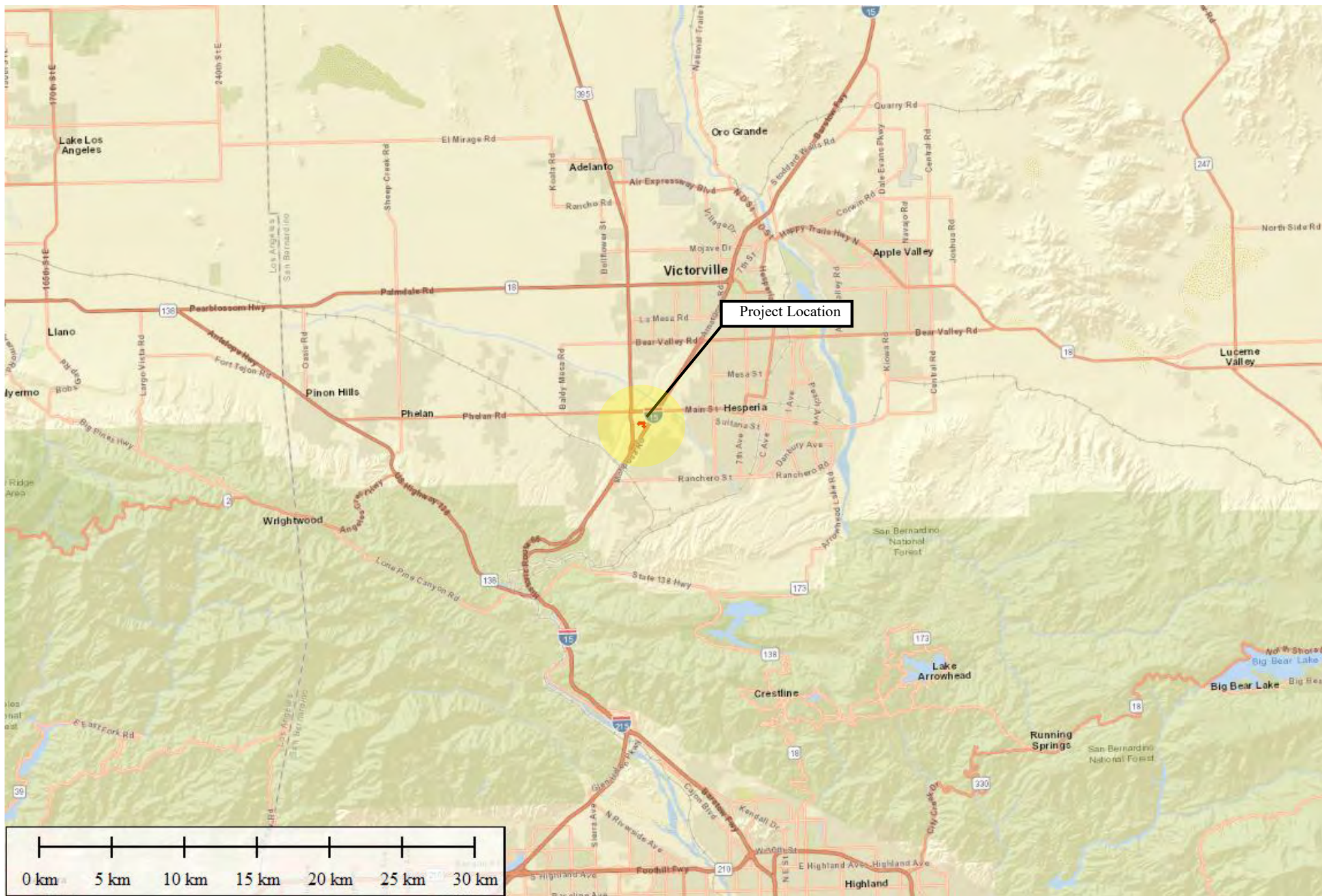


Figure 2
 Vicinity Map
 APNs 3064-581-02 & 03
 City of Hesperia, San Bernardino County, California

Legend

 Project Site Boundary





Figure 3

Desert Tortoise Survey Area Map

APNs 3064-581-02 & 03

City of Hesperia, San Bernardino County, California

- Legend**
-  Project Site Boundary
 -  500 Foot (150 Meter) Buffer Area
 -  Transect Location



APPENDIX A



View of disturbed Joshua tree woodland alliance habitat from the northeast. Facing southwest.



View of disturbed Joshua tree woodland alliance habitat from the northeast. Facing southwest.



View of rabbitbrush riparian habitat within ephemeral stream on site. Joshua tree present within riparian habitat. Facing north.



View of disturbed Joshua tree woodland alliance from the middle of the side where ephemeral stream occurs. Facing west.



View of disturbed Joshua tree woodland alliance habitat from the northwest. Facing southeast.



View of rabbitbrush riparian habitat along ephemeral stream. Disturbed Joshua tree woodland alliance surrounding the riparian habitat on both sides. Facing north.



View of beginning of onsite ephemeral stream from the north. Facing south.



View of onsite ephemeral stream from the north. Facing southeast. Rabbitbrush riparian habitat surrounds.



View of several Joshua trees in disturbed Joshua tree woodland alliance habitat from the middle of site. Facing west.

APPENDIX H



Memorandum

Date: June 28, 2022

To: EPD Solutions, Inc.

From: Juan J. Hernandez, Hernandez Environmental Services

Subject: Focused Burrowing Owl Survey Report for APNs 3064-581-02 & -03

This memorandum provides the methods and results of a California Department of Fish and Wildlife (CDFW) protocol burrowing owl (*Athene cunicularia*) (BUOW) survey for Assessor's Parcel Numbers (APNs) 3064-581-02 and -03 located within the City of Hesperia, San Bernardino County, California.

Project Location

The approximate 18.28-acre project site is located west of the Interstate 15 Freeway on the northwest corner of the intersection of Poplar Street and Mesa Linda Street within the City of Hesperia, San Bernardino County, California. Specifically, the project area is located within Section 22, Township 4 North, Range 5 West of the *Baldy Mesa* United States Geological Survey (USGS) 7.5' topographic quadrangle. The center point latitude and longitude coordinates for the project site are 34°25'06.3370" North and 117°23'30.7785" West (Figures 1 and 2).

Project Description

The proposed Project consists of the development of approximately 18.28 acres of land, including disturbed Joshua tree woodland habitat and ephemeral stream habitat, for the construction of a warehouse and associated offices, trailer stalls, auto stalls, and landscaping (Figure 3). The entire 18.28 acres is expected to be impacted.

Two projects adjacent to the west and east of this project are in the process of being approved by CDFW to begin ground-breaking activities. If approved prior to ours, those projects shall be responsible for offsite street improvements to Lassen Street, Sultana Street, and Mesa Linda Street. In the case that the neighboring projects do not move forward, this project will impact these streets. This report assumes that our project will be responsible for street improvements. The total project Study Area includes onsite and offsite impacts and is approximately 23.02 acres.

Project Contact Information

Owner/Applicant: EPD Solutions, Inc.

*Hernandez Environmental Services
17037 Lakeshore Drive
Lake Elsinore, CA 92530
909.772.9009*

2355 Main Street, Suite 100
Irvine, CA 92614

Principal Investigator: Juan J. Hernandez
Hernandez Environmental Services
17037 Lakeshore Drive
Lake Elsinore, CA 92530
(909) 772-9009

Field Survey Methods

HES implemented the steps as described in the *Staff Report on Burrowing Owl Mitigation* (1995). The General Biological Assessment prepared for the project determined that focused surveys for BUOW would be required due to the presence of suitable habitat documented during the October 27, 2021, habitat assessment. In accordance with the CDFW, focused burrow and focused BUOW surveys (Part A and Part B, respectively) were conducted on four separate days during the breeding season of 2022: March 23, April 25, May 25, and June 24. Survey times, weather, and sunrise/sunset information is described in Table 1 below.

Table 1. Survey Information

Survey	Date	Survey Start Time	Survey End Time	Sunrise/Sunset	Weather
1	March 23, 2022	0730 hours	0840 hours	0648 hours 1903 hours	50-55 degrees Fahrenheit, 0% cloud cover, winds 0-2 miles per hour from the southeast.
2	April 25, 2022	0720 hours	0804 hours	0604 hours 1929 hours	56-57 degrees Fahrenheit, 0% cloud cover, winds 0-3 miles per hour from the southeast.
3	May 25, 2022	0710 hours	0740 hours	0540 hours 1952 hours	76-81 degrees Fahrenheit, 0% cloud cover, winds 3 miles per hour from the southeast.
4	June 24, 2022	0710 hours	0738 hours	0538 hours 2005 hours	75-79 degrees Fahrenheit, 0% cloud cover, winds 4 miles per hour from the south.

