

Biological Resources Technical Report

Perris Airport Logistics Center
City of Perris, California

FINAL REPORT



TPM 38412 (PLN22-05046) APNs 330-090-031, -033, -034, -036, -038, -040, 330-100-031

Prepared for:

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October 2024

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GLOSSARY

APN	Assessor's Parcel Number
CAPSA	Criteria Area Plant Survey Areas
CDFG	California Department of Fish and Game (CDFW effective Jan 1 st 2013)
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Ranking
CWA	Clean Water Act
DBESP	Determination of Biological Equivalent or Superior Preservation
FESA	federal Endangered Species Act
GIS	Geographic Information System
HANS	Habitat Acquisition and Negotiation Strategy
JPR	Joint Project Review
MBTA	Migratory Bird Treaty Act
MSHCP	Multiple Species Habitat Conservation Plan
NCCP	Natural Communities Conservation Plan
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NWPR	Navigable Water Protection Rule
OHWM	Ordinary High Water Mark
RCA	Western Riverside County Regional Conservation Authority
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSC	California Species of Special Concern
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

INTRODUCTION

The following biological technical report describes a detailed assessment of potential sensitive natural resources located within and immediately adjacent to the Perris Airport Logistics Center project site (Project Site). Specifically, the report has been prepared to support the California Environmental Quality Act (CEQA) and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) documentation, compliance and review process conducted by the City of Perris. As discussed below, the assessment includes a literature review, site reconnaissance characterizing baseline conditions (including floral and faunal and dominate vegetation communities), impact analysis, and proposed mitigation and/or conservation measures.

PROJECT LOCATION & DESCRIPTION

The 87.68 acre Project Site including adjacent 10.98 acre offsite impact area (98.66 acres total) within which the impacts would occur is comprised of Assessor's Parcel Numbers (APNs) 330-090-031, -033, -034, -036, -038, -040, 330-100-031, and Right-of-Ways. The Project Site is located within United States Geological Survey (USGS) 7.5' Series Perris Quadrangle, Riverside County, Township 5 South, Range 3 West, Section 5. Specifically, the Project Site is located within the northern region of the Perris Valley Airport, extending south of Ellis Avenue, east of Goetz Road, and west of Case Road, as shown in Figure 1, *Regional Location Map* and Figure 2, *Project Site Map*. An offsite impact area extends southeast of the Project Site and is located immediately southwest and adjacent to Case Road.

The Project Site is located within the area subject to the Western Riverside County MSHCP Mead Valley Area Plan.

A 10.04 acre portion of the Project Site (APN 330-100-031) is located within MSHCP Criteria Area Cell 3377, Subunit 4, San Jacinto River Lower and is developed and used for trailer storage, as shown in Figure 3, *MSHCP Relationship Map* (RCA Data Downloads 2022). Impacts within Criteria Area Cell 3377 were initially addressed in the MSHCP Joint Project Review (JPR) Consistency Determination JPR 08-07-31-01 (Sept 23rd, 2008).

A 3.74 acre portion of the offsite impact area extends into MSHCP Criteria Area Cell 3276, Subunit 4, San Jacinto River Lower and the disturbed agricultural drainage ditch located in this region ultimately drains into Proposed Constrained Linkage 19 (San Jacinto River). Impacts within Criteria Area Cell 3276 were initially addressed in the MSHCP JPR Consistency Determination JPR 09-04-24-01 (Sept 5th, 2023).

The proposed action includes the consolidation of seven (7) parcels for the development of two (2) light industrial buildings totaling 742,560 square feet on Site 1 and a trailer storage lot on Site 2.

LITERATURE REVIEW

Existing biological resource conditions within and adjacent to the Project Site were initially investigated through review of pertinent scientific literature. Federal register listings, protocols, and species data provided by the USFWS were reviewed in conjunction with anticipated federally listed species potentially occurring within the Project Site. The California Natural Diversity Database (CNDDDB 2022a), a California Department of Fish and Wildlife (CDFW) Natural Heritage Division species account database, was also reviewed for all pertinent information regarding the locations of known occurrences of sensitive species in the vicinity of the property. In addition, numerous regional floral and faunal field guides were utilized in the identification of species and suitable habitats. Combined, the sources reviewed provided an excellent baseline from which to inventory the biological resources potentially occurring in the area. Other sources of information included the review of unpublished biological resource letter reports and assessments. Other CDFW reports and publications consulted include the following:

- Special Animals (CDFW 2022b);
- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2022c);
- Endangered, Threatened, and Rare Plants of California (CDFW 2022d); and
- Special Vascular Plants and Bryophytes List (CDFW 2022e).

FIELD SURVEYS

Reconnaissance surveys of the Project Site were conducted by Ruben Ramirez, Cadre Environmental in the spring of 2019, 2020 and 2022 in order to characterize and identify potential sensitive plant and wildlife habitats, and to establish the accuracy of the data identified in the literature search and previous surveys. Geologic and soil maps were examined to identify local soil types that may support sensitive taxa. Aerial photograph, topographic maps, and vegetation and rare plant maps prepared by previous studies in the region were used to determine community types and other physical features that may support sensitive plants/wildlife, uncommon taxa, or rare communities that occur within the Project Site. The MSHCP has determined that all of the sensitive species potentially occurring within the Project Site have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required for narrow endemic plant, criteria area, and specific wildlife species if suitable habitat is documented onsite and/or if the property is located within a predetermined "Survey Area" (MSHCP 2004). Based on the initial MSHCP review of predetermined Survey Areas a habitat assessment was conducted for the following target species:

- burrowing owl (*Athene cunicularia*) [California Species of Special Concern (SSC)].
- Munz's onion (*Allium munzii*) [FE, ST, CRPR 1B.1];
- San Diego ambrosia (*Ambrosia pumila*) [FE, CRPR 1B.1];
- many-stemmed dudleya (*Dudleya multicaulis*) [CRPR 1B.2];
- spreading navarretia (*Navarretia fossalis*) [FT, CRPR 1B.1];
- California Orcutt grass (*Orcuttia californica*) [FE/SE, CRPR 1B.1]; and

- Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*) [CRPR 2.1].
- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), [CRPR 1B.1];
- Davidson's saltscare (*Atriplex serenana* var. *davidsonii*), [CRPR 1B.2];
- little mousetail (*Myosurus minimus* ssp. *apus*), [CRPR 3.1];
- mud nama (*Nama stenocarpum*), [CRPR 2.2];
- Parish's brittlescale (*Atriplex parishii*), [CRPR 1B.1];
- round-leaved filaree (*California macrophyllum*), [CRPR 1B.1];
- San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), [FE, CRPR 1B.1];
- smooth tarplant (*Centromadia pungens* ssp. *laevis*), [CRPR 1B.1]; and
- thread-leaved brodiaea (*Brodiaea filifolia*), [FT, SE, CRPR 1B.1].

Vegetation Communities/Habitat Classification Mapping

Natural community names and hierarchical structure follows the CDFW "List of California Terrestrial Natural Communities" and/or Holland (1986) classification systems, which have been refined and augmented where appropriate to better characterize the habitat types observed onsite when not addressed by the MSHCP classification system.

Floristic Plant Inventory

A general plant survey was conducted throughout the Project Site during the initial reconnaissance in a collective effort to identify all species occurring onsite. All plants observed during the survey efforts were either identified in the field or collected and later identified using taxonomic keys. Plant taxonomy follows Hickman (1993). Scientific nomenclature and common names used in this report generally follow Roberts et al. (2004) or Baldwin et al. (2012) for updated taxonomy. Scientific names are included only at the first mention of a species; thereafter, common names alone are used.

Wildlife Resources Inventory

All animals identified during the reconnaissance survey by sight, call, tracks, scat, or other characteristic sign were recorded onto a 1:200 scale orthorectified color aerial photograph or documented using a global positioning system (GPS). In addition to species actually detected, expected use of the site by other wildlife was derived from the analysis of habitats on the site, combined with known habitat preferences of regionally occurring wildlife species. Vertebrate taxonomy followed in this report is according to the Center for North American Herpetology (2022 for amphibians and reptiles), the American Ornithologists' Union (1988 and supplemental) for birds, and Baker et al. (2003) for mammals. Both common and scientific names are used during the first mention of a species; common names only are used in the remainder of the text.

Regional Connectivity/Wildlife Movement Corridors

The analysis of wildlife movement corridors associated with the Project Site and immediate vicinity is based on information compiled from literature, analysis of the aerial photograph and direct observations made in the field during the reconnaissance site visit. A literature review was conducted that includes documents on island biogeography (studies of fragmented and isolated habitat "islands"), reports on wildlife home range sizes and migration patterns, and studies on wildlife dispersal. Wildlife movement studies

conducted in southern California were also reviewed. Use of field-verified digital data, in conjunction with the GIS database, allowed proper identification of regional vegetation communities and drainage features. This information was crucial to assessing the relationship of the Project Site to large open space areas in the immediate vicinity and was also evaluated in terms of connectivity and habitat linkages. Relative to corridor issues, the discussions in this report are intended to focus on wildlife movement associated within the Project Site and the immediate vicinity.

MSHCP Narrow Endemic and Criteria Area Sensitive Plant Habitat Assessment & Focused Surveys

Based on the results of a habitat assessment conducted on April 29th, 2019, March 16th, 2020 and February 15th, 2022, potential habitat is present on the property for MSHCP narrow endemic and criteria area sensitive plant based on the presence of alkali soils (Cadre Environmental 2020, 2021, 2022a). According to the MSHCP guidelines, focused surveys are required during the appropriate flowering season to identify and document the presence/absence of target sensitive plant species if suitable habitat is present and if the property is located within a predetermined Survey Area (MSHCP 2004).

Therefore, focused surveys for MSHCP narrow endemic and criteria area plants within the Project Site were conducted during the spring of 2019. Dates of the field surveys include: April 29th, May 21st and June 11th, 2019. It should also be noted that four (4) surveys were conducted for burrowing owl on May 17th, 26th, June 7th, and 14th, 2019, during which time sensitive plants would also have been documented, if present. Focused surveys for the offsite impact area were conducted on March 16th, April 22nd, May 13th, June 17th, and July 15th, 2020. Updated focused surveys were conducted throughout the Project Site and offsite impact area on February 15th, March 16th, April 13th, May 16th, June 13th, 2022, March 6th, April 23rd, May 20th, and June 13th, 2024.

Each focused survey was conducted on-foot and covered all suitable habitats onsite according to MSHCP protocols and the USFWS, CNPS, and CDFW survey guidelines.

A site-specific survey program was developed to achieve the following goals: (1) characterize the vegetation; (2) prepare a detailed floristic compendium; (3) conduct focused surveys to document the distribution and abundance, or absence, of MSHCP narrow endemic plant species at the site; and 4) prepare botanical resource maps showing the distribution of vegetation communities and the location of the MSHCP target species observed onsite. The project surveys also proposed to document other CNPS sensitive plants or species of local concern onsite, if present.

The methodology and focus of the survey program are consistent with the MSHCP guidelines, but also conforms to scientific and technical standards listed by the USFWS (1996), CNPS (2001), and CDFW (2009) for sensitive plant species surveys. The surveys were conducted on-foot throughout the Project Site.

Literature Review

Existing biological resources within and adjacent to the Project Site were initially investigated through a review of pertinent literature and online data. The California

Natural Diversity Database (CNDDDB 2022a), and CNPS (2022). In addition, soil, local floras, and consultation with local experts were utilized in the identification of species, soils, or habitats that could support the target MSHCP sensitive plants within or adjacent to the Project Site.

Prior to conducting fieldwork, a thorough archival review was conducted using the following baseline resources:

- California Native Plant Society 8th Inventory Online (2022);
- California Natural Diversity Data Base for the USGS 7.5' Perris Quadrangle (CNDDDB 2022a);
- Soil Survey of Western Riverside Area (Knecht 1971; USDA-NRCS 2022);
- Vegetation Alliances of Western Riverside County, California (Klein and Evens 2005);
- Vascular Flora of Western Riverside County (Roberts et al. 2004); and
- Reports prepared by the Regional Conservation Authority, Western Riverside County (<http://www.wrc-rca.org/about-rca/monitoring/monitoring-surveys/>);

Focused Survey Program Developed for MSHCP Target Plants

Floristic and focused plant surveys were conducted in order to identify all species observed on the Project Site. Additionally, program goals would also locate, census, and map the target MSHCP plants, and other CNPS or species of local concern, if present, occurring onsite.

Field notes and site photographs were taken during each field survey. These notes recorded the date, location, plant species observed, and general habitat characteristics of each area of the project and habitats examined that day. All plant species encountered during the field surveys were identified and recorded in the field notes, including any special-status plants occurring on the Project Site. Surveys were performed in a manner consistent with the MSHCP and other applicable survey protocol requirements as outlined by the USFWS (1996), CNPS (2001), and CDFW (2009).

Fieldwork was coordinated throughout the spring and blooming periods, site-specific habitat conditions, and vegetation-soil associations of the target species. Accordingly, eight (8) surveys were conducted onsite, including April 29th, May 21st, June 11th, 2019 and March 16th, April 22nd, May 13th, June 17th, and July 15th, 2020, which covered all suitable habitat areas within the Project Site and offsite impact area. Updated focused surveys were conducted throughout the Project Site and offsite impact area on February 15th, March 16th, April 13th, May 16th, June 13th, 2022, March 6th, April 23rd, May 20th, and June 13th, 2024.

All portions of the Project Site located within a Survey Area were surveyed on-foot by walking slowly and methodically across each habitat type. Scientific nomenclature and common names used in this report generally follow Roberts et al. (2004) and Baldwin et al. (2012), or Jepson Project eFlora (2022) for updated taxonomy.

MSHCP Burrowing Owl Habitat Assessment

In accordance with the MSHCP Burrowing Owl Survey Instructions (2006), survey protocol consists of two steps, Step I – Habitat Assessment and Step II – Locating Burrows and Burrowing Owls. Step II is comprised of two parts, Part A: Focused Burrow Surveys and Part B: Focused Burrowing Owl Surveys.

Each step is briefly outlined below, followed by the methodology and results of each survey conducted within the Project Site. All initial habitat assessment, burrow and focused surveys were conducted by Ruben Ramirez, Cadre Environmental.

Surveys were conducted during weather that is conducive to observing owls outside their burrows and detecting burrowing owl sign. Surveys were not conducted during rain, high winds (> 20 mph), dense fog, or temperatures over 90 °F. None of the surveys were conducted within five (5) days of measurable precipitation.

In addition to the MSHCP guidelines, field notes were taken daily. These notes recorded the date, location, animal species observed, and general habitat characteristics of each area and habitat examined that day.

Step I – Habitat Assessment

Step 1 of the MSHCP habitat assessment for burrowing owl consists of a walking survey to determine if suitable habitat is present onsite. Cadre Environmental conducted the habitat assessments on April 29th, 2019, March 31st, 2020 and March 18th, 2022. Upon arrival at the Project Site, and prior to initiating the assessment survey, Cadre Environmental used binoculars to scan all suitable habitats on and adjacent to the property, including perch locations, to ascertain owl presence.

All suitable areas of the Project Site were surveyed on foot by walking slowly and methodically while recording/mapping areas that may represent suitable owl habitat onsite. Primary indicators of suitable burrowing owl habitat in western Riverside County include, but are not limited to, native and non-native grassland, interstitial grassland within shrub lands, shrub lands with low density shrub cover, golf courses, drainage ditches, earthen berms, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas. Burrowing owls typically use burrows made by fossorial mammals, such as California ground squirrels (*Otospermophilus beecheyi*) or badgers (*Taxidea taxus*), but they often utilize man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles, or openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or in close proximity to man-made structures.

According to the MSHCP guidelines, if suitable habitat is present, the biologist should also walk the perimeter of the property, which consists of a 150-meter (approximately 500 feet) buffer zone around the Project Site boundary. If permission to access the buffer area cannot be obtained, the biologist shall not trespass, but visually inspect adjacent habitats with binoculars.

Results from the habitat assessments indicated that suitable burrowing owl burrows potentially utilized for refugia and/or nesting were documented within the property including foraging habitat documented throughout the Project Site. Accordingly, if suitable habitat is documented onsite, both Step II surveys and the 30-day pre-construction surveys are required in order to comply with the MSHCP guidelines.

Step II – Locating Burrows and Burrowing Owls

Concurrent with the initial habitat assessments, a detailed focused burrow survey was conducted and included documentation of appropriately sized natural burrows or suitable man-made structures that may be utilized by burrowing owl - as part of the MSHCP protocol, which is described below under Part A. Focused Burrow Survey. The MSHCP protocol indicated that no more than 100 acres should be surveyed per day/per biologist.

Part A: Focused Burrow Survey

A systematic survey for burrows, including burrowing owl sign, was conducted by walking across all suitable habitats mapped within the Project Site on April 29th, 2019, March 31st, 2020 and March 18th, 2022. Pedestrian survey transects were spaced to allow 100% visual coverage of the ground surface. The distances between transect centerlines were no more than 20 meters (approximately 66 ft.) apart, and owing to the terrain, often much smaller. Transect routes were also adjusted to account for topography and in general ground surface visibility. All observations of suitable burrows or dens, natural or man-made, or sightings of burrowing owl, were recorded and mapped during the survey.

Part B: Focused Burrowing Owl Surveys

Four (4) focused burrowing owl surveys (in addition to the initial focused burrow survey – Step II, Part A) were conducted within the Project Site on May 17th, 26th, June 7th, and 14th, 2019 from one hour before sunrise to two hours after sunrise. Four (4) focused burrowing owl surveys of the offsite impact area were conducted on March 31st, April 24th, May 20th, and June 23rd 2020 from one hour before sunrise to two hours after sunrise. Updated focused burrowing owl surveys (in addition to the initial focused burrow survey – Step II, Part A) were conducted within the Project Site and offsite impact area on March 18th, April 15th, 29th, May 22nd, 2022, March 22nd, April 29th, May 13th, and June 3rd, 2024 from one hour before sunrise to two hours after sunrise. During visual surveys, all potentially suitable burrow or structure entrances were investigated for signs of owl occupation, such as feathers, tracks, or pellets, and carefully observed to determine if burrowing owls utilize these features, when present. All burrows are monitored at a short distance from the entrance, and at a location that would not interfere with potential owl behavior, when present. In addition to monitoring potential burrow locations, all suitable habitats in the Project Site were walked along transects averaging 20 meters (approximately 66 feet) between centerlines.

Jurisdictional Resources Assessment

A formal jurisdictional delineation was conducted by Carlson Strategic Land Solutions, Inc. 2022 (Carlson Strategic Land Solutions, Inc. 2022). The delineation determined the boundaries or absence of potential wetland and non-wetland waters of the United States

subject to the regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE) pursuant to Clean Water Act (CWA) Section 404; wetland and non-wetland waters of the State subject to the regulatory jurisdiction of the Regional Water Quality Control Board (RWCQB) pursuant to CWA Section 401 and State Porter-Cologne Water Quality Control Act (Porter-Cologne); streambed and riparian habitat subject to the regulatory jurisdiction of the CDFW pursuant Sections 1600 *et seq.* of the California Fish and Game Code (CDFG Code).

All resources delineated as CDFW jurisdictional features were also defined as Western Riverside County MSHCP Section 6.1.2 resources.

Wetlands are identified by the presence of three characteristics: hydrophytic vegetation, wetland hydrology, and hydric soils. If any of these criteria were met, one or more transects were run to determine the extent of the wetland. Specifically, the presence of wetland hydrology was evaluated throughout the Project Site by recording the extent of observed surface flows, depth of inundation, depth to saturated soils, and depth to free water in the soil pits, where applicable. In addition, indicators of wetland or riverine hydrology were recorded, including water marks, drift lines, rack, debris, and sediment deposits, as warranted. Any indicators of hydric soils, such as redoximorphic features, buried organic matter, organic streaking, reduced soil conditions, gleyed or low-chroma soils, or sulfidic odor were also recorded.

EXISTING ENVIRONMENTAL SETTING

SURROUNDING LAND USES/TOPOGRAPHY/SOILS

The Project Site slopes slightly from northwest to southeast with elevations extending from 1,427 feet above mean sea level (AMSL) in the extreme northwest region to 1,413 AMSL along the southeast boundary. The undeveloped majority of the Project Site is currently dominated by disturbed/ruderal and ornamental trees as illustrated in Figure 4, *Vegetation Communities Map*, Figures 5 to 7, *Current Project Site Photographs*, and outlined in Table 1, *Vegetation Communities Acreages*. A disturbed agricultural drainage ditch extends from the Project Site southeast from the property extending toward the San Jacinto River as illustrated in Figure 8, *Current Project Site Photographs*. Construction activities including impacts and improvements to the disturbed agricultural drainage ditches are currently under construction by IDI Logistics (Perris Logistics Center north project).

The Soil Survey of Western Riverside Area has the following soils mapped within the boundary of the property as shown on Figure 9, *Soils Association Map*:

- **Dv – Domino silt loam, saline-alkali.**
- **Dw – Domino silt loam, strongly saline-alkali.**
- EpA – Exeter sandy loam, deep, 0-2% slopes.
- PaA - Pachappa fine sandy loam, 0-2% slopes.
- **Wn – Willows silty clay, deep, strongly saline-alkali.**
- **Wg – Willows silty clay, saline-alkaline**

Domino, and Willows soil types (Bold) are classified as sensitive substrates considered important for the conservation of certain plant species and vernal pool resources in the region (MSHCP 2004). The soils documented onsite are characterized as extending the full range from non- to highly saline levels and as being poorly to well drained (drainage class).

VEGETATION COMMUNITIES

Natural community names follow the CDFW “List of California Terrestrial Natural Communities” and/or Holland (1986) classification system, which have been refined and where appropriate to better characterize the habitat types onsite when not addressed by the MSHCP classification system. Acreage totals for vegetation communities documented onsite and offsite are listed in Table 1. *Vegetation Communities Acreages*.

Table 1.
Vegetation Communities Acreages

Vegetation Community	Project Site Acres	Offsite Impact Acres	Total Acres
Disturbed/Ruderal	76.40	5.37	81.77
Developed	10.06	4.77	14.83
Agricultural Drainage Ditch	0.17	0.71	0.88
Ornamental (Eucalyptus)	1.05	0.13	1.18
TOTAL	87.68	10.98	98.66

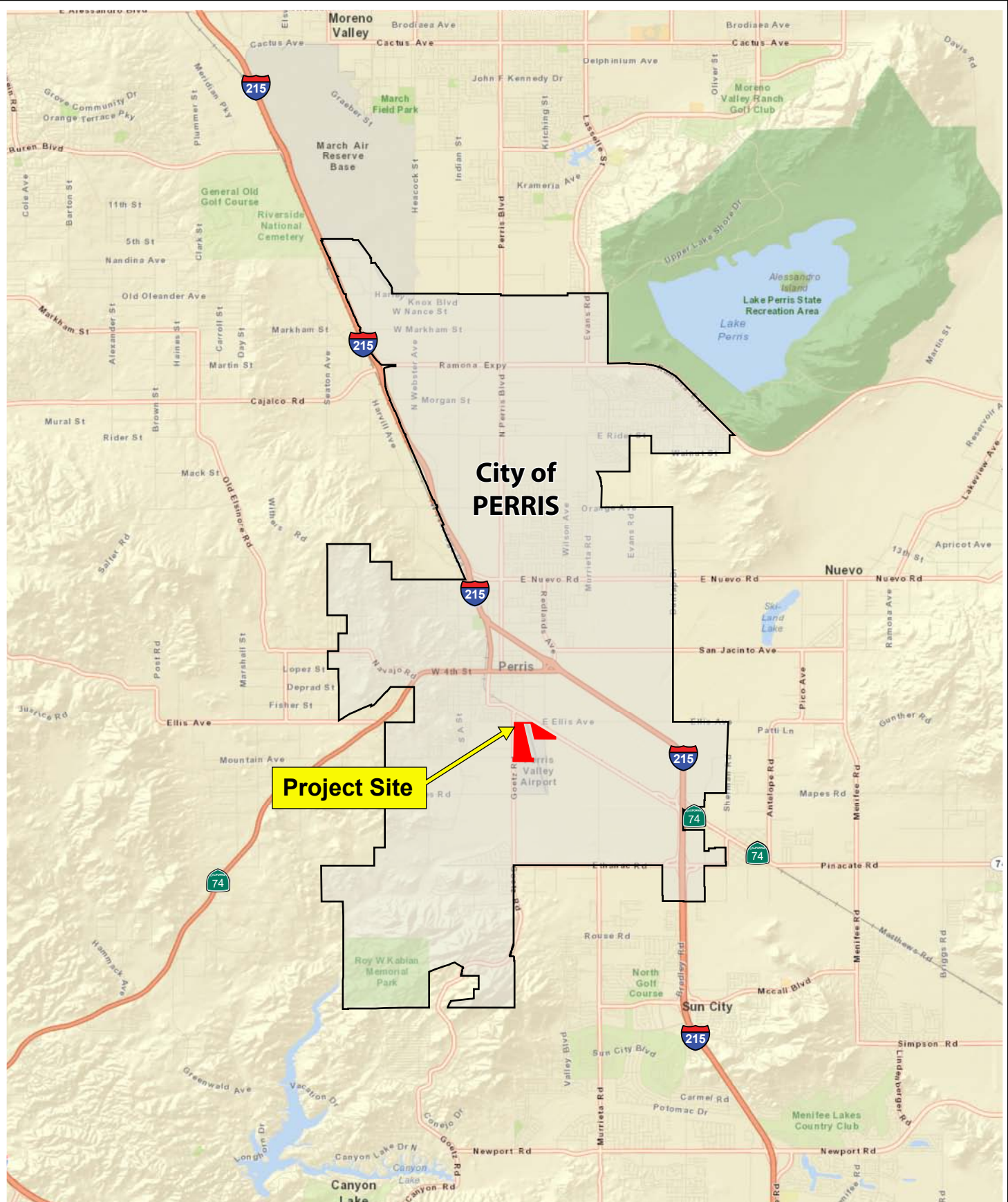
Source: Cadre Environmental 2022

Disturbed/Ruderal

The majority of the Project Site is dominated by annually disked disturbed/ruderal vegetation. Common dominant species documented within this habitat type include London rocket (*Sisymbrium irio*), stinknet (*Oncosiphon piluliferum*), cheeseweed (*Malva parviflora*), Russian thistle (*Salsola tragus*), totalote (*Centaurea melitensis*), red-stemmed filaree (*Erodium cicutarium*), white-stemmed filaree (*Erodium moschatum*), prickly lettuce (*Lactuca serriola*), black mustard (*Brassica nigra*), tumbling pigweed (*Amaranthus albus*), nettle-leaved goosefoot (*Chenopodium murale*), hare barley (*Hordeum murinum* subsp. *glaucum*), Italian rye (*Lolium multiflorum*), foxtail chess (*Bromus madritensis*), ripgut grass (*Bromus diandrus*), wild oat (*Avena fatua*), slender wild oat (*Avena barbata*), canary grass (*Phalaris canariensis*), pineapple weed (*Matricaria discoides*), cocklebur (*Xanthium strumarium*), and yellow sweetclover (*Melilotus officinalis*). Less common species include caterpillar phacelia (*Phacelia cicutaria*), alkali weed (*Cressa truxillensis*), slender goldfields (*Lasthenia gracilis*), Boccone's sand spurrey (*Spergularia bocconi*), and salt heliotrope (*Heliotropium curassavicum*).

Ornamental Trees

Several mature ornamental trees were documented within the Project Site along the northern boundary immediately south of Ellis Avenue including red gum tree (*Eucalyptus camaldulensis*).

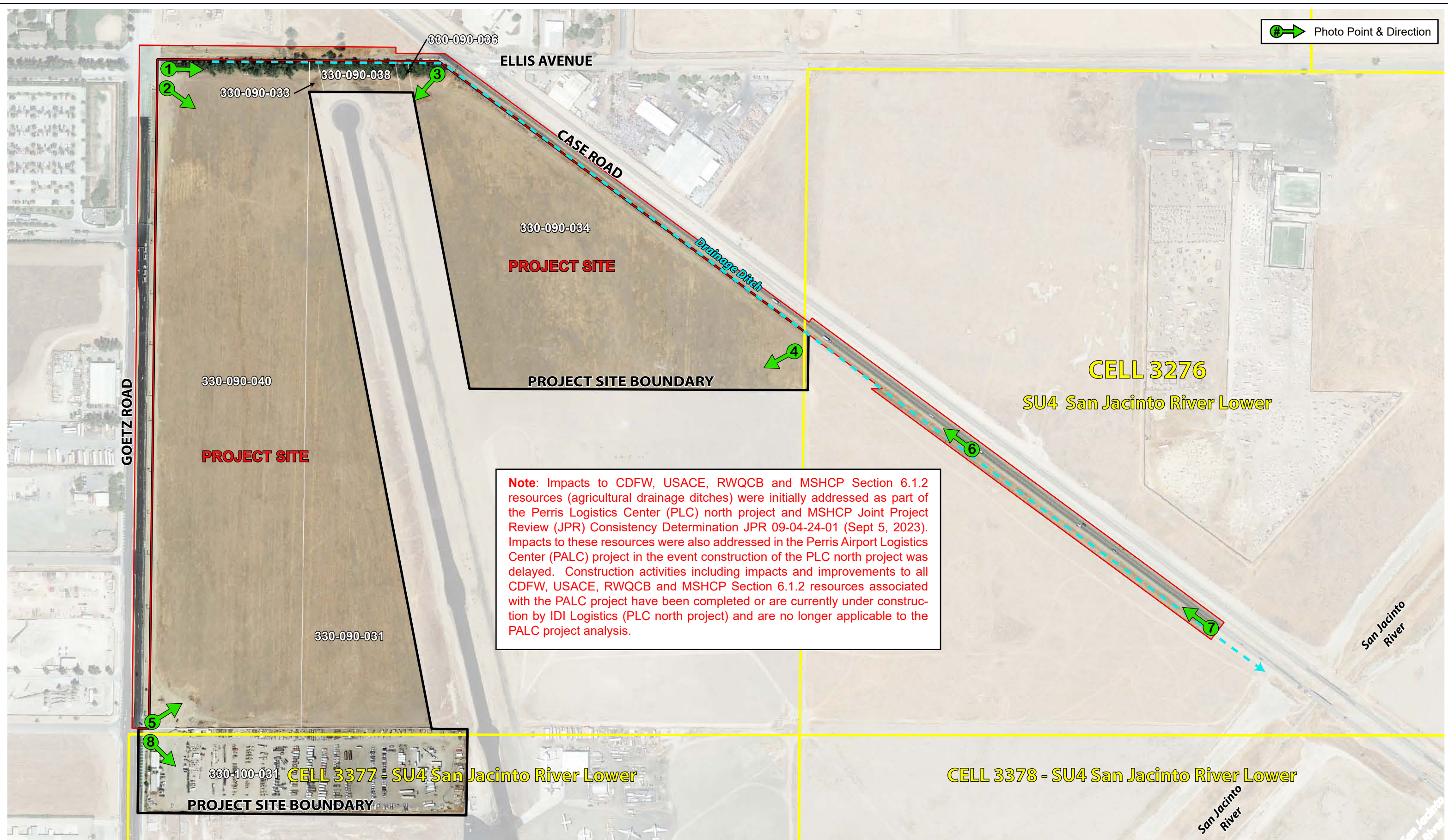


TPM 38412, APN's 330-090-031, 330-090-033, 330-090-034, 330-090-036, 330-090-038, 330-090-040, 330-100-031 (including right of ways).