Surveys were conducted from one hour before sunrise to two hours after sunrise or two hours before sunset to one hour after sunset and during weather that was conducive to observing owls outside their burrows and detecting BUOW sign. The surveys were not conducted during rain, high winds (> 20 miles per hour), dense fog, or temperatures above 90 degrees Fahrenheit. Surveys involved walking through potentially suitable habitat within the survey area. The

pedestrian survey transects were spaced approximately 30 to 50 feet apart to allow 100 percent visual coverage of the ground surface. Special attention was paid to those habitat areas that appeared to provide suitable habitat for BUOW. Where permission to access the buffer areas could not be obtained, the biologist visually inspects adjacent habitats with binoculars (Figure 4).

All encountered burrows or structure entrances were checked for the presence of BUOW, molted feathers, cast pellets, prey remains, eggshell fragments, tracks, or excrement. Natural or man-made structures and debris piles that could support BUOW were also surveyed. The locations of all suitable BUOW habitat, potential burrows, BUOW sign, and any BUOW observed was recorded and mapped with a handheld Global Positioning System (GPS) unit.

All wildlife species encountered visually or audibly during the field survey were identified and recorded in field notes. Binoculars were used to aid in the identification of observed wildlife. Representative site photographs were taken and are included within Appendix A.

Results

The project site consists of disturbed native desert scrub characterized by Joshua tree woodland alliance habitat. The site is surrounded by vacant land in all directions, a dirt path to the west and north, and Mesa Linda Street to the east. An ephemeral stream traverses the site. Soil at the project site is classified as Hesperia loamy fine sand (134), 2 to 5 percent slopes. Elevations on the project site range from 1,092 feet above mean sea-level (AMSL) to 1,096 feet AMSL.

The habitat assessment conducted on October 27, 2021, found that the project site does provide suitable habitat and burrows/nesting opportunities for BUOW. Ground squirrels and ground squirrel burrows were observed, and approximately 21 suitable burrows were identified and recorded in the study area (Figure 5). 5 burrows occur within the project site and 16 burrows were found within the 500-foot buffer. BUOW signs such as molted feathers, cast pellets, or excrement on rock outcroppings were not found. All burrows are considered inactive and not in use by burrowing owl. No BUOW were observed on the project site.

Based on the absence of BUOW and BUOW evidence (i.e., scat, pellets, and feathers) within the study area, it can be concluded that the study area is not in use by BUOW.

Recommendations

It is recommended that the following measures be implemented to ensure that potential impacts to BUOW are less than significant:

- Based on the presence of suitable habitat documented during the habitat assessment and focused burrowing owl surveys, a 30-day preconstruction survey will be conducted prior to the initiation of construction to ensure the protection of BUOW.
- If BUOW are found to have colonized the project site prior to the initiation of construction, the project proponent will immediately inform the Wildlife Agencies and

- will need to prepare a Burrowing Owl Protection and Relocation Plan for approval by the Wildlife Agencies prior to initiating ground disturbance.
- If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrow owl is found, the same coordination described above will be necessary.

Certification

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: June 28, 2022



Juan J. Hernandez
Principal Biologist

Enclosures:

Figure 1: Location Map
Figure 2: Vicinity Map
Figure 3: Project Plans
Figure 4: Survey Area Map
Figure 5: Survey Results Map
Appendix A: Site Photographs

FIGURES

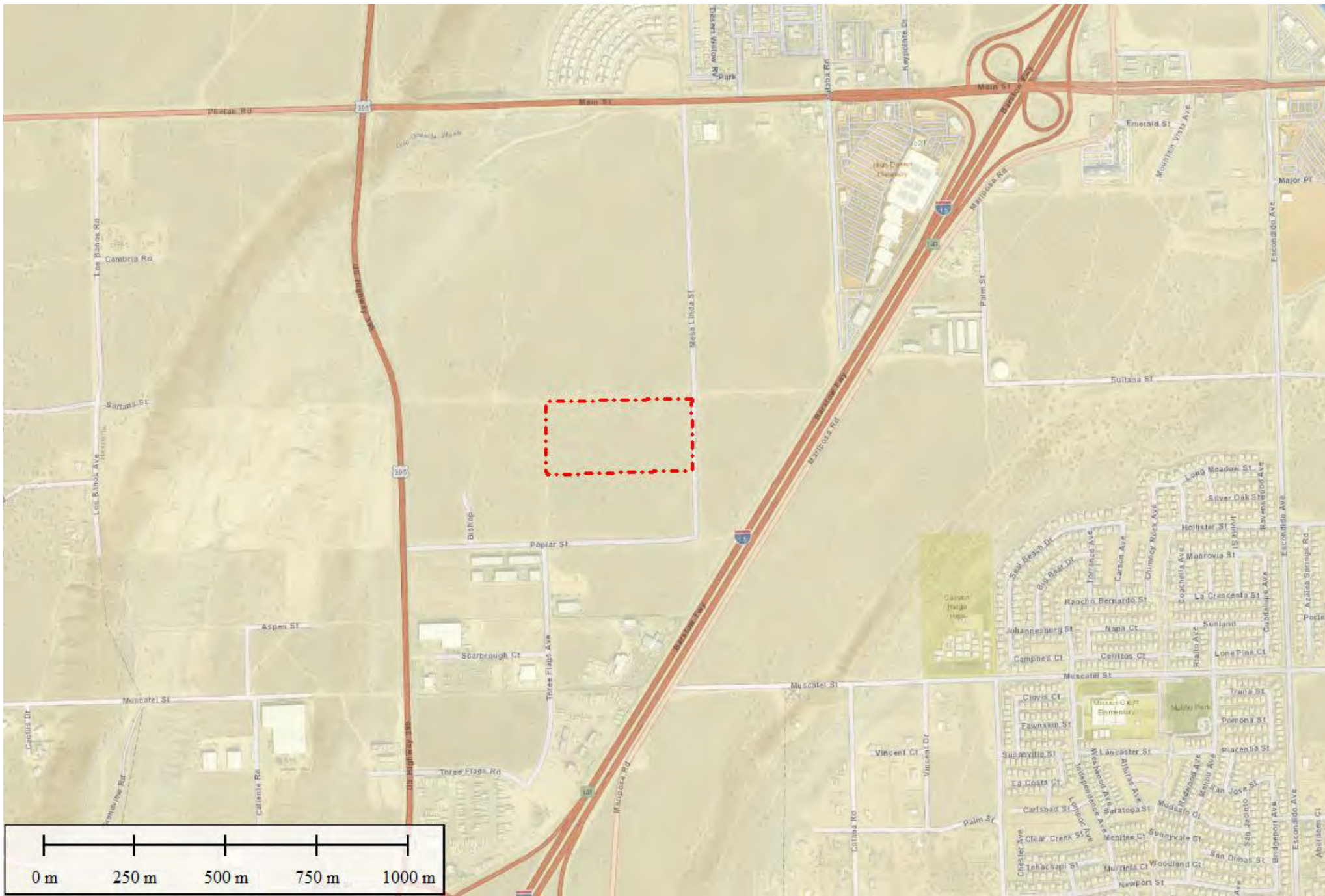


Figure 1
 Location Map
 APNs 3064-581-02 & 03
 City of Hesperia, San Bernardino County, California