Figure 1 - Regional Location Map
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Perris Airport Logistics Center, City of Perris



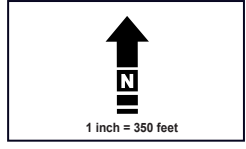
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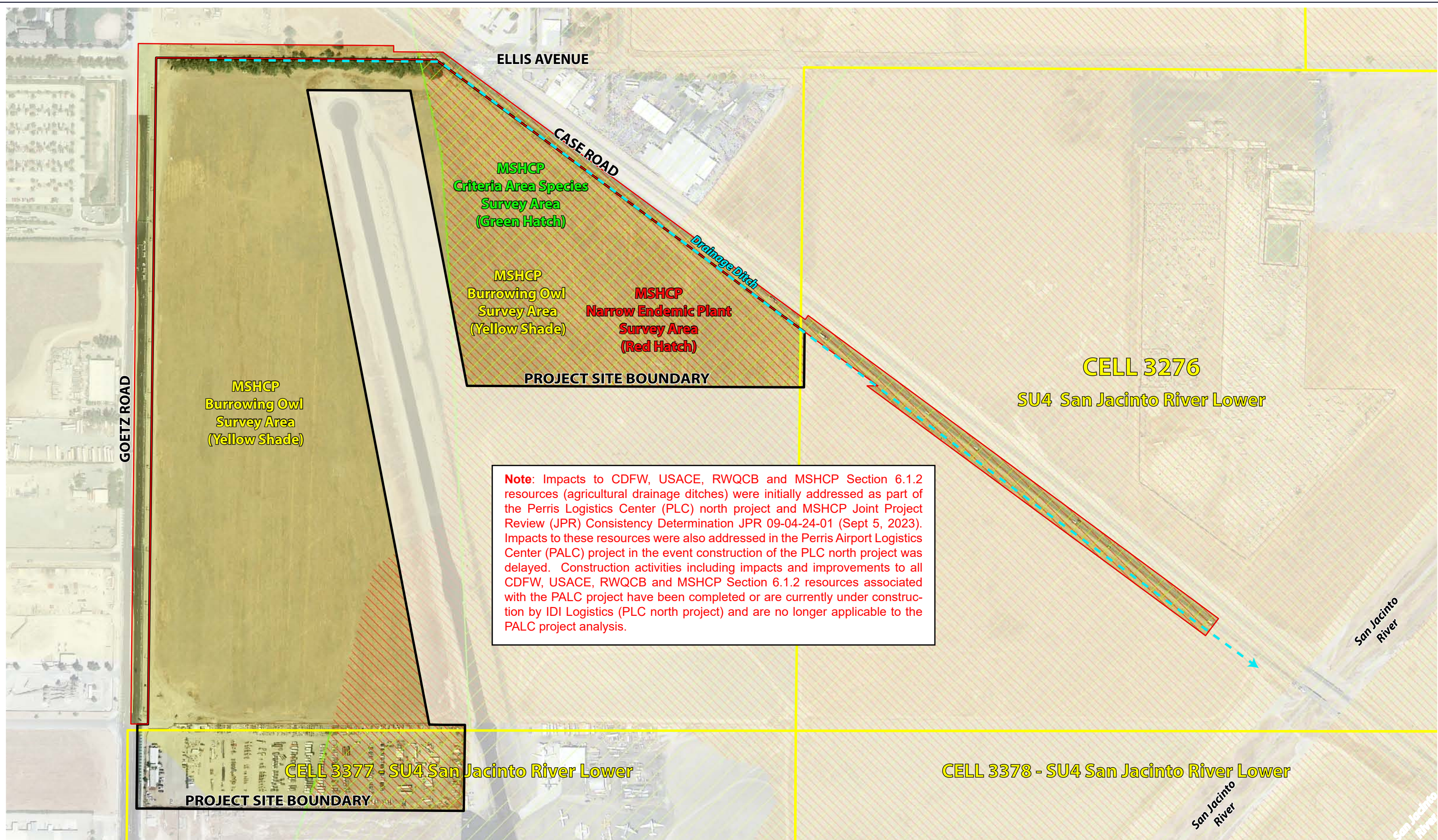


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— Offsite Impact Area

Figure 2 - Project Site Map
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 Perris Airport Logistics Center, City of Perris

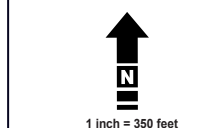


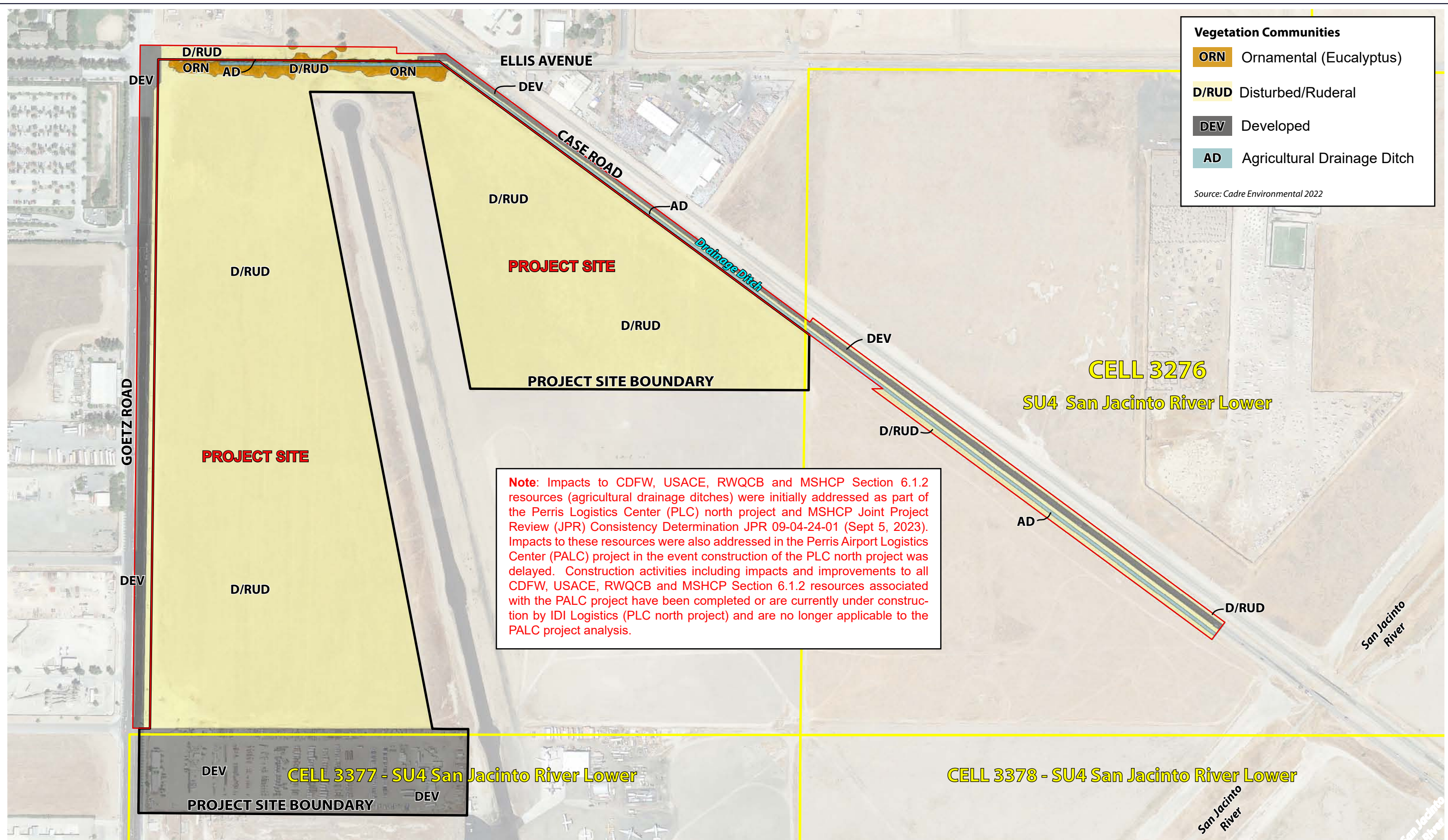


TPM 38412, APN's 330-090-031, 330-090-033, 330-090-034, 330-090-036, 330-090-038, 330-090-040, 330-100-031 (including right of ways).

— Offsite Impact Area

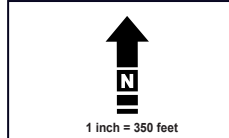
Figure 3 - MSHCP Relationship Map
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TPM 38412, APN's 330-090-031, 330-090-033, 330-090-034, 330-090-036, 330-090-038, 330-090-040, 330-100-031 (including right of ways).

Figure 4 - Vegetation Communities Map
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PHOTOGRAPH 1 - Ornamental (Eucalyptus)



PHOTOGRAPH 2 - Disturbed/Ruderal

Refer to Figure 2 - Project Site Map for Photographic Key

Figure 5 - Current Project Site Photographs
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PHOTOGRAPH 3 - Disturbed/Ruderal



PHOTOGRAPH 4 - Disturbed/Ruderal

Refer to Figure 2 - Project Site Map for Photographic Key

Figure 6 - Current Project Site Photographs
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PHOTOGRAPH 5 - Disturbed/Ruderal



PHOTOGRAPH 6 - Agricultural Drainage Ditch

Refer to Figure 2 - Project Site Map for Photographic Key

Figure 7 - Current Project Site Photographs
Biological Resources Technical Report
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PHOTOGRAPH 7 - Agricultural Drainage Ditch

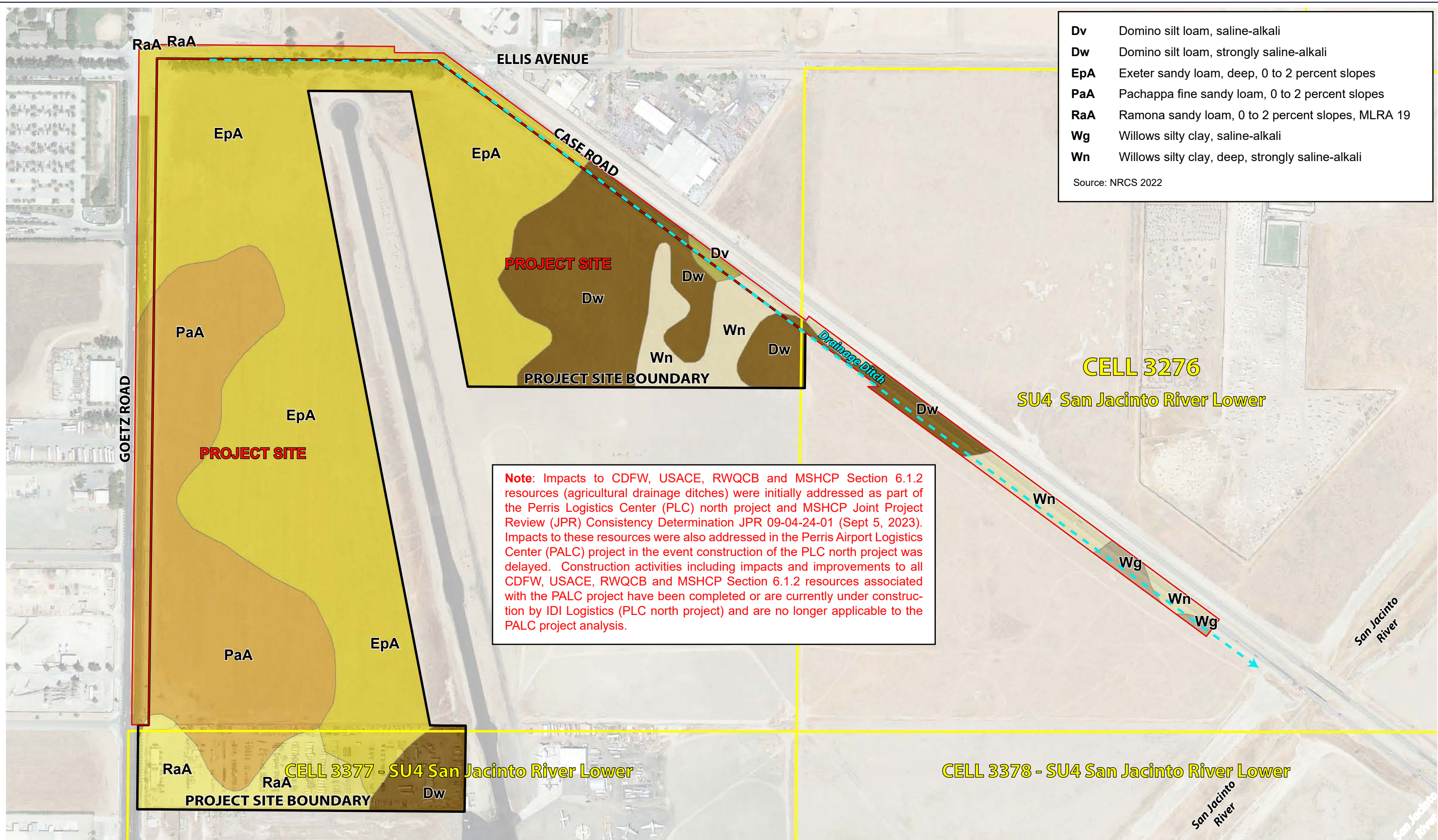


PHOTOGRAPH 8 - Developed

Refer to Figure 2 - Project Site Map for Photographic Key

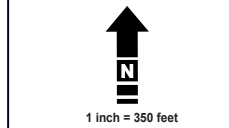
Figure 8 - Current Project Site Photographs
*Biological Resources Technical Report
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TPM 38412, APN's 330-090-031, 330-090-033, 330-090-034, 330-090-036, 330-090-038, 330-090-040, 330-100-031 (including right of ways).

Figure 9 - Soils Association Map
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Agricultural Drainage Ditch

A disturbed agricultural drainage ditch bisects the offsite impact area and is bordered to the northeast by Case Road (developed) and south by disturbed/ruderal vegetation. Species documented within the agricultural drainage ditch include but are not limited to canary grass, barnyard grass (*Echinochloa crus-galli*) alkali weed, Boccone's sand spurrey, English plantain (*Plantago lanceolata*), common plantain (*Plantago major*), annual sunflower (*Helianthus annuus*), prickly sow thistle (*Sonchus asper* subs. *asper*) saltgrass (*Distichlis spicata*), California burclover (*Medicago polymorpha*), tumbling pigweed, alkali mallow (*Malvella leprosa*), swiss chard (*Beta vulgaris*), mayweed (*Anthemis cotula*), sprawling saltbush (*Atriplex suberecta*), silverscale saltbush (*Atriplex argentea*), bush seepweed (*Suaeda nigra*), short pod mustard (*Hirschfeldia incana*), shepherd's purse (*Capsella bursa-pastoris*), and common fiddleneck (*Amsinckia menziesii*).

GENERAL PLANT & WILDLIFE SPECIES

General wildlife species documented onsite or within the vicinity during the focused surveys include but are not limited to red-tailed hawk (*Buteo jamaicensis*), Anna's hummingbird (*Calypte anna*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), Cassin's kingbird (*Tyrannus vociferans*), cliff swallow (*Petrochelidon pyrrhonota*), Say's phoebe (*Sayornis saya*), California towhee (*Pipilo crissalis*), western meadowlark (*Sturnella neglecta*), northern mockingbird (*Mimus polyglottos*), house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), and California ground squirrel.

JURISDICTIONAL RESOURCES

The following section is excerpted and/or summarized directly from the following document prepared by Carlson Strategic Land Solutions, Inc. 2022 "Jurisdictional Delineation for the Perris Airport Project Site Located in the City of Perris", as outlined in Table 2, USACE/RWQCB Jurisdictional Resources, Table 3, CDFW/MSHCP Jurisdictional Resources, and as shown in Figure 10, Jurisdictional Resources Map.

As summarized in the following sections, CDFW jurisdiction exceeds USACE jurisdiction and any project mitigation necessary to satisfy the requirements of the CDFW would also satisfy the requirement of the USACE and RWQCB.

USACE/RWQCB Jurisdiction

A total of 0.03 acre onsite and 0.09 acre offsite (0.12 acre total) of regulated drainages were documented and are subject to Section 404 under the Army Corps of Engineers and Regional Water Quality Control Board Water under the Clean Water Act Section 401, as outlined in Table 2, USACE/RWQCB Jurisdictional Resources. Based on field observations no wetlands were identified or observed onsite. (Carlson Strategic Land Solutions, Inc. 2022)

**Table 2.
USACE/RWCQB Jurisdictional Resources**

Drainage	Type	Location	Total (acres)
Agricultural Drainage Ditch	Non-Wetland	Onsite	0.03
Agricultural Drainage Ditch	Non-Wetland	Offsite	0.09
TOTAL			0.12

Source: Carlson Strategic Land Solutions, Inc. 2022

CDFW Jurisdiction

A total of 0.17 acre onsite and 0.71 acre offsite (0.88 acre total) of regulated drainages were documented and are subject to CDFW jurisdiction in accordance with FGC Section 1600, as outlined in Table 3, *CDFW/MSHCP Jurisdictional Resources*. (Carlson Strategic Land Solutions, Inc. 2022)

**Table 3.
CDFW/MSHCP Jurisdictional Resources**

Drainage	Type	Location	Total (acres)
Agricultural Drainage Ditch	Non-Riparian	Onsite	0.17
Agricultural Drainage Ditch	Non-Riparian	Offsite	0.71
TOTAL			0.88

Source: Carlson Strategic Land Solutions, Inc. 2022

MSHCP Riparian/Riverine/Vernal Pool Resources

All resources delineated as CDFW jurisdictional features were also defined as Western Riverside County MSHCP Section 6.1.2 Riverine resources.

Regulated activities within inland streams, wetlands and riparian areas in Western Riverside County California fall under the jurisdiction of the MSHCP. The MSHCP requires, among other things, assessments for riparian/riverine and vernal pool resources. As projects are proposed within the MSHCP Plan Area, an assessment of the potentially significant effects of those projects on riparian/riverine areas, and vernal pools are required, as currently mandated by CEQA, using available information augmented by project-specific mapping provided to and reviewed by the permittee’s biologist(s). Riparian/riverine areas and vernal pools are defined for this section as follows in accordance with Section 6.1.2, Vol. I, of the Final MSHCP Plan:

“Riparian/Riverine Areas are lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.” (MSHCP 2004)

It is assumed the first part of the definition defines riparian habitat, and the second part defines riverine areas. Vernal pools are defined as:

“...seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season”. (MSHCP 2004)

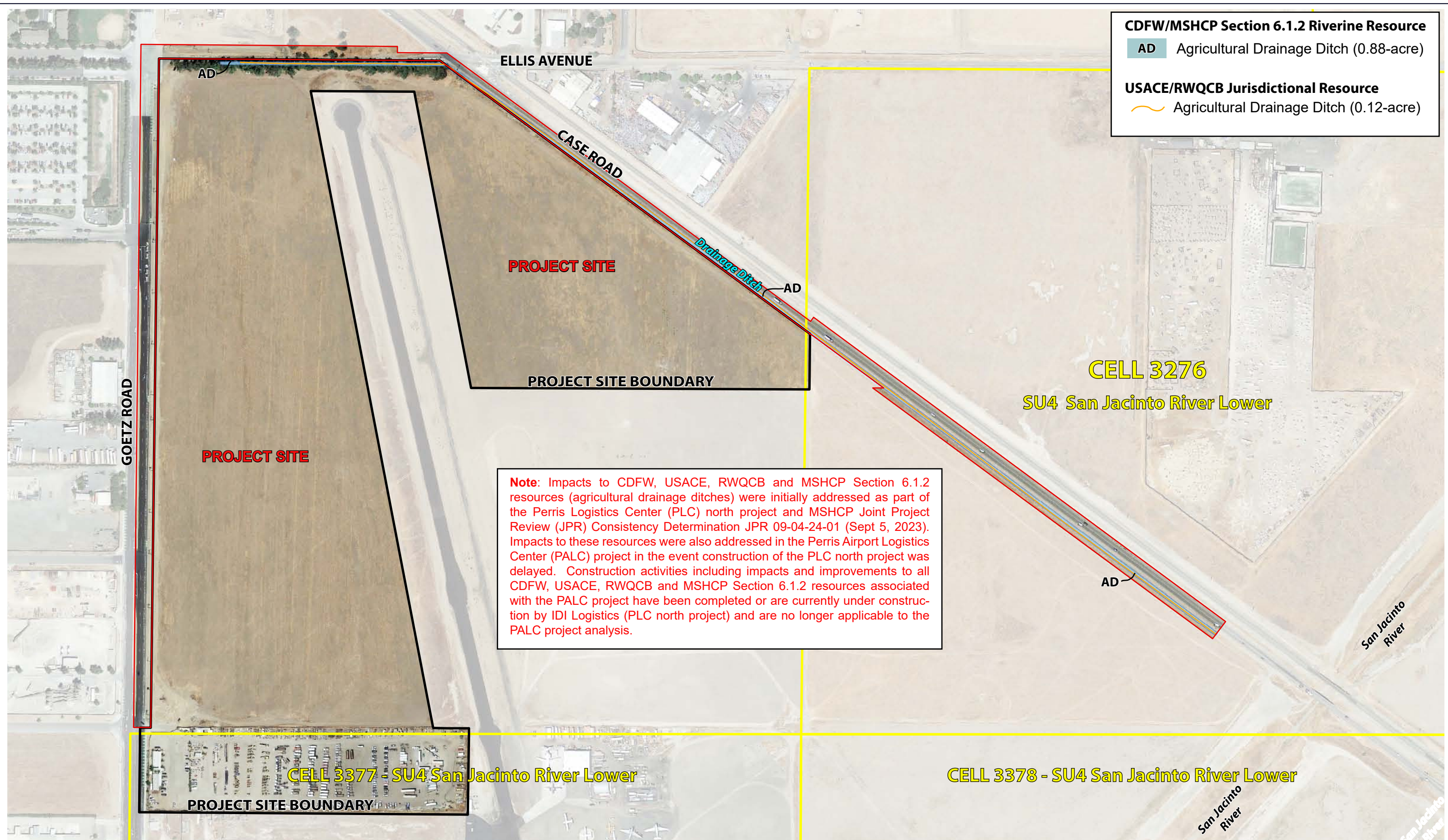
A total of 0.88 acre of MSHCP Section 6.1.2 Riverine resources occur within the Project Site as outlined in Table 3, *CDFW/MSHCP Jurisdictional Resources*, and shown in Figure 10, *Jurisdictional Resources Map*.

No MSHCP Section 6.1.2 Riparian resources are located within or adjacent to the Project Site.

No evidence of vernal pools, seasonal depressions or seasonally inundated road ruts were documented within the Project Site. Vernal pools are depressions in areas where a hard-underground layer prevents rainwater from draining downward into the subsoils. When rain fills the pools in the winter and spring, the water collects and remains in the depressions. In the springtime, the water gradually evaporates away, until the pools became completely dry in the summer and fall. Vernal pools tend to have an impermeable layer that results in ponded water. The soil texture (the amount of sand, silt, and clay particles) typically contains higher amounts of fine silts and clays with lower percolation rates. Pools that retain water for a sufficient length of time will develop hydric cells. Hydric cells form when the soil is saturated from flooding for extended periods of time and anaerobic conditions (lacking oxygen or air) develop.

A review of historic aerials was conducted to determine if inundated features were present during years of high rainfall when features would certainly be documented. Historic aerials taken in 2011 represent an ideal baseline during which known (previously documented) inundated vernal pools, seasonal depressions and road ruts can easily be seen. No sign or indication of inundation was documented within the Project Site during a review of historic aerials.

The made-made concrete and earthen agricultural drainage ditch has been classified as an MSHCP Section 6.1.2 Riverine resources and does not meet the definition of vernal pool.



CDFW/MSHCP Section 6.1.2 Riverine Resource
 AD Agricultural Drainage Ditch (0.88-acre)

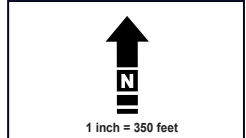
USACE/RWQCB Jurisdictional Resource
 Agricultural Drainage Ditch (0.12-acre)

Note: Impacts to CDFW, USACE, RWQCB and MSHCP Section 6.1.2 resources (agricultural drainage ditches) were initially addressed as part of the Perris Logistics Center (PLC) north project and MSHCP Joint Project Review (JPR) Consistency Determination JPR 09-04-24-01 (Sept 5, 2023). Impacts to these resources were also addressed in the Perris Airport Logistics Center (PALC) project in the event construction of the PLC north project was delayed. Construction activities including impacts and improvements to all CDFW, USACE, RWQCB and MSHCP Section 6.1.2 resources associated with the PALC project have been completed or are currently under construction by IDI Logistics (PLC north project) and are no longer applicable to the PALC project analysis.

TPM 38412, APN's 330-090-031, 330-090-033, 330-090-034, 330-090-036, 330-090-038, 330-090-040, 330-100-031 (including right of ways).

— Offsite Impact Area

Figure 10 - Jurisdictional Resources Map
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SENSITIVE BIOLOGICAL RESOURCES

The following discussion describes the plant and wildlife species present, or potentially present within the property boundaries, that have been afforded special recognition by federal, state, or local resource conservation agencies and organizations, principally due to the species' declining or limited population sizes, usually resulting from habitat loss. Also discussed are habitats that are unique, of relatively limited distribution, or of particular value to wildlife. Protected sensitive species are classified by state and/or federal resource management agencies, or both, as threatened or endangered, under provisions of the state and federal endangered species act. Vulnerable or "at-risk" species that are proposed for listing as threatened or endangered (and thereby for protected status) are categorized administratively as "candidates" by the USFWS. The CDFW uses various terminology and classifications to describe vulnerable species. There are additional sensitive species classifications applicable in California. These are described below.

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The CDFW, USFWS, and special groups like the California Native Plant Society maintain watch lists of such resources. For the purpose of this assessment sources used to determine the sensitive status of biological resources are:

Plants: USFWS (2022), CNDDDB (CDFW 2022a), CDFW (2022b), CNPS (2022), and Skinner and Pavlik (1994),

Invertebrate - Crotch's bumble bee *Bombus crotchii*: Leif Richardson, Paul Williams, Robbin Thorp and Sheila Colla, et al. (2022), CDFW (2019), CDFW (2023).

Wildlife: California Wildlife Habitat Relationships (2008), USFWS (2022), CNDDDB (CDFW 2022a), and CDFW (2022b).

Habitats: CNDDDB (CDFW 2022a).

FEDERAL PROTECTION AND CLASSIFICATIONS

The Federal Endangered Species Act of 1973 (FESA) defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range..." Threatened species are defined as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to "take" any listed species. "Take" is defined as follows in Section 3(18) of the FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification as forms of a "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant

and animal species, the property owner and agency are required to consult with USFWS. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants. Recently, the USFWS instituted changes in the listing status of former candidate species. Former C1 (candidate) species are now referred to simply as candidate species and represent the only candidates for listing. Former C2 species (for which the USFWS had insufficient evidence to warrant listing at this time) and C3 species (either extinct, no longer a valid taxon or more abundant than was formerly believed) are no longer considered as candidate species. Therefore, these species are no longer maintained in list form by the USFWS, nor are they formally protected. However, some USFWS field offices have issued memoranda stating that former C2 species are henceforth to be considered Federal Species of Concern. This term is employed in this document but carries no official protections. All references to federally protected species in this report (whether listed, proposed for listing or candidate) include the most current published status or candidate category to which each species has been assigned by USFWS.

For purposes of this assessment, the following acronyms are used for federal status species:

FE	Federal Endangered
FT	Federal Threatened
FPE	Federal Proposed Endangered
FPT	Federal Proposed Threatened
FC	Federal Candidate for Listing

The designation of critical habitat can also have a significant impact on the development of land designated as “*critical habitat*.” The FESA prohibits federal agencies from taking any action that will “*adversely modify or destroy*” critical habitat (16 U.S.C. § 1536(a)(2)). This provision of the FESA applies to the issuance of permits by federal agencies. Before approving an action affecting critical habitat, the federal agency is required to consult with the USFWS who then issues a biological opinion evaluating whether the action will “*adversely modify*” critical habitat. Thus, the designation of critical habitat effectively gives the USFWS extensive regulatory control over the development of land designated as critical habitat.

The MBTA makes it unlawful to “*take*” any migratory bird or part, nest, or egg of such bird listed in wildlife protection treaties between the United States and Great Britain, the Republic of Mexico, Japan, and the Union of Soviet States. For purposes of the MBTA, “*take*” is defined as to pursue, hunt, capture, kill, or possess or attempt to do the same.

The Bald Eagle and Golden Eagle Protection Act explicitly protects the bald eagle and golden eagle and imposes its own prohibition on any taking of these species. As defined in this act, take means to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, or molest or disturb. Current USFWS policy is not to refer the incidental take of bald eagles for prosecution under the Bald Eagle and Golden Eagle Protection Act (16 U.S.C. 668-668d).

STATE PROTECTION AND CLASSIFICATIONS

California's Endangered Species Act (CESA) defines an endangered species as "...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." The State defines a threatened species as "...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species." Candidate species are defined as "...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike FESA, CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of CESA addresses the taking of threatened or endangered species by stating "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided..." Under CESA, "take" is defined as "...hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require "...permits or memorandums of understanding..." and can be authorized for "...endangered species, threatened species, or candidate species for scientific, educational, or management purposes." Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

Additionally, some sensitive mammals and birds are protected by the State as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. SSC ("special" animals and plants) listings include special status species, including all state and federal protected and candidate taxa, Bureau of Land Management and US Forest Service sensitive species, species considered to be declining or rare by the CNPS or National Audubon Society, and a selection of species which are considered to be under population stress but are not formally proposed for listing. This list is primarily a working document for the CDFW's CNDDDB project. Informally listed taxa are not protected per se but warrant consideration in the preparation of biotic assessments. For some species, the CNDDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites. For the purposes of this assessment, the following acronyms are used for State status species:

SE	State Endangered
ST	State Threatened

SCE	State Candidate Endangered
SCT	State Candidate Threatened
SFP	State Fully Protected
SP	State Protected
SR	State Rare
SSC	California Species of Special Concern
CWL	California Watch List

Nesting birds, including raptors, are protected under California Fish and Game Code Section 3503, which reads, “It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” In addition, under California Fish and Game Code Section 3503.5, “it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto”. Passerines and non-passerine land birds are further protected under California Fish and Game Code 3513. As such, the CDFW typically recommends surveys for nesting birds that could potentially be directly (e.g., actual removal of trees/vegetation) or indirectly (e.g., noise disturbance) impacted by project-related activities. Disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by the CDFW.

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in the State. This organization has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of rare, threatened, or endangered vascular plant species of California (Tibor 2001). The list serves as the candidate list for listing as threatened and endangered by CDFW. The CNPS has developed five categories of rarity (CRPR):

CRPR 1A	Presumed extinct in California.
CRPR 1B	Rare, threatened, or endangered in California and elsewhere.
CRPR 2A	Plants presumed extirpated in California but common elsewhere
CRPR 2B	Plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3	Plants about which we need more information – a review list.
CRPR 4	Species of limited distribution in California (i.e., naturally rare in the wild), but whose existence does not appear to be susceptible to threat.

As stated by the CNPS:

“Threat Rank is an extension added onto the California Rare Plant Rank and designates the level of endangerment by a 1 to 3 ranking with 1 being the most endangered and 3 being the least endangered. A Threat Rank is

present for all California Rare Plant Rank 1B's, 2's, 4's, and the majority of California Rare Plant Rank 3's. California Rare Plant Rank 4 plants are seldom assigned a Threat Rank of 0.1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a California Rare Plant Rank. In addition, all California Rare Plant Rank 1A (presumed extinct in California), and some California Rare Plant Rank 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension.” (CNPS 2010)

0.1	Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2	Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3	Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

SENSITIVE HABITATS

As stated by the CDFW:

“One purpose of the vegetation classification is to assist in determining the level of rarity and imperilment of vegetation types. Ranking of alliances according to their degree of imperilment (as measured by rarity, trends, and threats) follows NatureServe’s Heritage Methodology, in which all alliances are listed with a G (global) and S (state) rank. For alliances with State ranks of S1-S3, all associations within them are also considered to be highly imperiled” (CDFW 2012)

No vegetation communities listed by the CDFW as sensitive were documented within or adjacent to the Project Site.