Legend
 Project Site Boundary



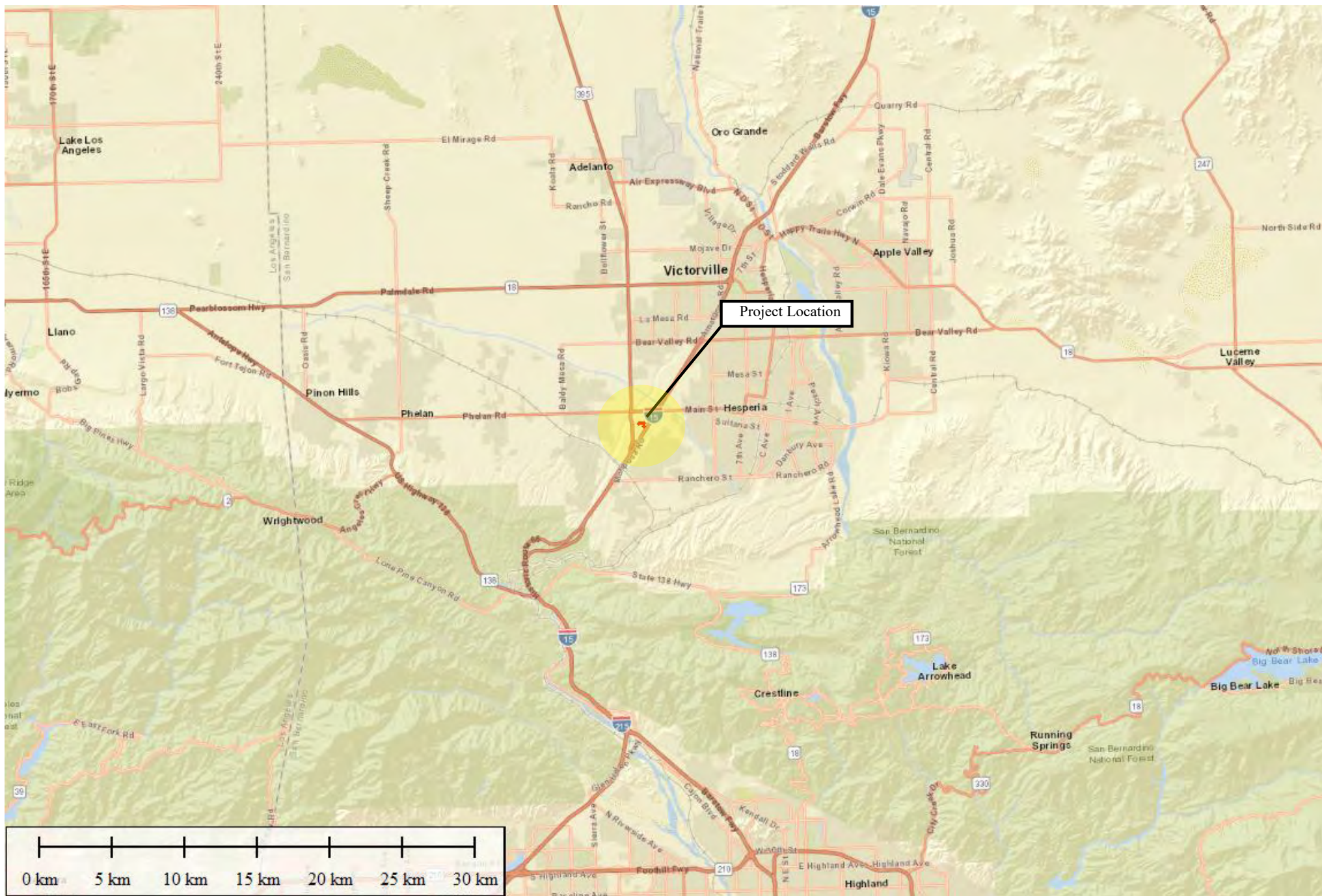


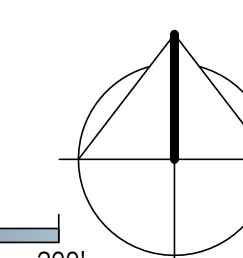
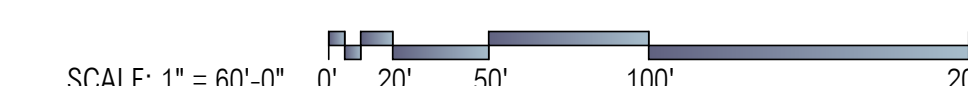
Figure 2
 Vicinity Map
 APNs 3064-581-02 & 03
 City of Hesperia, San Bernardino County, California

Legend

 Project Site Boundary



GROSS INDUSTRIAL SITE AREA:	796,54 SF / 18.28 AC.
NET INDUSTRIAL SITE AREA:	764,891 SF / 17.55 AC.
BUILDING AREA:	
FOOTPRINT	402,900 SF
MEZZANINE:	3,000 SF
TOTAL:	405,900 SF
GROSS COVERAGE:	
NET COVERAGE:	50.95 %
	53.06 %
AUTO PARKING REQUIRED:	
0 TO 10,000 SF @ 1/500 SF	20 STALLS
ABV 10K @ 1/2500 SF	160 STALLS
TOTAL PARKING	180 STALLS
PARKING PROVIDED:	
STANDARD STALLS	174 STALLS
ACCESSIBLE STALLS	6 STALLS
TOTAL STALLS	180 STALLS
DOCK LOADING POSITIONS	
	55 DOCKS
TRAILER PARKING STALLS	
	56 TRAILERS
LANDSCAPE PROVIDED	129,129 SF / 16.88 % (NET)



SULTANA STREET / MESA LINDA STREET

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FX 949-341-0922

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Figure 4
BUOW Survey Area Map
APNs 3064-581-02 & -03
City of Hesperia, San Bernardino County, California

 Project Site Boundary

 500 Foot Buffer

Legend

 Transects



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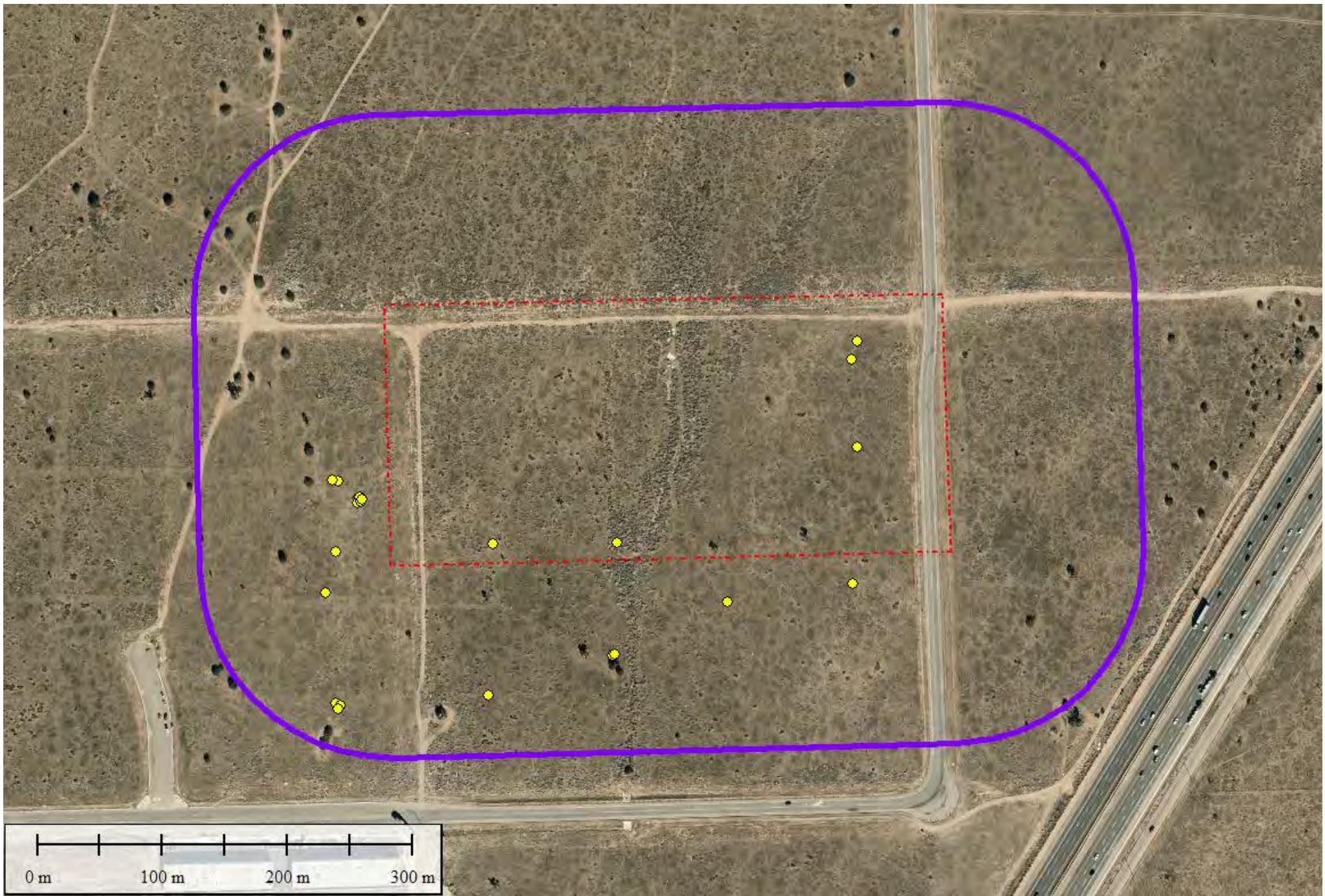


Figure 5
BUOW Survey Results Map
APNs 3064-581-02 & -03
City of Hesperia, San Bernardino County, California



Project Site Boundary

500 Foot Buffer



Inactive Burrows (x21)



N



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APPENDIX A



Suitable burrow within the project site spotted during the focused surveys.



Suitable burrow within the project site spotted during the focused surveys.