SENSITIVE PLANTS

The Project Site lies partially within a predetermined Survey Area for six (6) MSHCP narrow endemic sensitive plant species, which includes:

- Munz's onion (*Allium munzii*) [FE, ST, CRPR 1B.1];
- San Diego ambrosia (*Ambrosia pumila*) [FE, CRPR 1B.1];
- many-stemmed dudleya (*Dudleya multicaulis*) [CRPR 1B.2];
- spreading navarretia (*Navarretia fossalis*) [FT, CRPR 1B.1];
- California Orcutt grass (*Orcuttia californica*) [FE/SE, CRPR 1B.1]; and
- Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*) [CRPR 2.1].

None of the six (6) MSHCP narrow endemic sensitive plant species were detected during the project surveys and are therefore not expected to occur due to lack of observation as noted in Table 4, *Sensitive Plant Species with Potential to Occur Onsite*.

The Project Site lies partially within a predetermined Survey Area nine (9) MSHCP criteria area sensitive plant species, which includes:

- Coulter’s goldfields (*Lasthenia glabrata* ssp. *coulteri*), CRPR 1B.1;
- Davidson’s saltscale (*Atriplex serenana* var. *davidsonii*), CRPR 1B.2;
- Little mousetail (*Myosurus minimus* ssp. *apus*), CRPR 3.1;
- Mud nama (*Nama stenocarpum*), CRPR 2.2;
- Parish’s brittlescale (*Atriplex parishii*), CRPR 1B.1;
- Round-leaved filaree (*California macrophyllum*), CRPR 1B.1;
- San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), FE, CRPR 1B.1;
- Smooth tarplant (*Centromadia pungens* ssp. *laevis*), CRPR 1B.1; and
- Thread-leaved brodiaea (*Brodiaea filifolia*), FT, SE, CRPR 1B.1.

One (1) of the nine (9) MSHCP criteria area sensitive plant species (smooth tarplant) was detected during the project surveys as noted in Table 4, *Sensitive Plant Species with Potential to Occur Onsite*. Specifically, a total of approximately 100 smooth tarplant (MSHCP criteria area species) were documented within the eastern region of the Project Site as shown in Figure 11, *Sensitive Species Observation Map*.

One (1) additional CNPS species, paniculate tarplant (*Deinandra paniculata*) CRPR 4.2 (approximately 25 plants) was observed outside of the Project Site limits, as shown in Figure 11, *Sensitive Species Observation Map*.

No state or federally listed threatened or endangered plant species were detected onsite.

**Table 4.
Sensitive Plant Species with Potential to Occur Onsite.**

Species Name (Scientific Name) Status	Habitat Description	Comments
MSHCP Criteria Area Plant Species		
San Jacinto Valley crownscale <i>(Atriplex coronata</i> var. <i>notatior)</i> FE CRPR List 1B.1 MSHCP CAPSA CA Endemic	The San Jacinto Valley crownscale occurs primarily in floodplains that support alkali scrub, alkali playas, vernal pools, and occasionally alkali grasslands.	San Jacinto Valley crownscale has a low potential to occur onsite based on the presence of suitable alkali soils and disturbed vegetation. Not detected within Project Site during focused spring 2019, 2020, 2022 or 2024 sensitive plant surveys.

Species Name (Scientific Name) Status	Habitat Description	Comments
<p>Parish's brittlescale (<i>Atriplex parishii</i>)</p> <p>CRPR List 1B.1 MSHCP CAPSA</p>	<p>Parish's brittlescale is a small prostrate to decumbent annual, white scaly, and is often much less than eight inches in length. It blooms May to October. This species occurs on alkali or saline flats, alkali meadows, and in or along the margins of vernal pools or playa depressions.</p>	<p>Parish's brittlescale has a low potential to occur onsite based on the presence of suitable alkali soils and disturbed vegetation.</p> <p>Not detected within Project Site during focused spring 2019, 2020, 2022 or 2024 sensitive plant surveys.</p>
<p>Davidson's saltscale (<i>Atriplex serenana</i> var. <i>davidsonii</i>)</p> <p>CRPR List 1B.2 MSHCP CAPSA</p>	<p>Davidson's saltscale is a decumbent to ascending annual that is sparsely scaly. It blooms April to October. It grows on coastal bluffs and alkaline alluvial terraces, and on alkali or saline flats in interior areas such as western Riverside County.</p>	<p>Davidson's saltscale has a low potential to occur onsite based on the presence of suitable alkali soils and disturbed vegetation.</p> <p>Not detected within Project Site during focused spring 2019, 2020, 2022 or 2024 sensitive plant surveys.</p>
<p>Thread-leaved brodiaea (<i>Brodiaea filifolia</i>)</p> <p>FT/SE CRPR List 1B.1 MSHCP CAPSA CA Endemic</p>	<p>Thread-leaved brodiaea is a geophyte, which produces leaves and flower stalks that sprout from corms (underground bulb-like storage stems). Thread-leaved brodiaea blooms March to June. Thread-leaved brodiaea typically occurs on gentle hillsides, valleys, and floodplains in semi-alkaline flats of riparian areas, vernal pools, mesic southern needlegrass grassland, mixed native-annual grassland, and alkali grassland plant communities in association with clay, clay loam, or alkaline silty-clay soils.</p>	<p>Thread-leaved brodiaea is not expected to occur onsite based on a lack of suitable clay and clay associated substrates.</p> <p>Not detected within Project Site during focused spring 2019, 2020, 2022 or 2024 sensitive plant surveys.</p>
<p>Smooth Tarplant (<i>Centromadia pungens</i> ssp. <i>laevis</i>)</p> <p>CRPR 1B.1 MSHCP CAPSA</p>	<p>Smooth tarplant is an annual member of the sunflower family (Asteraceae) that occurs in vernal pools, alkali playas and scrub, alkali grasslands, riparian areas, along watercourses and disturbed sites. It blooms April to September.</p>	<p><u>Present</u> – Approx. 100 individuals were documented in the eastern region of the Project Site as shown in Figure 11, <i>Sensitive Species Observation Map</i>.</p>

Species Name (Scientific Name) Status	Habitat Description	Comments
Round-leaved filaree <i>(Erodium macrophyllum)</i> CRPR List 2.1 MSHCP CAPSA CA Endemic	Habitats include open areas in cismontane woodland and valley and foothill grasslands, which are often associated with heavy clay soils below 3,600 feet elevation.	Round-leaved filaree is not expected to occur onsite based on a lack of suitable clay and clay associated substrates. Not detected within Project Site during focused spring 2019, 2020, 2022 or 2024 sensitive plant surveys.
Coulter's goldfields <i>(Lasthenia glabrata ssp. coulteri)</i> CRPR List 1B.1 MSHCP CAPSA	Coulter's goldfields is associated with low-lying alkali and saline habitats along the coast and inland valleys. The majority of the populations are associated with coastal salt marsh. In Riverside County, Coulter's goldfields primarily grow in highly alkaline, silty clays associated with the Traver-Domino-Willows soils, and usually in the wet areas in the alkali vernal plain community.	Coulter's goldfields has a low potential to occur onsite based on the presence of suitable alkali soils and disturbed vegetation. Not detected within Project Site during focused spring 2019, 2020, 2022 or 2024 sensitive plant surveys.
Little mousetail <i>(Myosurus minimus ssp. apus)</i> CRPR List 3.1 MSHCP CAPSA	Little mousetail is widespread in California. It occurs in alkaline vernal pools, and vernal alkali plains and grasslands, and blooms March to June.	Little mousetail has a low potential to occur onsite based on the presence of suitable alkali soils and disturbed vegetation. Not detected within Project Site during focused spring 2019, 2020, 2022 or 2024 sensitive plant surveys.
Mud nama <i>(Nama stenocarpum)</i> CRPR List 2.2 MSHCP CAPSA	Mud nama grows on muddy embankments of marshes and swamps, lake margins, riverbank, meadow, playa, and vernal pools. In western Riverside County, it is known only from the north shore of Mystic Lake (Roberts et al. 2004).	Mud nama is not expected to occur onsite based on a lack of suitable marsh and vernal pool resources. Not detected within Project Site during focused spring 2019, 2020, 2022 or 2024 sensitive plant surveys.
MSHCP Narrow Endemic Plant Species		
Munz's onion <i>(Allium munzii)</i> FE/ST CRPR List 1B.1 MSHCP NEPSA CA Endemic	Restricted to mesic clay soils in western Riverside County, California. It blooms from March to May. This species is found in southern needlegrass grassland, annual grassland, open	Munz's onion is not expected to occur onsite based on a lack of suitable soil conditions. Not detected within Project Site during focused spring

Species Name (Scientific Name) Status	Habitat Description	Comments
	coastal sage scrub, or occasionally, in cismontane juniper woodlands.	2019, 2020, 2022 or 2024 sensitive plant surveys.
San Diego ambrosia (<i>Ambrosia pumila</i>) FE CRPR List 1B.1 MSHCP NEPSA	San Diego ambrosia is known from Baja California, Mexico, and San Diego and Riverside counties in the United States. It blooms May to September. San Diego ambrosia occurs primarily on upper terraces of rivers and drainages as well as in open grasslands, openings in coastal sage scrub, and occasionally in areas adjacent to vernal pools.	San Diego ambrosia has a moderate to low potential to occur onsite based on the presence of suitable loam soils. Not detected within Project Site during focused spring 2019, 2020, 2022 or 2024 sensitive plant surveys.
Multi-stemmed dudleya (<i>Dudleya multicaulis</i>) CRPR List 1B.2 MSHCP NEPSA	Many-stemmed dudleya is a succulent perennial in the stonecrop family. It blooms April to July. This species is known from several southern California counties, and typically occurs in dry, stony places on heavy soils in scrub and grassland habitats below 2,000 feet elevation. Many-stemmed dudleya is most often associated with clay soils in barren, rocky places, or thinly vegetated openings in chaparral, coastal sage scrub, and southern needlegrass grasslands.	Many-stemmed dudleya is not expected to occur onsite based on a lack of suitable soil conditions. Not detected within Project Site during focused spring 2019, 2020, 2022 or 2024 sensitive plant surveys.
Spreading navarretia (<i>Navarretia fossalis</i>) FT/SE CRPR List 1B.1 MSHCP NEPSA	Spreading navarretia is a member of the phlox family, and is found in vernal pools, chenopod scrub, edge of marshes, and playas on saline-alkali soils. It occasionally grows in ditches and depressions associated with degraded habitat or old stock ponds (Consortium 2012). Spreading navarretia is a small prostrate to occasionally erect annual. Spreading navarretia blooms April to June.	Spreading navarretia has a low potential to occur onsite based on the presence of suitable alkali soils and disturbed vegetation. Not detected within Project Site during focused spring 2019, 2020, 2022 or 2024 sensitive plant surveys.

Species Name (Scientific Name) Status	Habitat Description	Comments
California Orcutt grass <i>(Orcuttia californica)</i> FE/SE CRPR List 1B.1 MSHCP NEPSA	California Orcutt grass is a small, unique grass that occurs primarily in vernal pool habitats. In southern California, it is known from Orange (recently reported occurrence), Los Angeles, Riverside, Ventura, and San Diego Counties, and continues south into Baja California, Mexico. California Orcutt grass blooms April to August. In Riverside County, this species is found in southern basaltic claypan vernal pools at the Santa Rosa Plateau, and alkaline vernal pools such as Skunk Hollow, at Upper Salt Creek near Hemet, Menifee and elsewhere.	California Orcutt grass is not expected to occur onsite based on a lack of suitable vernal pool resources. Not detected within Project Site during focused spring 2019, 2020, 2022 or 2024 sensitive plant surveys.
Wright's trichocoronis <i>(Trichocoronis wrightii var. wrightii)</i> CRPR List 2.1 MSHCP NEPSA	The historic known range of Wright's trichocoronis includes the Great Valley of central California, western Riverside County, and south Texas and adjacent northeast Mexico. This plant grows in meadows and seeps, marshes, riparian scrub, and vernal pools. Wright's trichocoronis blooms May to September.	Wright's trichocoronis is not expected to occur onsite based on a lack of suitable habitat. Not detected within Project Site during focused spring 2019, 2020, 2022 or 2024 sensitive plant surveys.
MSHCP Covered Species		
Vernal barley <i>(Hordeum intercedens)</i> MSHCP Covered CRPR 3.2	Annual herb generally blooming from March to June within coastal dunes, coastal scrub, grassland and vernal pools (CNPS 2022)	Not detected within Project Site during focused spring 2019, 2020, 2022 or 2024 sensitive plant surveys.
Other Sensitive Species Considered		
Robinson's pepper-grass <i>(Lepidium virginicum var. robinsonii)</i> CRPR 1B.1	Occurs in chaparral and coastal scrub.	No potential to occur near due to lack of suitable habitat.

Species Name (Scientific Name) Status	Habitat Description	Comments
Chaparral sand-verbena (<i>Abronia villosa</i> var. <i>aurita</i>) CRPR 1B.1	Sandy soils in sage-scrub, chaparral.	Not expected to occur due to lack of suitable habitat.
Parry's spineflower (<i>Chorizanthe parryi</i> var. <i>parryi</i>) CRPR 3.2 MSHCP Covered	Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	No potential to occur near due to lack of suitable habitat.
Long-spined spine flower (<i>Chorizanthe polygonoides</i> var. <i>longispina</i>) CRPR 1B MSHCP Covered	Annual herb generally blooming from April to July within chaparral, coastal scrub, meadows and seeps, grassland and vernal pools in association with clay substrates (CNPS 2022).	No potential to occur near due to lack of suitable soils.
<p>California Native Plant Society (CNPS): California Rare Plant Rank (CRPR) CRPR 1A – plants presumed extinct in California CRPR 1B – plants rare, threatened, or endangered in California, but more common elsewhere CRPR 2A – plants presumed extirpated in California but common elsewhere CRPR 2B – plants rare, threatened, or endangered in California but more common elsewhere CRPR 3 – plants about which we need more information, a review list CRPR 4 – plants of limited distribution, a watch list .1 – Seriously endangered in California .2 – Fairly endangered in California .3 – Not very endangered in California</p> <p>Federal (USFWS) Protection and Classification FE – Federally Endangered FT – Federally Threatened FC – Federal Candidate for Listing</p> <p>State (CDFW) Protection and Classification SE – State Endangered ST – State Threatened</p>		