Suitable burrow within the project site spotted during the focused surveys.

APPENDIX I

**Mohave Ground Squirrel -MGS (*Xerospermophilus mohavensis*) Habitat
Assessment Survey Results for Mesa Linda 20 Acres, Hesperia, Ca.**



Site Acreage: 20 Acres

APN 3064-581-02/03

Prepared by:

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Trapping Surveys Conducted On:

April 10 to April 14, 2022

May 11 to 15, 2022

June 7 to 11, 2022

Report Date:

September 27, 2022

Prepared For:

Hernandez Environmental Services

17037 Lakeshore Drive

Lake Elsinore, CA 92530

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Appendix A	MOHAVE GROUND SQUIRREL TRAPPING SUMMARY FORM
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1.0 EXECUTIVE SUMMARY

Philippe Vergne of ENVIRA was contracted by Hernandez Environmental Services (HES) to conduct a focused Mohave ground squirrel (*Xerospermophilus mohavensis*)-MGS trapping survey on the Mesa Linda 20-acre site. The proposed project is located east and adjacent to Mesa Linda Avenue in Hesperia, California.

The proposed project is for the construction of warehouse facilities and related improvements.

This report documents the findings of the focused Mohave ground squirrel trapping surveys for the project site shown on Figure 1- Project Boundary. The intended use of this document is to disclose the presence or absence of MGS within the project limits.

The MGS was not captured on the current project site during the 2022 protocol survey as described in this report. The Mesa Linda project site does not currently support MGS. The surrounding properties were trapped in 2021, and 2022 by Dipodomys Environmental resulting in no MGS capture.

Implementation of the Mesa Linda Project will not result in the loss of individual MGS, occupied MGS habitat, nor will it adversely affect local or regional MGS populations.

2.0 PROJECT AND PROPERTY DESCRIPTION

The proposed project site is located west of Interstate 15 Freeway on the northwest corner of the intersection of Poplar Street and Mesa Linda Street within the City of Hesperia, San Bernardino County, California. Specifically, the project site is located within Section 22, Township 4 North, Range 5 West, San Bernardino Base and Meridian (SBB&M) of the *Baldy Mesa* United States Geological Survey (USGS) 7.5-minute topographic quadrangle. The project site center point latitude and longitude are 34°25'06.3370" North and 117°23'30.7785" West.

The study area consists of disturbed native desert scrub characterized by Joshua tree woodland alliance habitat. The project site is bordered by vacant land in all directions, a dirt path to the west and north, and Mesa Linda Street to the east. The surrounding lands are being considered for development by the City of Hesperia.

The project site is within the historical range of the Mohave ground squirrel, a state-Threatened species and contains habitat considered suitable for the species.

2.1 SITE VEGETATION

The disturbed annual grasslands and understory on site are dominated by fiddleneck, brome, and forbs. A few Joshua trees are scattered throughout the site. Scrub community is dominated by saltbush, Indigo bush, and isolated creosote bush (Photo 1). A list of plant species observed onsite is provided in Table 1.



Photo 1 - Looking Southwest Across the Site

Table 1 – Vegetation Observed Onsite

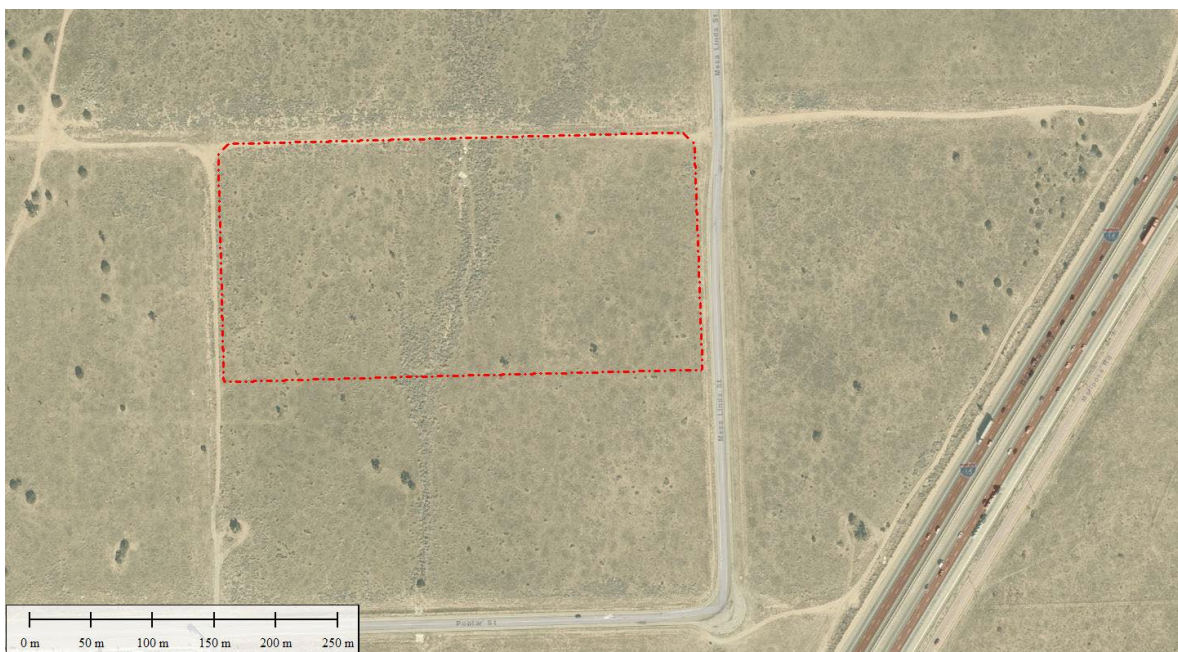
Common Name	Scientific Name
Joshua tree	<i>Yucca brevifolia</i>
California juniper	<i>Juniperus californica</i>
Burro bush or white bur sage	<i>Ambrosia dumosa</i>
Desert sunflower	<i>Geraea canescens</i>
Bristly fiddleneck	<i>Amsikia tessellatas</i>
Heron's bill	<i>Erodium cicutarium</i>
Rubber rabbitbrush	<i>Ericameria nauseosa</i>
Baker's goldfield	<i>Lasthenia californic</i>
Fremont pincushion	<i>Chaenactis fremontii</i>
Cheese bush	<i>Hymenoclea salsola</i>
Antelope bush	<i>Purshia tritendata</i>
Flat-topped buckwheat	<i>Eriogonum plumatella</i>
California buckwheat	<i>Eriogonum fasciculatum</i>
Great basin sagebrush	<i>Artemisia tritendata</i>
Coopers box-thorn	<i>Lycium cooperi</i>
Desert sage	<i>Salvia dorii</i>
Woody bottle washer	<i>Camissonia boothii</i>
Plantain	<i>Plantago insularis</i>
Cotton thorn	<i>Tetradymia axillaris</i>
Creosote bush	<i>Larrea tridentata</i>
Hop sage	<i>Grayia sinosa</i>

Common Name	Scientific Name
Snakeweed	<i>Gutierrezia microcephala</i>
Rabbit brush	<i>Chrysothamnus nauseosus</i>
Nevada ephedra	<i>Ephreda nevadensis</i>
Red brome	<i>Bromus madritensis</i>
Cheat grass	<i>Bromus tectorum</i>
Perennial bluegrass	<i>Poa secunda</i>
Mediterranean grass	<i>Schismus barbatus</i>
Red stemmed filaree	<i>Erodium cicutarium</i>

2.2 SITE TOPOGRAPHY AND SOILS

The project site is an undeveloped portion adjacent to Mesa Linda. The valley floor is almost flat (approximately 1.25% slope to the southwest). The elevation of the site ranges from approximately 3,000 to 3,216 feet above mean sea level. The soils on the site are alluvial and Cajon sands. According to the USDA Web Soil Survey, soil at the study area is classified as Hesperia loamy fine sand, 2 to 5 percent slopes.

Figure 1 Project Boundary



2.3 WILDLIFE

Observations of wildlife included scat, trails, tracks, burrows, skeletal remains, calls and visual sightings. Species observed included side-blotched lizard (*Uta stansburiana*), Basin whiptail (*Aspidoscelis tigris tigris*), white-tailed antelope ground squirrel (*Ammospermophilus leucurus*), and common raven (*Corvus corax*).