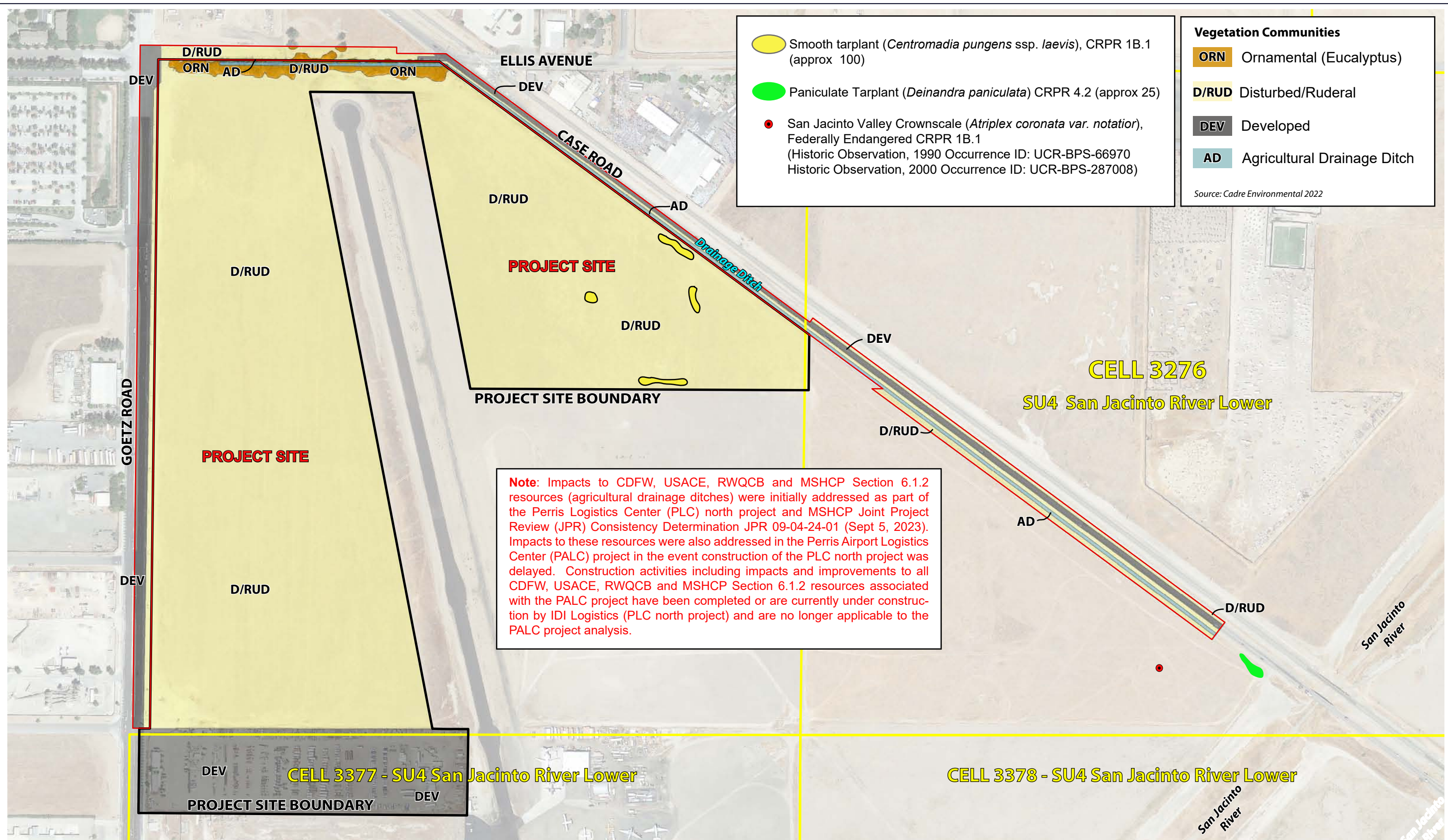
Source: Cadre Environmental 2022.

SENSITIVE WILDLIFE

The Project Site does not occur within a predetermined MSHCP Survey Area for amphibians or mammals (RCA GIS Database 2022). The Project Site occurs completely within a predetermined MSHCP Survey Area for the burrowing owl (*Athene cunicularia*) (RCA GIS Database 2022).

Potential foraging and/or breeding habitat for four (4) MSHCP covered species was detected onsite including Cooper's hawk (*Accipiter cooperii*), California horned lark (*Eremophila alpestris actia*), white-tailed kite (*Elanus leucurus*), and loggerhead shrike (*Lanius ludovicianus*), as outlined in Table 5, *Sensitive Wildlife Species with Potential to Occur Onsite*.

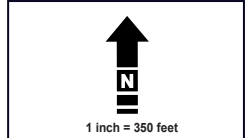
No state or federally listed threatened or endangered wildlife species were detected or are expected to occur onsite.



TPM 38412, APN's 330-090-031, 330-090-033, 330-090-034, 330-090-036, 330-090-038, 330-090-040, 330-100-031 (including right of ways).

Offsite Impact Area

Figure 11 - Sensitive Species Observation Map
 Biological Resources Technical Report
 Perris Airport Logistics Center, City of Perris



**Table 5.
Sensitive Wildlife Species with Potential to Occur Onsite.**

Species Name (<i>Scientific Name</i>) Status	Habitat Description	Comments
INVERTEBRATES		
Crotch's bumble bee (<i>Bombus crotchii</i>) SCE	Range extends from southern to northern California within a variety of habitats including grassland, scrub, chaparral and desert habitats. Food plants include but are not limited to the following genera: <i>Antirrhinum, Phacelia, Clarkia, Cordylanthus, Dendromecon, Medicago Eschscholzia, Chaenactis, Eriogonum, Hypericum, Lantana, Lupinus, Salvia, Asclepias, Cirsium, Monardella, Keckiella, Acmispon, Euthamia, Ehrendorferia, Vicia, and/or Trichostema.</i>	<u>No Potential.</u> No suitable habitat documented within the Project Site. The Project Site is dominated by annually disked/ruderal vegetation or areas completely devoid of vegetation. Although less than four (4) individual caterpillar phacelia (<i>Phacelia cicutaria</i>) and six (6) California burclover (<i>Medicago polymorpha</i>) plants were documented onsite, this limited distribution when considered on context to the disturbed site conditions does not provide suitable resources for the species.
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>) <i>FT</i> <i>MSHCP Covered Species</i>	Vernal pool fairy shrimp is restricted to seasonal vernal pools (Eng, Belk, and Eriksen 1990; USFWS 1994). The vernal pool fairy shrimp prefers cool-water pools that have low to moderate dissolved solids, are unpredictable, and often short lived (Eriksen and Belk 1999, MSHCP 2004).	<u>No Potential</u> – No vernal pools, seasonal depressions or inundated road ruts detected onsite.
Quino checkerspot butterfly (<i>Euphydryas editha quino</i>) FE MSHCP Covered Species	Quino checkerspot butterfly (QCB) is restricted to low elevation meadow habitats or clearings usually characterized by clay or cryptogamic deposits, inhabited by host plants including <i>Plantago erecta, Plantago patagonica, Castilleja exserta, and Cordylanthus rigidus.</i> Adult QCB often occur on open or sparsely vegetated rounded hilltops, ridgelines, and	<u>No potential</u> to occur onsite based on a lack of suitable habitat and soils. The Project Site is dominated by disturbed/ruderal vegetation annually disked.

Species Name (Scientific Name) Status	Habitat Description	Comments
	occasionally rocky outcrops. (MSHCP 2004)	
AMPHIBIANS		
Western spadefoot (<i>Spea hammondi</i>) SSC MSHCP Covered Species	The western spadefoot population is patchily but widely distributed throughout the Riverside Lowlands and San Jacinto Foothills Bioregions. Primary habitat for this species includes suitable breeding habitat below 1500 meters (i.e., vernal pools or other standing water that is free of exotic species) with secondary habitats including adjacent chaparral, sage scrub, grassland, and alluvial scrub habitats. (MSHCP 2004)	<u>No potential</u> to occur onsite based on a lack of suitable habitat. The Project Site is dominated by disturbed/ruderal vegetation annually disked.
REPTILES		
Orange-throated whiptail (<i>Aspidoscelis hyperythra</i>) CWL MSHCP Covered Species	The orange-throated whiptail occurs primarily in a wide variety of habitats but is more closely tied to coastal sage scrub and chaparral habitats with less than 90 percent vegetative cover.	<u>No potential</u> to occur onsite based on a lack of suitable habitat. The Project Site is dominated by disturbed/ruderal vegetation annually disked.
Coastal western whiptail (<i>Aspidoscelis tigris stejnegeri</i>) SSC MSHCP Covered Species	The coastal western whiptail occurs in a wide variety of habitats including coastal sage scrub, desert scrub, Riversidean alluvial fan scrub, woodlands, grasslands, playas, and respective ecotones between these habitats (MSHCP 2004).	<u>No potential</u> to occur onsite based on a lack of suitable habitat. The Project Site is dominated by disturbed/ruderal vegetation annually disked.
Red-diamond rattlesnake (<i>Crotalus ruber</i>) SSC MSHCP Covered Species	The red-diamond rattlesnake is often found in areas with dense vegetation especially chaparral and sage scrub up to 1,520 meters in elevation (MSHCP 2004).	<u>No potential</u> to occur onsite based on a lack of suitable habitat. The Project Site is dominated by disturbed/ruderal vegetation annually disked.

Species Name (Scientific Name) Status	Habitat Description	Comments
Western pond turtle (<i>Emys marmorata</i>) SSC MSHCP Covered Species	The western pond turtle inhabits slow moving permanent or intermittent streams, small ponds, small lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and sewage treatment lagoons (Rathbun <i>et al.</i> , 1992; Holland, 1994). Pools are the preferred habitat within streams (Bury, 1972, MSHCP 2004).	<u>No potential</u> to occur onsite based on a lack of suitable habitat. The Project Site is dominated by disturbed/ruderal vegetation annually disked.
Coast horned lizard (<i>Phrynosoma blainvillii</i>) SSC MSHCP Covered Species	The horned lizard occurs primarily in scrub, chaparral, and grassland habitats. The species is common in most areas of the Plan Area except where adjacent to urban situations (MSHCP 2004).	<u>No potential</u> to occur onsite based on a lack of suitable habitat. The Project Site is dominated by disturbed/ruderal vegetation annually disked.
BIRDS		
Cooper's hawk (<i>Accipiter cooperii</i>) SSC MSHCP Covered Species	Cooper's hawk is most commonly found within or adjacent to riparian/oak forest and woodland habitats. This uncommon resident of California increases in numbers during winter migration.	<u>Potential</u> to occur onsite based on the presence of mature Eucalyptus trees located in the northern region of the Project Site.
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>) CWL MSHCP Covered Species	Southern California rufous-crowned sparrow is a non-migratory bird species that primarily occurs within sage scrub and grassland habitats and to a lesser extent chaparral sub-associations (Unitt 2004). This species generally breeds on the ground within grassland and scrub communities in the western and central regions of California.	<u>No potential</u> to occur onsite based on a lack of suitable habitat. The Project Site is dominated by disturbed/ruderal vegetation annually disked.

Species Name <i>(Scientific Name)</i> Status	Habitat Description	Comments
Bell's sage sparrow <i>(Amphispiza belli)</i> CWL MSHCP Covered Species	Bell's sage sparrow is an uncommon to fairly common but localized resident breeder in dry chaparral and coastal sage scrub along the coastal lowlands, inland valleys, and in the lower foothills of local mountains (MSHCP 2004).	<u>No potential</u> to occur onsite based on a lack of suitable habitat. The Project Site is dominated by disturbed/ruderal vegetation annually disked.
Burrowing owls <i>(Athene cunicularia)</i> SSC MSHCP Covered Species	The burrowing owl uses predominantly open land, including grassland, agriculture (e.g., dry-land farming and grazing areas), playa, and sparse coastal sage scrub and desert scrub habitats (Garrett and Dunn 1981). Some breeding burrowing owls are year-round residents and additional individuals from the north may winter throughout the MSHCP Area Plan (MSHCP 2004).	<u>Not detected onsite during focused surveys conducted in 2019, 2020 2022, and 2024.</u>
Mountain plover (wintering) <i>(Charadrius montanus)</i> FPT/SSC MSHCP Covered Species	The mountain plover is narrowly distributed at relatively few locations within the Plan Area in suitable habitat. The mountain plover uses playas and vernal pool, grassland, and some agriculture habitats during the winter in the Plan Area. Although playa and vernal pool habitat is well identified for the Plan Area, it encompasses a relatively small portion. The remaining habitats, grassland and agriculture land, are well distributed within the Plan Area but the mountain plover uses only a small portion of what is available. (MSHCP 2004)	<u>No Potential</u> - Based on a lack of suitable undisturbed foraging habitat.

Species Name (Scientific Name) Status	Habitat Description	Comments
California horned lark (<i>Eremophila alpestris actia</i>) SSC MSHCP Covered Species	The California horned lark is a common to abundant resident in a variety of open habitats, usually where trees and large shrubs are absent (Zeiner, <i>et al.</i> 1990). (MSHCP 2004)	<u>Potential</u> Suitable foraging habitat documented onsite within the disturbed/ruderal habitat.
White-tailed kite (<i>Elanus leucurus</i>) SFP MSHCP Covered Species	The white-tailed kite is found in riparian, oak woodlands adjacent to large open spaces including grasslands, wetlands, savannahs and agricultural fields. This non-migratory bird species occurs throughout the lower elevations of California and commonly nests in coast live oaks (Unitt 2004).	<u>Potential</u> Suitable foraging habitat documented onsite within the disturbed/ruderal habitat.
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>) FE/SE MSHCP Covered Species	The southwestern willow flycatcher is narrowly distributed at few locations within the Plan Area. Although the preferred habitat, riparian woodland and select other forests, is well distributed within all bioregions and spread over the entire Plan Area, few current locations for the willow flycatcher have been documented (MSHCP 2004).	<u>No potential</u> to occur onsite based on a lack of suitable habitat.
Loggerhead shrike (<i>Lanius ludovicianus</i>) SSC MSHCP Covered Species	Loggerhead shrike prefer open ground for foraging and thick trees and shrubs including sage scrub, chaparral, and desert scrub habitats for nesting.	<u>Potential</u> - Suitable foraging habitat documented onsite within the disturbed/ruderal habitat. Low likelihood to occur onsite based on limited distribution within plan area.
White-faced ibis (<i>Plegadis chihi</i>) SSC MSHCP Covered Species	The white-faced ibis is virtually restricted to emergent vegetation and islands along the margins of open water areas for nesting. However, the species may use a wide variety of Habitats, including flooded	<u>No Potential</u> – Based on a lack of suitable foraging and breeding habitat.

Species Name (Scientific Name) Status	Habitat Description	Comments
	agriculture lands and grasslands in a very nomadic and unpredictable manner for foraging (Garrett and Dunn 1988).	
Coastal California gnatcatcher <i>(Polioptila californica californica)</i> FT/SSC MSHCP Covered Species	The coastal California gnatcatcher is a non-migratory bird species that primarily occurs within sage scrub habitats in coastal southern California dominated by California sagebrush (<i>Artemisia californica</i>), and California buckwheat (<i>Eriogonum fasciculatum</i>).	<u>No potential</u> to occur onsite based on a lack of suitable habitat.
Least Bell's vireo <i>(Vireo bellii pusillus)</i> FE/SE MSHCP Covered Species	Least Bell's vireo resides in riparian habitats with a well-defined understory including southern willow scrub, mule fat, and riparian forest/woodland habitats.	<u>No potential</u> to occur onsite based on a lack of suitable habitat.
MAMMALS		
Northwestern San Diego pocket mouse <i>(Chaetodipus fallax fallax)</i> SSC MSHCP Covered Species	The northwestern San Diego pocket mouse occurs throughout the Plan Area in coastal sage scrub sage scrub/grassland ecotones, chaparral, and desert scrubs at all elevations up to 6,000 feet (MSHCP 2004).	<u>No potential</u> to occur onsite based on a lack of suitable habitat.
San Diego black-tailed jackrabbit <i>(Lepus californicus bennettii)</i> SSC	The San Diego black-tailed jackrabbit in open habitats, primarily including grasslands, sage scrub, alluvial fan sage scrub, and Great Basin sage scrub.	<u>No potential</u> to occur onsite based on a lack of suitable habitat. Not detected onsite during the 2019, 2020 2022, 2024 surveys.
San Diego desert woodrat <i>(Neotoma lepida intermedia)</i> SSC MSHCP Covered Species	The San Diego desert woodrat is found throughout the Plan Area in sage scrub and chaparral wherever there are rock outcrops, boulders, cactus patches and dense undergrowth. (MSHCP 2004)	<u>No potential</u> to occur onsite based on a lack of suitable habitat.

Species Name (Scientific Name) Status	Habitat Description	Comments
Southern grasshopper house (<i>Onychomys torridus ramona</i>) SSC	Common in arid desert habitats of the Mojave Desert and southern Central Valley of California. Alkali desert scrub and desert scrub habitats are preferred, with somewhat lower densities expected in other desert habitats, including succulent shrub, wash, and riparian areas. Also occurs in coastal scrub, mixed chaparral, sagebrush, low sage, and bitterbrush habitats. Uncommon in valley foothill and montane riparian, and in a variety of other habitats. (CDFW 1999)	<u>No potential</u> to occur onsite based on a lack of suitable habitat.
Stephens' kangaroo rat (<i>Dipodomys stephensi</i>) FE/ST MSHCP Covered Species	The Stephens' kangaroo rat is found almost exclusively in open grasslands or sparse shrublands with cover of less than 50 percent during the summer (MSHCP 2004).	<u>No potential</u> to occur onsite based on a lack of suitable habitat.
Western mastiff bat (<i>Eumops perotis californicus</i>) SSC	Western mastiff bats are found in a variety of biotic environments from low desert scrub to chaparral, oak woodland and ponderosa pine.	<u>No potential</u> to occur onsite based on a lack of suitable habitat.
Yellow bat (<i>Lasiurus xanthinus</i>) SSC	Although formerly associated only with the desert palm oasis in California (Bond, 1970), yellow bats appear to be expanding their range to the coast and northward, possibly as a result of the planting of ornamental palms.	<u>No potential</u> to occur onsite based on a lack of suitable habitat.
Bobcat (<i>Lynx rufus</i>) MSHCP Covered Species	The bobcat requires large expanses of relatively undisturbed brushy and rocky habitats near springs or other perennial water sources.	<u>No potential</u> to occur onsite based on a lack of suitable habitat. Not detected onsite during the 2019, 2020, 2022, 2024 surveys.

Species Name (<i>Scientific Name</i>) Status	Habitat Description	Comments
Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>) SSC MSHCP Covered Species	Usually associated with rugged canyons, high cliffs, and rock outcroppings. Roosts in rock crevices and caves during the day; may also roost in buildings or under roof tiles (Ziener et al. 1988-1990).	<u>No potential</u> to occur onsite based on a lack of suitable habitat.
Los Angeles pocket mouse (<i>Perognathus longimembris brevinasus</i>) SSC MSHCP Covered Species	The Los Angeles pocket mouse appears to be limited to sparsely vegetated habitat areas in patches of fine sandy soils associated with washes or of aeolian (windblown) origin, such as dunes (MSHCP 2004).	<u>No potential</u> to occur onsite based on a lack of suitable habitat.
American badger (<i>Taxidea taxus</i>) SSC	The American badger prefers friable soils in open grassland and scrub habitat in southern California.	<u>No potential</u> to occur onsite based on a lack of suitable habitat. No individuals or adequality sized burrows detected onsite the 2019, 2020, 2022 or 2024 surveys.
Federal (USFWS) Protection and Classification FE – Federally Endangered FT – Federally Threatened FC – Federal Candidate for Listing State (CDFW) Protection and Classification SE – State Endangered ST – State Threatened SSC – State Species of Special Concern CWL – California Watch List SPF – State Fully Protected		

Sources: Cadre Environmental 2022.

Critical habitat designations by the USFWS were researched to determine if any of the Project Site is located within USFWS critical habitat. The Project Site does not occur within a designated critical habitat for federally endangered or threatened species.

REGIONAL CONNECTIVITY/WILDLIFE MOVEMENT CORRIDORS

Overview

Wildlife corridors link areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals,

will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information (MacArthur and Wilson 1967; Soule 1987; Harris and Gallagher 1989; Bennett 1990). Corridors effectively act as links between different populations of a species. A group of smaller populations (termed “demes”) linked together via a system of corridors is termed a “metapopulation.” The long-term health of each deme within the metapopulation is dependent upon its size and the frequency of interchange of individuals (immigration vs. emigration). The smaller the deme, the more important immigration becomes, because prolonged inbreeding with the same individuals can reduce genetic variability. Immigrant individuals that move into the deme from adjoining demes mate with individuals and supply that deme with new genes and gene combinations that increases overall genetic diversity. An increase in a population’s genetic variability is generally associated with an increase in a population’s health. Corridors mitigate the effects of habitat fragmentation by:

- (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity;
- (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and
- (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Noss 1983; Fahrig and Merriam 1985; Simberloff and Cox 1987; Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). A number of terms have been used in various wildlife movement studies, such as “wildlife corridor”, “travel route”, “habitat linkage”, and “wildlife crossing” to refer to areas in which wildlife moves from one area to another. To clarify the meaning of these terms and facilitate the discussion on wildlife movement in this study, these terms are defined as follows:

Travel Route: A landscape feature (such as a ridge line, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another; it contains adequate food, water, and/or cover while moving between habitat areas; and provides a relatively direct link between target habitat areas.

Wildlife Corridor: A piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred

to as “habitat or landscape linkages”) can provide both transitory and resident habitat for a variety of species.

Wildlife Crossing: A small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are manmade and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These are often “choke points” along a movement corridor.

Wildlife Movement within Project Site

The Project Site does not represent a regional wildlife movement corridor and provides no cover, food, natural unrestricted water courses or habitats that would facilitate regional wildlife movement onsite. The Project Site is not located within an MSHCP designated core, extension of existing core, non-contiguous habitat block, constrained linkage, or linkage area. However, the offsite impact area extends into MSHCP Criteria Area Cell 3276, Subunit 4 – San Jacinto River Lower and the disturbed agricultural drainage ditch located in this region ultimately drains offsite into Proposed Constrained Linkage 19 (San Jacinto River).

The MSHCP Urban/Wildlands Interface guidelines presented in Section 6.1.4 are intended to address indirect effects associated with locating commercial, mixed uses and residential developments in proximity to an MSHCP Conservation Area. The proposed action will implement best management practices (BMP’s) to ensure no potential impacts to the downstream drainage (San Jacinto River) and vernal pool habitat located within Criteria Cell 3276 results from the proposed action.

REGIONAL AND REGULATORY SETTING

FEDERAL

Federal Endangered Species Act

The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the FESA of 1973, allowing participating jurisdictions to authorize “take” of plant and wildlife species. The MSHCP has been issued under this Section and provides incidental take for all covered species.

Clean Water Act

As stated by Carlson Strategic Land Solutions, Inc.:

“The Clean Water Act (CWA), Section 401 provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation’s waters. Section 401 requires a project operator to obtain a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification,

thereby ensuring that the discharge will comply with provisions of the CWA. The Regional Water Quality Control Board administers the certification program in California. Section 404 establishes a permit program administered by the United States Army Corps of Engineers (Corps) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The Corps implementing regulations are found at 33 CFR 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the United States Environmental Protection Agency in conjunction with the Corps (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.” (Carlson Strategic Land Solutions, Inc. 2022)

“Aquatic resources, including riparian areas, wetlands, and certain aquatic vegetation communities, are considered sensitive biological resources and fall under the jurisdiction of several regulatory agencies. The Corps exerts jurisdiction over waters of the United States, including all waters that are subject to the ebb and flow of the tide; wetlands and other waters such as lakes, rivers, streams (including intermittent or ephemeral streams), mudflats, sandflats, sloughs, prairie potholes, vernal pools, wet meadows, playa lakes, or natural ponds; and tributaries of the above features. The extent of waters of the United States is generally defined as the portion that falls within the limits of the Ordinary High-Water Mark (OHWM). The OHWM is defined as the “line on the shore established by the fluctuation 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.

The definition of Navigable Waters has undergone several iterations, including a much more streamlined definition which was published and formally adopted in April 2020. However, in August 2021, the April 2020 Navigable Waters definition was challenged in the case Pascua Yaqui Tribe v. U.S. Environmental Protection Agency. In light of this case and subsequent order from US District Court for the District of Arizona, the U.S. Environmental Protection Agency (EPA) and Corps have halted implementation of the Navigable Waters Protection Rule from 2020 and are interpreting “waters of the United States” consistent with the pre-2015 regulatory regime until further notice.

The pre-2015 definition of Navigable Waters includes (1) all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (2) All interstate waters including interstate wetlands; (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use,

degradation or destruction of which could affect interstate or foreign commerce including any such waters: (4) All impoundments of waters otherwise defined as waters of the United States under this definition; (5) Tributaries of waters identified in paragraphs (s)(1) through (4) of this section; (6) The territorial sea; and (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section.

Wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas, are defined by Corps as “those areas that are inundated or saturated by surface or groundwater 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” (33 CFR 328.3[b]; 40 CFR 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by Corps (USACE 1987). It is important to note that the RWQCB definition of wetland was redefined, and the new definition went into effect May 28, 2020. The definition of a wetland is as follows: 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. This RWQCB modified three-parameter definition is similar to the federal definition in that it identifies three wetland characteristics that determine the presence of a wetland: wetland hydrology, hydric soils, and hydrophytic vegetation. Unlike the federal definition, however, the RWQCB wetland definition allows for the presence of hydric substrates as a criterion for wetland identification (not just wetland soils) and wetland hydrology for an area devoid of vegetation (less than 5% cover) to be considered a wetland. However, if any vegetation is present, then the Corps delineation procedures would apply to the vegetated component (i.e., hydrophytes must dominate). Examples of waters that would be considered wetlands by the RWQCB definition, but not by the federal wetland definition, are non-vegetated wetlands, or wetlands characterized by exposed bare substrates like mudflats and playas, as long as they meet the three-parameters as described in the RWQCB definition. It is important to note that while the Corps may not designate a feature as a wetland, that feature could be considered a special aquatic site or other water of the U.S. by the Corps and potentially subject to Corps’ jurisdiction.” (Carlson Strategic Land Solutions, Inc. 2022)

Migratory Bird Treaty and Bald and Golden Eagle Protection Acts

Migratory birds including resident raptors and passerines are protected under the federal MBTA. The MBTA of 1918 implemented the 1916 convention between the

United States and Great Britain for the protection of birds migrating between the U.S. and Canada. Similar conventions between the United States and Mexico (1936), Japan (1972) and the Union of Soviet Socialist Republics (1976) further expanded the scope of international protection of migratory birds. Each new treaty has been incorporated into the MBTA as an amendment and the provisions of the new treaty are implemented domestically. These four treaties and their enabling legislation, the MBTA, established Federal responsibilities for the protection of nearly all species of birds, their eggs and nests.

The MBTA made it illegal for people to "take" migratory birds, their eggs, feathers or nests. Take is defined in the MBTA to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing or transporting any migratory bird, nest, egg, or part thereof. The Bald and Golden Eagle Protection Act affords additional protection to all bald and golden eagles.

STATE

California Endangered Species Act

The CESA is similar to FESA in that it contains a process for listing of species regulating potential impacts to listed species. Section 2081 of the CESA authorizes the CDFW to enter into a memorandum of agreement for take of listed species for scientific, educational, or management purposes. The MSHCP serves as an HCP pursuant the Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001, allowing participating jurisdictions to authorize "Take" of plant and wildlife species.

As stated by the CDFW:

"On June 22, 2004, the Department issued NCCP Approval and Take Authorization for the Western Riverside County MSCHP per Section 2800 et seq. of the California Fish and Game Code. The MSHCP establishes a multiple species conservation program to minimize and mitigate habitat loss and the incidental take of covered species in association with activities covered under the permit." (CDFG 2004)

California Fish and Game Code 3503 and 3513

As stated by the CDFW:

"CHAPTER 1. General Provisions [3500 - 3516] (Chapter 1 enacted by Stats. 1957, Ch. 456.) It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. (Amended by Stats. 1971, Ch. 1470.)"

Native Plant Protection Act

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in plants

that are listed. The CESA follows the NPPA and covers both plants and wildlife determined to be threatened with extinction or endangered. Plants listed as rare under the NPPA are designated as threatened under the CESA. No plants listed under the CESA occur on the Project Site onsite or offsite impact areas.

Regional Water Quality Control Board

As stated by Carlson Strategic Land Solutions, Inc:

“The RWQCB also has jurisdiction over waters deemed “isolated” or not subject to Section 404 jurisdiction under the Solid Waste Agency of Northern Cook County v. Corps decision. Dredging, filling, or excavation of isolated waters constitutes a discharge of waste to waters of the state and prospective dischargers are required to obtain authorization through an Order of Waste Discharge or waiver thereof from the RWQCB and comply with other requirements of Porter-Cologne Act.

Under Section 401 of the CWA, the local RWQCB must certify that actions receiving authorization under Section 404 of the CWA also meet state water quality standards. The RWQCB requires projects to avoid impacts to wetlands if feasible and requires that projects do not result in a net loss of wetland acreage or a net loss of wetland function and values. Compensatory mitigation for impacts to wetlands and/or waters of the state is required.” (Carlson Strategic Land Solutions, Inc. 2022)

CDFW Streambed Alteration Agreement

As stated by Carlson Strategic Land Solutions, Inc:

“Waters of the State are regulated by the California Department of Fish and Wildlife (CDFW) through Section 1600 et seq. of the California Fish and Game Code. Section 1600 et seq. requires notifying the CDFW prior to any project activity that might (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. If, after this notification, the CDFW determines that the activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will need to be obtained. CDFW may then place conditions in the Section 1602 Streambed Alteration Agreement to avoid, minimize, and mitigate any potentially significant adverse impacts within CDFW jurisdictional limits.

The limits of Waters of the State are defined as the “body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” Therefore, the limits extend from the

channel bed to the top of the bank, with the addition of the canopy of any riparian habitat associated with the watercourse.” (Carlson Strategic Land Solutions, Inc. 2022)

LOCAL

Western Riverside County Multiple Species Habitat Conservation Plan Compliance Analysis

The proposed Project Site is located completely within the area subject to the MSHCP, which is a comprehensive multi-jurisdictional effort that includes western Riverside County and eighteen (18) cities including the City of Perris. Rather than addressing sensitive species on an individual basis, the MSHCP focuses on conservation of 146 species, including those listed at the federal and state levels and those that could become listed in the future. The MSHCP proposed a reserve system of approximate 500,000 acres, of which 347,000 acres are currently within public ownership and 153,000 acres will need to be assembled from lands currently in private ownership. The MSHCP allows the County and other permittees (including the City of Perris) to issue take permits for listed species so that applicants do not need to receive endangered species incidental take authorization from the USFWS and CDFW.

On June 7th, 2003, the County Board of Supervisors adopted the MSHCP, certified the Environmental Impact Report/Environmental Impact Statement, and authorized the Chairman to sign the Implementing Agreement with the respective wildlife agencies. The Incidental Take Permit was issued by the wildlife agencies on June 22nd, 2004. The City of Perris is a Permittee under the MSHCP.

MSHCP Reserve Design & Criteria Area Objectives

The Project Site is located within the area subject to the MSHCP Mead Valley Area Plan. The Mead Valley Area Plan has a target conservation acreage of 4,980 to 6,730 acres. It is composed of approximately 3,095 acres of existing Public/Quasi-Public Lands and 1,885 - 3,635 acres of Additional Reserve Lands. The City of Perris is located entirely within the Mead Valley Area Plan. The target acreage range within the City of Perris is 720 - 1,400 acres. The City of Perris target acreage is included within the 1,885 - 3,635 acre target conservation range on Additional Reserve Lands for the entire Mead Valley Area Plan (MSHCP 2004).

Mead Valley Area Plan - Criteria Cell 3276 **Subunit 4 – San Jacinto River Lower**

A 3.74 acre portion of the offsite impact area is located within the MSHCP Mead Valley Area Plan, Criteria Cell 3276, Subunit 4 –San Jacinto River Lower (RCA GIS Data Downloads 2022). The Project Site is not located within an MSHCP linkage area. As stated in the MSHCP:

“Conservation within this Cell will contribute to assembly of Proposed Constrained Linkage 19. Conservation within this Cell will focus on assembly of grassland habitat associated with the San Jacinto River. Areas

conserved within this Cell will be connected to grassland habitat and agricultural land proposed for conservation in Cell #3277 to the east and to agricultural land proposed for conservation in Cell #3378 to the south. Conservation within this Cell will range from 45%-55% of the Cell focusing in the southern portion of the Cell.” (MSHCP 2004)

The proposed project would result in a total of 3.74 acres of permanent impacts within Criteria Cell 3276. All impacts within Criteria Cell 3276 would occur to the existing paved (developed) regions of Case Street, man-made agricultural drainage ditch and adjacent disturbed/ruderal habitat within the right-of-way (MSHCP Covered Roads). The proposed project would not restrict reserve design objectives or guidelines for Criteria Cell 3276. All impacts within Criteria Cell 3276 would occur within the existing MSHCP 100-foot wide covered roadways (Case Street) and would not restrict reserve design objectives or guidelines within Criteria Cell 3276.