Table 2 Species Documented on Mesa Linda Site

Common name	Scientific Name
Reptiles	
Side-blotched Lizard	<i>Uta stansburiana</i>
Basin whiptail	<i>Aspidoscelis tigris tigris</i>
Birds	
Cactus Wren	<i>Campylorhynchus brunneicapillus</i>
Loggerhead shrike	<i>Lanius ludovicianus</i>
American kestrel	<i>Falco sparverius</i>
Common Raven	<i>Corvus corax</i>
Mammals	
Black-tailed jack rabbit	<i>Lepus californicus</i>
Coyote	<i>Canis latrans</i>
White-tailed Antelope Squirrel	<i>Ammospermophilus leucurus</i>
Kangaroo rat	<i>Dipodomys sp.</i>

3.0 BACKGROUND ON MOHAVE GROUND SQUIRREL

The MGS was listed as a rare species in 1971 under the authority of the California State Endangered Species Act of 1970 (CESA) and was re-designated as a state threatened species in 1985 (Gustafson 1993). The MGS is small, grayish, diurnal squirrel. The California Department of Fish and Wildlife (CDFW) is the responsible agency that provides for its protection and management.

MGS are dormant in the fall and winter months, but emerge from hibernation in February and begin pair bonding and mating during March (Gustafson 1993). If rainfall is adequate, MGS will reproduce. If rainfall levels are not sufficient to support substantial annual plant growth, then MGS will merely forage

on herbaceous perennials and shrubs until they gain ample body mass for another prolonged period of dormancy (Gustafson 1993). The adult males can enter dormancy as early as late May. Juveniles will remain above-ground until August in order to acquire generous fat reserves prior to entering dormancy.

The site is within the historic range of the Mohave ground squirrel. MGS occur in the western half of the Mojave Desert. Its historical range encompasses an area between Antelope Valley and Lucerne Valley, in the south (Gustafson 1993). However, MGS occurrences in the southern portion of its range are very unusual. The northern limits of the range are near Owens Dry Lakebed, in the north, and through China Lake Naval Weapons Station and Fort Irwin Military Base in the east (Gustafson 1993). The eastern limit of the species range extends to Barstow and south along the Mojave River. The western limits loosely follow State Highway 14 and the foothills of the southern Sierra Nevada escarpment (Gustafson 1993). Several other common squirrels occur within their range; antelope ground squirrel (AGS; *Ammospermophilus leucurus*), round-tailed ground squirrel (RTGS; *Xerospermophilus tereticaudus*) and the California ground squirrel (CGS; *Spermophilus beecheyi*).

4.0 MOHAVE GROUND SQUIRREL FOCUSED SURVEYS

Prior to beginning field surveys, resource specialists were consulted and available information from resource management plans and relevant documents were reviewed to determine the locations and types of biological resources that have the potential to exist within and adjacent to the study area; resources within several miles of the project site were evaluated.

The materials reviewed included, but were not limited to, the following:

1. U.S. Fish and Wildlife Service (USFWS) Critical Habitat Mapper and File Data (USFWS 2013a);
2. USFWS Ventura Field Office Species List for San Bernardino County (2013b);
3. California Natural Diversity Database maintained by the California Department of Fish and Wildlife (CDFW 2020);
4. California Native Plant Society (CNPS) Electronic Inventory (CNPS 2013);
5. Aerial Photographs (Microsoft Corporation 2022);
6. Previous biological reports prepared for nearby sites (Brylski 2012; Vergne 2017);
and
7. Leitner Current Status of MGS (2012) (Figure 3).

5.0 METHODS

Survey methods were derived from generally accepted professional standards including the 2010 California Department of Fish and Game Mohave Ground Squirrel Survey Guidelines (CDFG 2010); and performed under the auspices of a Memorandum of Understanding (MOU) with the CDFW.

Per protocol, since no MGS were previously captured, three five-day trapping session was conducted.

Within the grid, 100 traps were deployed at roughly 30-meter (m) spacing. The grid consisted of a ten-by-ten array covering approximately 20 acres. Standard small-mammal aluminum, foldable, ventilated 12-inch Sherman Traps were used within the project site for sampling purposes. The bait used consisted of crushed four-way grains with horse supplement. Folding cardboard boxes held down by soil were deployed as shade covers for each trap as appropriate. Traps and shade covers were configured to provide the greatest shade cover possible.

Figure 2 MGS Trapping Grid



Temperature readings were taken and recorded every hour, at one foot above the ground and at ground level in the shade. Traps were checked every 1-2 hours depending on temperature and other environmental influential factors (i.e., pregnant or lactating females in traps, feral dogs on grid, cold weather, presence of juveniles, etc.). Traps were open within 1 hour after sunrise and closed within one hour before sunset. Traps were closed when air temperature reached 90 °F. Traps were not opened until AM temperatures reached 50 °F. No rain occurred during the surveys. Weather data is provided in Table 3.

During live trapping surveys, plants were identified to the lowest taxonomic level sufficient to determine whether the plant species observed were non-native, native, or special-status. Plants of uncertain identity were subsequently identified from taxonomic keys (Baldwin et al. 2012). Scientific and common species names were recorded. The presence of a wildlife species was based on direct observation and/or wildlife sign (e.g., tracks, burrows, nests, scat, or vocalization). Field data compiled for wildlife species included scientific name, common name, and evidence of sign when no direct observations were made. Wildlife of uncertain identity was documented and subsequently identified from specialized field guides and related literature. A reference list is provided in Section 9.0.

6.0 SURVEY RESULTS

Project Site in Relation to MGS Historical Range

The project site is located at the southern margin of the historical range for the Mohave ground squirrel. There are several MGS records in the California Natural Diversity Database (CNDDB) within the project vicinity. These are as follows:

- 6.2 miles north, 4 miles W Hesperia, near Mountain View. One male captured on July 1, 1977.
- 1.5 miles SSW Duncan Corners, Sunset Ridge. One juvenile captured on July 13, 2005.
- Hesperia (exact location uncertain). One individual was collected on March 9, 1921.
- Victorville. One individual collected on March 2, 1919.
- 3.2 miles NW Adelanto Post Office. One juvenile captured on June 24, 2011.
- Victorville, near Adelanto Road, west of Mojave Heights. Two individuals detected on June 3, 1980.

Leitner (2012), in a review of the status of the MGS, examined the results of MGS trapping surveys throughout the species' range for the period 1998-2007. There have been a number of MGS surveys in the vicinity of Victorville (Figure 3). Two of these surveys, one carried out in 1977 and the other in 2005, yielded MGS captures in the project vicinity. These results are included in the CNDDB.

Figure Three MGS Distribution from Lightner 2012

Western Wildlife 2:9–22 • 2015

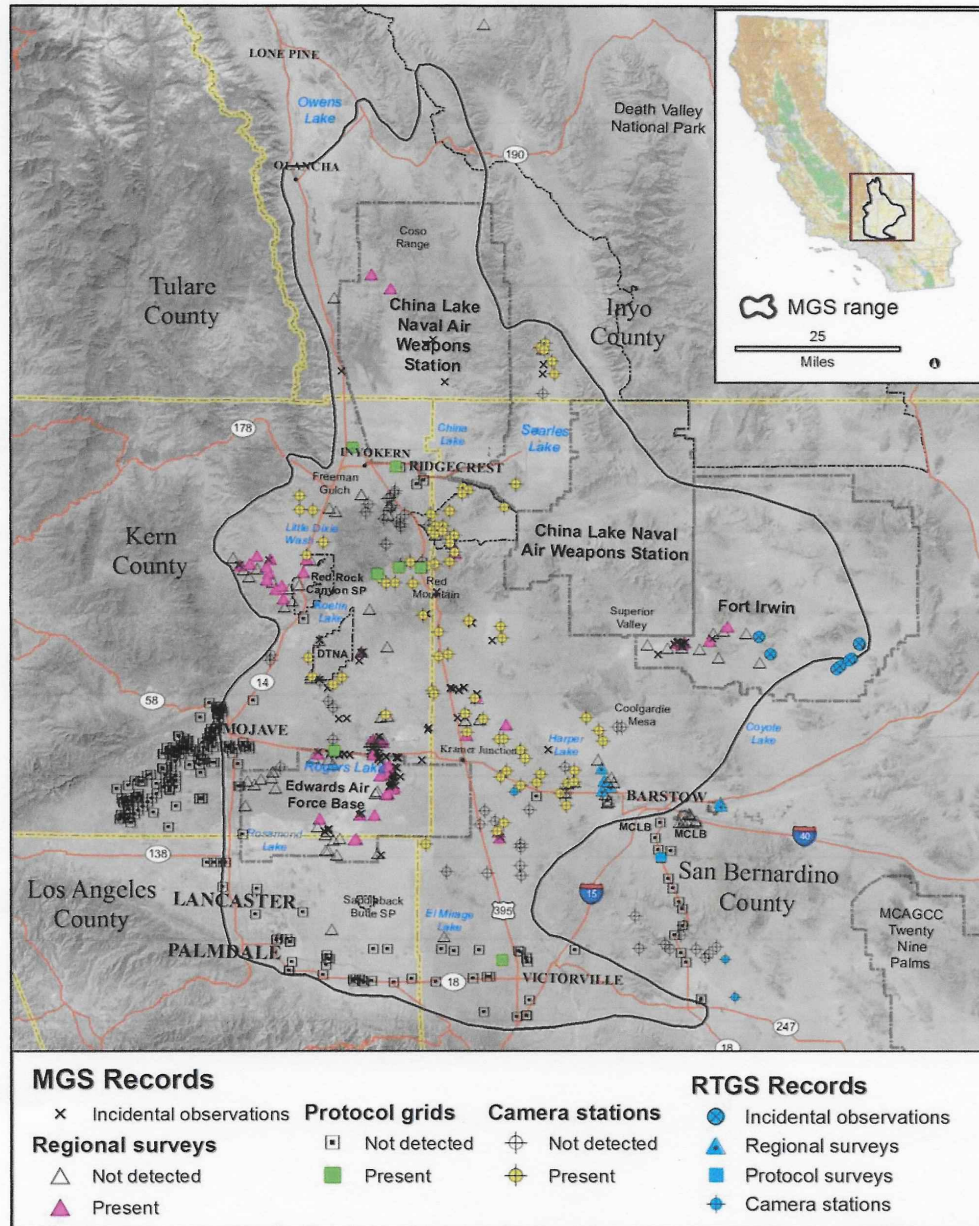


FIGURE 1. The geographic distribution of all Mohave Ground Squirrel (*Xerospermophilus mohavensis*) records for the period 2008–2012. Occurrences of the Round-tailed Ground Squirrel (*Xerospermophilus tereticaudus*) in the contact zone between the two species are also shown.

Project Findings Trapping Dates, Grid Location, Weather, Capture Data.

Trapping Dates

Grid No.	First Session	Second Session	Third Session
1	04/10 to 04/14 2022	05/11 to 05-15 2022	06/7 to 06/11 2022

Grid Census Locations

Grid No. and Trapping Sessions 1-3	Grid Corners
Grid 1 – Three Sessions	SW 34 25 3.39 N 117 23 40.98 W NW 34 25 9.22 N 117 23 40.71 W NE 34 25 9.09 N 117 23 26.33 W SE 34 25 3.55 N 117 23 26.33 W

The center of the grid was located at 34 25 6.03N and 117 23 33.54 W.

Table 3 Weather Summary

WEATHER CONDITIONS	Temp. Air Min. F.	Temp. Air Max. F.	Temp. Soil Min. F.	Temp. Soil Max. F.	Cloud Cover % AM	Cloud Cover % PM	Wind Min Mph	Wind Max Mph
Session 1								
April 10	48	72	46	74	10	10	0	3
April 11	45	58	43	61	10	20	3	8
April 12	37	55	34	58	20	30	3	8
April 13	35	64	34	66	0	0	5	10
April 14	40	66	39	69	0	0	5	8
Session 2								
May 11	37	58	39	62	0	0	3	5
May12	36	74	35	76	0	0	3	5
May13	46	85	45	88	20	20	0	6
May14	49	90	50	91	00	00	3	10
May 15	57	84	60	86	10	10	6	9
Session 3								
June 7	60	93	61	95	0	0	5	9
June 8	60	93	62	94	5	10	6	10
June 9	62	93	63	94	10	00	6	12
June 10	66	97	67	99	0	0	6	10
June 11	67	96	67	98	0	0	5	9

AM and Min. Readings at 06:00

PM and Max. Readings at 15:00

Table 4 Live Tapping Data Summary

Category	Grid A	Total for Project
	Individuals (recaptures)	Individuals
Trap Hours, Per Trap	169.5	169.5
Captures Totals All Species	17	11
MGS Captures	0	0
MGS Adult Male Captures	0	0
MGS Adult Female Captures	0	0
MGS Juvenile Male Captures	0	0
MGS Juvenile Female Captures	0	0
MGS Unknown Sex	0	0
AGS Captures	11(6)	5
AGS Adult Male Captures	7 (4)	3
AGS Adult Female Captures	4(2)	2
AGS Juvenile Male Captures	0	0
AGS Juvenile Female Captures	0	0
AGS Unknown Sex	0	0
Number Of Species Captured	1	10

7.0 IMPACTS AND RECOMMENDATIONS

The majority of the project site consists of medium density scrub and dense disturbed annual grasslands, and sparsely dispersed Joshua trees.

The disturbed annual grasslands and understory on site are dominated by fiddleneck, brome, and forbs. A few Joshua Tree are scattered throughout the site. Scrub community is dominated by saltbush, indigo bush, and isolated creosote bush.

Historical MGS occurrence records show that the species was detected in the project vicinity. The closest records are about a mile from the proposed project to the north of the California Aqueduct. The Aqueduct represents an impossible barrier for the MGS to cross.

No MGS were observed or captured during the current 2022 focused MGS survey.

MGS were not detected in the project site or within any census grids during any of the three live trapping sessions. Only the AGS were trapped within the grid.

Total trap hours were in excess of 172 hours, averaging approximately 11.3 hours per day or 56.5 hours per live trapping event. There were no MGS captures. AGS capture totals were representing 10 individuals.

The properties surrounding and adjacent to the site were trapped in 2021, and 2022 by *Dipodomys* Environmental resulting in no MGS capture.

Implementation of the Mesa Linda Project will not result in the loss of individual MGS, nor will it adversely affect local or regional MGS populations.

8.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached figures present the data and information required for this resource assessment, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this investigation was performed by me. I certify that I have not signed a nondisclosure or consultant confidentiality agreement nor do I have any financial interest in the Project.

DATE: September 27, 2022

SIGNED: *Philippe Jean Vergne*

Report Author: Philippe Vergne

9.0 REFERENCES

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Vergne P. Focused Survey for Mohave Ground Squirrel Amethyst Basin 2017 for Kidd Biological Consulting

Vergne P. Trapping Survey for Mohave Ground Squirrel US Cold Storage 2022

Appendix A Mohave Ground Squirrel (MGS) Survey and Trapping Form

Mohave Ground Squirrel (MGS) Survey and Trapping Form (photocopy as needed)

Part I – PROJECT INFORMATION (use a separate form for each sampling grid)

Project name: Mesa Linda_____` Property Owner: NA

Location: Township 4N___; Range _5W_____; Section____15___; ¼ Section _SE_____

Quad map/series: Baldy Mesa_ UTM coordinates

GPS coordinates of trapping grid corners:

Grid Census Locations

Grid No. and Trapping Sessions 1-3	Grid Corners
Grid 1 – Three Sessions	SW 34 25 3.39 N 117 23 40.98 W NW 34 25 9.22 N 117 23 40.71 W NE 34 25 9.09 N 117 23 26.33 W SE 34 25 3.55 N 117 23 26.33 W

The center of the grid was located at 34 25 6.03N and 117 23 33.54 W.

Acreage of Project Site:___20acres ___ Acreage of potential MGS habitat on site____20 acres_

Total acreage visually surveyed on project site: 20 acres

Visual surveys conducted by: Philippe Vergne of ENVIRA

Total acres trapped: 20 acres

Number of sampling grids: _____1_____

Trapping conducted by: _____Philippe Vergne of ENVIRA_____

Dates of sampling term(s): (all 2022)

Trapping Dates

Grid No.	First Session	Second Session	Third Session
1	04/10 to 04/14 2022	05/11 to 05-15 2022	06/7 to 06/11 2022

Site Elevation 3,200

Weather Summary

Table 3 Weather Summary

WEATHER CONDITIONS	Temp. Air Min. F.	Temp. Air Max. F.	Temp. Soil Min. F.	Temp. Soil Max. F.	Cloud Cover % AM	Cloud Cover % PM	Wind Min Mph	Wind Max Mph
Session 1								
April 10	48	72	46	74	10	10	0	3
April 11	45	58	43	61	10	20	3	8
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April 13	35	64	34	66	0	0	5	10
April 14	40	66	39	69	0	0	5	8
Session 2								
May 11	37	58	39	62	0	0	3	5
May12	36	74	35	76	0	0	3	5
May13	46	85	45	88	20	20	0	6
May14	49	90	50	91	00	00	3	10
May 15	57	84	60	86	10	10	6	9
Session 3								
June 7	60	93	61	95	0	0	5	9
June 8	60	93	62	94	5	10	6	10
June 9	62	93	63	94	10	00	6	12
June 10	66	97	67	99	0	0	6	10
June 11	67	96	67	98	0	0	5	9

AM and Min. Readings at 06:00

PM and Max Readings at 15:00

Live Tapping Data Summary

Table 4 Live Tapping Data Summary

Category	Grid A	Total for Project
	Individuals (recaptures)	Individuals
Trap Hours, Per Trap	169.5	169.5
Captures Totals All Species	17	11
MGS Captures	0	0
MGS Adult Male Captures	0	0
MGS Adult Female Captures	0	0
MGS Juvenile Male Captures	0	0
MGS Juvenile Female Captures	0	0
MGS Unknown Sex	0	0
AGS Captures	11(6)	5
AGS Adult Male Captures	7 (4)	3
AGS Adult Female Captures	4(2)	2
AGS Juvenile Male Captures	0	0
AGS Juvenile Female Captures	0	0
AGS Unknown Sex	0	0
Number Of Species Captured	1	10

Part II – GENERAL HABITAT DESCRIPTION

Table 1 – Vegetation Observed Onsite

Common Name	Scientific Name
Joshua tree	<i>Yucca brevifolia</i>
California juniper	<i>Juniperus californica</i>
Burro bush or white bur sage	<i>Ambrosia dumosa</i>
Desert sunflower	<i>Geraea canescens</i>
Bristly fiddleneck	<i>Amsikia tessellatas</i>
Heron's bill	<i>Erodium cicutarium</i>
Rubber rabbitbrush	<i>Ericameria nauseosa</i>
Baker's goldfield	<i>Lasthenia californic</i>
Fremont pincushion	<i>Chaenactis fremontii</i>
Cheese bush	<i>Hymenoclea salsola</i>
Antelope bush	<i>Purshia tritendata</i>
Flat-topped buckwheat	<i>Eriogonum plumatella</i>
California buckwheat	<i>Eriogonum fasciculatum</i>
Great basin sagebrush	<i>Artemisia tritendata</i>
Coopers box-thorn	<i>Lycium cooperi</i>
Desert sage	<i>Salvia dorii</i>
Woody bottle washer	<i>Camissonia boothii</i>
Plantain	<i>Plantago insularis</i>
Cotton thorn	<i>Tetradymia axillaris</i>
Creosote bush	<i>Larrea tridentata</i>
Hop sage	<i>Grayia sinosa</i>
Snakeweed	<i>Gutierrezia microcephala</i>
Rabbit brush	<i>Chrysothamnus nauseosus</i>
Nevada ephedra	<i>Ephreda nevadensis</i>

Appendix C.2: Desert Native Plant and Rare Plant Survey



August 12, 2022

Jackson Smith, Partner
Newcastle Partners, Inc
4740 Green River Road, Ste. 110
Corona, CA 92878

SUBJECT: *Desert Native Plant and Rare Plant Survey Results, ±18-acre Hesperia Site, City of Hesperia, San Bernardino County, California*

Dear Jackson:

This letter report presents findings of a focused Desert Native Plant and Rare Plant Survey conducted on an ±18-acre site. The survey was conducted to evaluate the presence of sensitive botanical resources as part of the environmental review process.

Introduction

The subject study area is regionally located in San Bernardino County, California (**Plate 1**). Specifically, the survey area is located west of Mesa Linda Street, north of Poplar Street, east of Lassen Street, and south of Sultana Street. The site occurs on the "Baldy Mesa" California 7.5-minute USGS quadrangle map, Township 4 North, Range 5 West, Section 22 (**Plate 2**). **Plate 3** illustrates an aerial view of the project site. Botanical information contained in this report is expected to provide regulatory agencies such as the U.S. Fish and Wildlife Service (FWS), California Department of Fish and Wildlife (CDFW), and other reviewing agencies such as the City of Hesperia with necessary biological information required for planning and permitting decisions concerning the proposed project.

Investigative Methods

Scientific Literature Compilation and Review

Various data sources were reviewed to evaluate the potential presence of sensitive botanical resources known from the site vicinity. Special-status or sensitive plant species are those that have been afforded special protection or recognition by federal, state, or local resource conservation agencies due principally to declining or limited populations, mainly as a result of habitat reduction. Historical occurrence records of special-status plant species were obtained from the California Natural Diversity Data Base (CNDDB 2019) for the "Baldy Mesa" California USGS 7.5-minute quadrangle map, and review of online inventories developed by the California Native Plant Society (CNPS.org 2022) and Calflora (Calflora.org 2022).

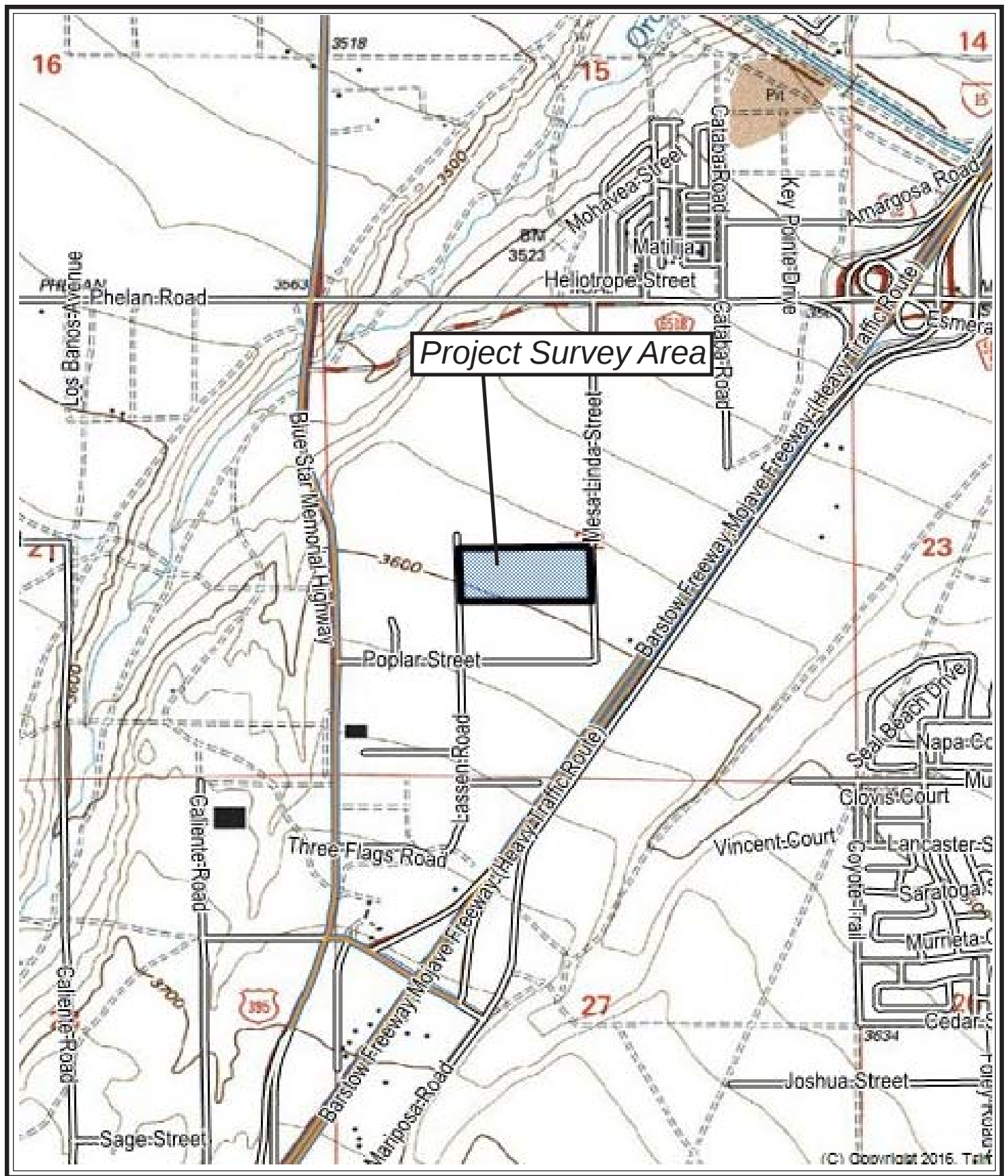
Additional sources reviewed included, but not limited to: (1) literature pertaining to habitat requirements of special-status plant species potentially occurring in the site vicinity; and (2) distributional data contained in Hickman (1993) and CNPS (2001). Common plant names are mostly taken from Hickman (1993), Calflora and CNPS websites (2022).



18-acre *Hesperia* Site



August 2022



August 2022

plate 2

Site Vicinity

18-acre Hesperia Site



— — — — = Project Survey Area

plate 3

Methodology

2022 Desert Native Plant and Rare Plant Survey

Ecological Sciences Principal Biologist, Scott Cameron, conducted a desert native plant and rare plant survey in accordance with the California Desert Native Plants Act and the Hesperia Municipal Code, Chapter 16.24 (City of Hesperia 1997) to evaluate the potential presence of sensitive botanical resources (e.g., plants considered rare, threatened, sensitive, endangered, or otherwise unique by regulatory or resource agencies). Surveys were conducted in a systematic manner, using field techniques that ensure a reasonably thorough coverage of all habitats potentially supporting special-status plant species. All habitat types present were included in the survey detailed below. Field surveys were generally scheduled to coincide with known flowering periods and/or during periods of phenological development that are necessary for species identification to maximize the validity of survey results. The survey was conducted on May 15, 2022 from 8:20 a.m. to 2:30 p.m. under suitable weather conditions (73°F–88°F, 1–3 mph winds, and 10% cloud cover). Focused special-status plant surveys conformed to the CNPS Botanical Survey Guidelines (CNPS 2001), Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018), and the FWS General Rare Plant Survey Guidelines (Cypher 2002).

Existing Study Area Conditions

The site is characterized as an undeveloped vacant lot. Vegetation communities present in the study area generally consist of natural, quasi-natural, and highly disturbed areas. Site topography is characterized as relatively flat. Dumped gravels were present in some portions of the site and ground utility structures are also present (e.g., hydrants). **Plates 4a-4b** illustrate typical survey conditions at the time of the survey.

Non-native grasslands occur throughout the site. Common species recorded in this habitat type included brome grasses (*Bromus* spp.), mustard (*Brassica/Hirschfeldia* spp.), and red-stemmed filaree (*Erodium cicutarium*). **Desert scrub vegetation** shares many elements with other desert communities present in the area. Desert scrub habitat refers to the dominant desert plant community present on site which occasionally intergrades with small patches of other desert habitats. Desert scrub vegetation recorded onsite during the May 2022 surveys include shadscale (*Atriplex confertifolia*), interior goldenbush (*Haplopappus linearifolius*), rubber rabbitbrush (*Chrysothamnus nauseosus*), bladderpod (*Peritoma arborea*), and a few creosote bush (*Larrea tridentata*).

For the purposes of this study, disturbed areas are defined as those that have been converted from their natural habitat type. **Disturbed areas** include ruderal areas, all of which provide low quality habitat for most wildlife. Components of the disturbed vegetation present at the site consist primarily of weedy annual vegetation, interspersed with scattered native species. Common plant species present in the disturbed areas onsite include brome grasses, mustards, and red-stemmed filaree.

Joshua tree (*Yucca brevifolia*) woodland is present on site. This survey effort did not include an inventory for individual on-site Joshua trees.

Booth's evening primrose (*Eremothera boothii* ssp. *boothii*) is not expected on site. Booth's evening primrose was not observed during the May 15 survey. However, based on locational records (Jepson Flora Project 2021) and Consortium of California Herbaria (CCH 2021), the species is restricted to wash habitat, which is absent from the survey area.

Additional species not expected on site include **white-bracted spineflower** (*Chorizanthe xanti* var. *leucotheca*) known from Lytle Creek and **beaver dam breadroot** (*Pediomelum castoreum*) known from Lucerne Valley. These species were also not observed during the May 15 survey.





View to north



View to east



View to south



View to west

Due to extremely dry conditions in 2022, spring and summer blooming annuals and cryptic perennials were not highly detectable (if present); however, the desert native plant target species are generally conspicuous shrubs/herbs that would have been identifiable during the survey. The current survey provides an accurate representation of the desert native plant species that occur in the study area. Results contained herein provide a reasonable and accurate assessment of desert native plant species present within the study area.

Discussion

The level of constraint that a sensitive biological resource would pose to potential development typically depends on the following criteria: (1) the relative value of that resource; (2) the amount or degree of impact to the resource; (3) whether or not impacts to the resource would be in violation of state and/or federal regulations or laws; (4) whether or not impacts to the resource would require permitting by resource agencies; and (5) the degree to which impacts on the resource would otherwise be considered “significant” under CEQA. On-site habitats have been assigned a low biological constraint rating based on the degree in which expected impacts to on-site resources would meet the criteria discussed above.

The CDFW delivered its long-awaited Status Review and Recommendation on the western Joshua tree to California Fish and Game Commission on April 21, 2022, recommending against listing the species as threatened under the California Endangered Species Act (CESA). The 150-page, peer-reviewed report states that “the scientific evidence that is currently possessed by the Department does not demonstrate that populations of the species are negatively trending in a way that would lead the Department to believe that the species is likely to be in serious danger of becoming extinct throughout all or a significant portion of its range in the foreseeable future.” However, we understand that a final ruling by CDFW on WJT listing status would not be determined until at least February 2023.

In October 2019, the Center for Biological Diversity submitted a petition to the California Fish and Game Commission (CFGC) requesting that Western Joshua Tree be listed as a threatened species under CESA. In September 2020, the Commission found sufficient information exists to indicate that listing may be warranted, and the western Joshua tree (WJT) was designated as a candidate species while CDFW conducted its review of the status of the species as required by Fish and Game Code section 2074.6. As a candidate species, the WJT has been given the same protections as if the species was formally listed as threatened or endangered since October 2020.

Potential Permitting and Mitigation Measures (wildlife.ca.gov)

Pursuant to CDFW guidelines, during the western Joshua tree's candidacy period, it is a violation of California Fish and Game Code to trim or remove (or “take”) a tree without first obtaining a permit. Read the resources and processes for compliance with the interim regulations. Incidental Take Permits allow a permittee to take a CESA-listed species if such taking is incidental to, and not the purpose of, carrying out an otherwise lawful activity. These permits are most commonly issued for construction, utility, transportation, and other infrastructure-related projects. Permittees must implement species-specific minimization and avoidance measures, and fully mitigate the impacts of the project. (Fish & G. Code § 2081 (b); Cal. Code Regs., tit. 14, §§ 783.2-783.8).

Minimization measures are intended to ensure the minimization of incidental take of CESA-listed species in the project area during covered activities. They are collaboratively developed on a project-by-project basis by the permit applicant and CDFW. Examples of general measures used in the past include: (1) Erecting protective fencing around sensitive habitat within construction sites Limited operating periods to avoid breeding, movements, etc.; (2) Pre-construction surveys to identify and mark sensitive or suitable habitat features; and (3) Onsite construction personnel education programs covering species identification, protected status, and measures to take if present.

Mitigation

CDFW may determine that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate project-related impacts of the taking on the Covered Species that will result with implementation of the project. Determinations are based on factors including an assessment of the importance of that habitat in the project area, the extent to which covered activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation.

Conservation/Mitigation Banking

Permittees may purchase credits from a CDFW approved conservation or mitigation bank, which is a privately or publicly owned land managed for its natural resource values. Credits are established for the specific CESA-listed species that occur on the site.

Conservation Easement

A project proponent may enter into a conservation easement with a land trust, government agency, tribe, or other qualified organization to mitigate adverse impacts on natural resources. A conservation easement is a voluntary legal agreement that protects the land by permanently limiting some uses that would compromise the conservation values or the landowners' goals for the property (California Government Code section 65965 et seq. and California Civil Code section 813 et seq.).

Timing

If mitigation will not be completed prior to the start of activities that will affect CESA-listed species, a trust account or other form of security acceptable to CDFW must be established to ensure that funding is available to carry out mitigation measures and monitoring requirements in the event the applicant fails to complete these activities. CDFW generally requires that the performance security be in the form of an irrevocable letter of credit, surety bond, a bank trust (or escrow) account, or another form of security approved in writing in advance by CDFW's Office of General Counsel.

Conclusion

No threatened, endangered, or rare plant species were recorded during the survey effort. However, this report acknowledges that multiple Joshua trees may be removed because of project implementation. It is expected that the applicant would submit a native plant removal permit application to the City of Hesperia (if not formally listed by CDFW in February 2023) requesting the removal of individuals (where applicable). No further mitigation is required if not listed under CESA; however, permit conditions may require salvage or that native species be incorporated into the landscape plan of the project. Any approved land use application and/or development permit shall be the permit for the removal of Joshua trees once the City approves it.

If the WJT is formally listed, an Incidental Take Permit could be required. CDFW's issuance of an Incidental Take Permit is considered a discretionary action as defined in Title 14 of the California Code of Regulations, section 15357 under CEQA. Therefore, before CDFW can issue the permit the applicant must have completed the necessary steps under CEQA. Compliance with CEQA (Title 14 of the California Code of Regulations, section 783.3).

Φ

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological survey, and that the facts, statements, and information presented herein are true and correct to the best of my knowledge and belief.



Sincerely,

Ecological Sciences, Inc.



Scott D. Cameron
Principal Biologist

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