Impacts to 3.74 acres within Criteria Cell 3276 were initially addressed as part of the Perris Logistics Center north project and MSHCP JPR 09-04-24-01 Consistency Determination (Sept 5, 2023). Impacts to 3.74 acres of Criteria Cell 3276 were also addressed in the Perris Airport Logistics Center project in the event construction of the Perris Logistics Center north project was delayed. Construction activities including impacts and improvements within 3.74-acres of Criteria Cell 3276 have been completed or are currently under construction by IDI Logistics (Perris Logistics Center north project) and are no longer applicable to the Perris Airport Logistics Center project analysis.

Mead Valley Area Plan - Criteria Cell 3377 **Subunit 4 – San Jacinto River Lower**

A 10.04 acre portion of the Project Site is located within the MSHCP Mead Valley Area Plan, Criteria Cell 3377, Subunit 4 –San Jacinto River Lower (RCA GIS Data Downloads 2022). The Project Site is not located within an MSHCP linkage area. As stated in the MSHCP:

“Conservation within this Cell will contribute to assembly of Proposed Constrained Linkage 19. Conservation within this Cell will focus on assembly of agricultural land associated with the San Jacinto River. Areas conserved within this Cell will be connected to agricultural land proposed for conservation in Cell #3378 to the east and to habitat proposed for conservation in Cell #3467 to the south. Conservation within this Cell will range from 5%-15% of the Cell focusing in the southeastern portion of the Cell.” (MSHCP 2004)

The proposed project would result in a total of 10.04 acres of permanent impacts within Criteria Cell 3377. All impacts within Criteria Cell 3377 would occur to the existing developed regions (APN 330-100-031). The proposed project would not restrict reserve design objectives or guidelines for Criteria Cell 3377. All impacts within Criteria Cell 3377 would occur within the extreme northwestern region of the Cell where conservation is not proposed and would not restrict reserve design objectives or guidelines within Criteria Cell 3377.

Impacts within Criteria Area Cell 3377 were initially addressed in the MSHCP JPR 08-07-31-01 Consistency Determination (Sept 23rd, 2008) and are no longer applicable to the Perris Airport Logistics Center project analysis.

MSHCP Sensitive Species Surveys

The Project Site lies partially within a predetermined Survey Area for six (6) MSHCP narrow endemic sensitive plant species, which includes:

- Munz's onion (*Allium munzii*) [FE, ST, CRPR 1B.1];
- San Diego ambrosia (*Ambrosia pumila*) [FE, CRPR 1B.1];
- many-stemmed dudleya (*Dudleya multicaulis*) [CRPR 1B.2];
- spreading navarretia (*Navarretia fossalis*) [FT, CRPR 1B.1];
- California Orcutt grass (*Orcuttia californica*) [FE/SE, CRPR 1B.1]; and
- Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*) [CRPR 2.1].

None of the six (6) MSHCP narrow endemic sensitive plant species were detected during the project surveys and are therefore not expected to occur due to lack of observation as noted in Table 3, *Sensitive Plant Species with Potential to Occur Onsite*.

The Project Site lies partially within a predetermined Survey Area nine (9) MSHCP criteria area sensitive plant species, which includes:

- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), CRPR 1B.1;
- Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), CRPR 1B.2;
- little mousetail (*Myosurus minimus* ssp. *apus*), CRPR 3.1;
- mud nama (*Nama stenocarpum*), CRPR 2.2;
- Parish's brittlescale (*Atriplex parishii*), CRPR 1B.1;
- round-leaved filaree (*California macrophyllum*), CRPR 1B.1;
- San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), FE, CRPR 1B.1;
- smooth tarplant (*Centromadia pungens* ssp. *laevis*), CRPR 1B.1; and
- thread-leaved brodiaea (*Brodiaea filifolia*), FT, SE, CRPR 1B.1.

One (1) of the nine (9) MSHCP criteria area sensitive plant species (smooth tarplant) was detected during the project surveys as noted in Table 3, *Sensitive Plant Species with Potential to Occur Onsite*. Specifically, a total of approximately 100 smooth tarplant (MSHCP criteria area species) were documented within the eastern region of the Project Site as shown in Figure 11, *Sensitive Species Observation Map*.

One (1) additional CNPS species, paniculate tarplant (*Deinandra paniculata*) CRPR 4.2 (approximately 25 plants) was observed outside of the Project Site limits, as shown in Figure 11, *Sensitive Species Observation Map*.

No state or federally listed threatened or endangered plant species were detected onsite. The limited distribution of approximately 100 smooth tarplant onsite is not expected to have long-term conservation value and no additional mitigation obligations specific to this species is warranted.

The Project Site is not located within an MSHCP Amphibian or Mammal Species Survey Area; therefore, no surveys are required (RCA GIS Data Downloads 2022). The project is consistent with MSHCP Section 6.3.2.

The Project Site and offsite impact area occurs completely within a predetermined Survey Area for the burrowing owl. Suitable burrowing owl burrows potentially utilized for refugia and/or nesting including foraging habitat were documented within and adjacent to the Project Site. Therefore, focused surveys were conducted by Cadre Environmental during the spring of 2019, spring/summer of 2020, spring of 2022 and 2024. No burrowing owl or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within or immediately adjacent to the Project Site or offsite impact area during the 2019, 2020, 2022 or 2024 survey efforts. Regardless, at a minimum, a 30-day preconstruction survey will be conducted immediately prior to the initiation of construction to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP (BIO-MM1).

The project is consistent with MSHCP Section 6.1.3 and 6.3.2.

MSHCP Riparian, Riverine, Vernal Pool Resources

Regulated activities within inland streams, wetlands and riparian areas in Western Riverside County California fall under the jurisdiction of the MSHCP. The MSHCP requires, among other things, assessments for riparian/riverine and vernal pool resources. As projects are proposed within the MSHCP Plan Area, an assessment of the potentially significant effects of those projects on riparian/riverine areas, and vernal pools are required, as currently mandated by CEQA, using available information augmented by project-specific mapping provided to and reviewed by the permittee's biologist(s). Riparian/riverine areas and vernal pools are defined for this section as follows in accordance with Section 6.1.2, Vol. I, of the Final MSHCP Plan:

“Riparian/Riverine Areas are lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.” (MSHCP 2004)

It is assumed the first part of the definition defines riparian habitat, and the second part defines riverine areas. Vernal pools are defined as:

“...seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season”. (MSHCP 2004)

No evidence of vernal pools, seasonal depressions or seasonally inundated road ruts were documented within the Project Site. Vernal pools are depressions in areas where a hard-underground layer prevents rainwater from draining downward into the subsoils. When rain fills the pools in the winter and spring, the water collects and remains in the depressions. In the springtime, the water gradually evaporates away, until the pools became completely dry in the summer and fall. Vernal pools tend to have an impermeable layer that results in ponded water. The soil texture (the amount of sand, silt, and clay particles) typically contains higher amounts of fine silts and clays with lower percolation rates. Pools that retain water for a sufficient length of time will develop hydric cells. Hydric cells form when the soil is saturated from flooding for extended periods of time and anaerobic conditions (lacking oxygen or air) develop.

A review of historic aerials was conducted to determine if inundated features were present during years of high rainfall when features would certainly be documented. Historic aerials taken in 2011 represent an ideal baseline during which known (previously documented) inundated vernal pools, seasonal depressions and road ruts can easily be seen. No sign or indication of inundation was documented within the Project Site during a review of historic aerials. The man-made concrete and earthen agricultural drainage ditch has been classified as an MSHCP Section 6.1.2 Riverine resource and does not meet the definition of vernal pool. In summary, none of the conditions (i.e., no inundated depressions including road ruts, historic inundation, etc.) were observed or documented within the Project Site permanent impact area. No features are present that would support fairy shrimp.

No suitable habitat (riparian scrub, forest, or woodlands) for the least Bell's vireo, southwestern willow flycatcher or western yellow-billed cuckoo was detected within or adjacent to the Project Site as shown in Figure 4, *Vegetation Communities Map* and Figure 5 to 8, *Current Project Site Photographs*.

No MSHCP Section 6.1.2 Riparian resources are located within or adjacent to the Project Site.

Impacts to 0.88 acre of MSHCP Section 6.1.2 Riverine resources (agricultural drainage ditches) were initially addressed as part of the Perris Logistics Center north project and MSHCP JPR Consistency Determination JPR 09-04-24-01 (Sept 5, 2023). Impacts to these resources were also addressed in the Perris Airport Logistics Center project in the event construction of the Perris Logistics Center north project was delayed. Construction activities including impacts and improvements to all MSHCP Section 6.1.2 Riverine resources associated with the Perris Airport Logistics Center project have been completed or are currently under construction by IDI Logistics (Perris Logistics Center north project) and are no longer applicable to the Perris Airport Logistics Center project analysis.

MSHCP Urban/Wildlands Interface Guidelines

The MSHCP Urban/Wildlands Interface guidelines presented in Section 6.1.4 are intended to address indirect effects associated with locating commercial, mixed uses and residential developments in proximity to an MSHCP Conservation Area. The Project Site is not located adjacent to an existing or proposed MSHCP Conservation Area. The

project is consistent with MSHCP Section 6.1.4. However, the offsite impact area extends into MSHCP Criteria Area Cell 3276, Subunit 4 – San Jacinto River Lower and the disturbed agricultural drainage ditch located in this region ultimately drains offsite into Proposed Constrained Linkage 19 (San Jacinto River). Therefore, the proposed action will implement BMP's to ensure no potential impacts to the downstream drainage (San Jacinto River) and vernal pool habitat located within Criteria Cell 3276 resulting from the proposed action.

A hydrology study was conducted to determine if the capture of flows onsite would indirectly impact the existing vernal pool located south of the Project Site within Criteria Cell 3276. The results of the hydrology study indicate that existing flows extend in a southeast direction from the southern Project Site boundary toward the existing agricultural drainage ditch and do not contribute to the inundation of the offsite vernal pool. No indirect impact respective of altering hydrology (contributing sheet flows) to the offsite vernal pool would result from the capture of onsite flows.

MSHCP Fuels Management Guidelines

The fuels management guidelines presented in Section 6.4 of the MSHCP are intended to address brush management activities around new development within or adjacent to MSHCP Conservation Areas. The Project Site is not located adjacent to an existing or proposed MSHCP Conservation Area. The project is consistent with MSHCP Section 6.4.

City of Perris Urban Forestry Establishment and Care Ordinance (19.71).

Several mature eucalyptus trees are located along the northern Project Site boundary. Eucalyptus trees will be removed as a result of the project. Therefore, a site-specific tree study conducted by a certified arborist will be conducted and comply with all ordinance requirements outlined in the City of Perris Urban Forestry Establishment and Care Ordinance (19.71).

City of Perris General Plan - Open Space Element

As outlined below, the City of Perris's 2006 General Plan Open Space Element and Polices are not applicable to the proposed action.

Goals, Policies and Implementation Measures

Goal I – Recreational opportunities that are available to all members of the community.

No proposed parks or recreational facilities are proposed in the Cities Specific Plan for Parks (Exhibit OS-7: Specific Plan Parks).

Goal II – Establish comprehensive trail system for pedestrian, bicycle and equestrian use.

No proposed trail systems are proposed in the Cities Specific Plan for Parks (Exhibit OS-7: Specific Plan Parks).

Goal III – Conserve and protect significant land forms.

The Project Site is primarily disturbed/ruderal with an adjacent agriculture drainage ditch and row of ornamental trees (*Eucalyptus*) located along the northern boundary. No native undisturbed habitats are present onsite. The proposed action would not directly or indirectly impact hillside or rock outcroppings in the planning areas.

The proposed action would not conflict with Goals I, II, or III as presented in the City of Perris's 2006 General Plan Open Space Element.

City of Perris (MSHCP Local Development Mitigation Fee)

The project applicant shall pay MSHCP Local Development Mitigation fees as established by the RCA and implemented by the City of Perris. Five categories of the fee are defined and include: Residential, density less than 8.0 dwelling units per acre \$4,236 per dwelling unit; Residential, density between 8.1 and 14.0 dwelling units per acre \$1,766 per dwelling unit; Residential, density greater than 14.1 dwelling units per acre \$781 per dwelling unit; Commercial development \$19,066 per acre; and Industrial development \$19,066 per acre.

Stephens' Kangaroo Rat Fee

At the time of permit issuance, a fee of \$500 per acre is due for all new development. Single-family residences where lots sizes are greater than ½ acre will only be subject to a flat fee of \$500 per unit. Non-profit entities reduced by 75% as defined in 26 U.S.C. section 501 (c) (3).

ENVIRONMENTAL IMPACTS

The following sections include an analysis of the direct impacts, indirect impacts, and cumulative effects of the proposed action on sensitive biological resources. This analysis characterizes the project related activities that are anticipated to adversely impact the species, and when feasible, quantifies such impacts. Direct effects are defined as actions that may cause an immediate effect on the species or its habitat, including the effects of interrelated actions and interdependent actions. Indirect effects are caused by or result from the proposed actions, are later in time, and are reasonably certain to occur. Indirect effects may occur outside of the area directly affected by the proposed action.

Cumulative impacts refer to incremental, individual environmental effects of two or more projects when considered together. These impacts taken individually may be minor but may be collectively significant. Cumulative effects include future tribal, local, or private actions that are reasonably certain to occur in the proposal vicinity considered in this report. A cumulative impact to biological resources may occur if a project has the potential to collectively degrade the quality of the environment, substantially reduce the habitat of wildlife species or cause a population to drop below self-sustaining levels, thereby threatening to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal species.

THRESHOLD OF SIGNIFICANCE

The environmental impacts relative to biological resources are assessed using impact significance criteria which mirror the policy statement contained in CEQA at Section 21001 (c). This section reflects that the legislature has established it to be the policy of the state to:

“Prevent the elimination of fish and wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities...”

The following definitions apply to the significance criteria for biological resources:

- “*Endangered*” means that the species is listed as endangered under state or federal law.
- “*Threatened*” means that the species is listed as threatened under state or federal law.
- “*Rare*” means that the species exists in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens.
- “*Region*” refers to the area within southern California that is within the range of the individual species.
- “*Sensitive habitat*” refers to habitat for plants and animals (1) which plays a special role in perpetuating species utilizing the habitat on the property, and (2) without which there would be substantial danger that the population of that species would drop below self-perpetuating levels.
- “*Substantial effect*” means significance loss or harm of a magnitude which, based on current scientific data and knowledge, (1) would cause a species or a native plant or animal community to drop below self-perpetuating levels on a statewide or regional basis or (2) would cause a species to become threatened or endangered.

Impacts to biological resources may result in a significant adverse impact if one or more of the following conditions would result from implementation of the proposed project.

- Have a substantial adverse effect, either directly or through habitat modification, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or Title 50, Code of Federal Regulations (Sections 17.11 or 17.12).
- Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS, and meets the definition of Section 15380 (b), (c), or (d) of the CEQA Guidelines.

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident migratory wildlife corridors, or impede the use of native nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state conservation plan.

Also, the determination of impacts has been made according to the federal definition of “take”. The federal FESA prohibits the “taking” of a member of an endangered or threatened wildlife species or removing, damaging, or destroying a listed plant species by any person (including private individuals and private or government entities). The FESA defines “take” as “to harass, harm, pursue, hunt, shoot, would, kill, trap, capture or collect” an endangered or threatened species, or to attempt to engage in these activities.

DIRECT IMPACTS

Vegetation Communities

A total of 98.66 acres of vegetation communities will be directly impacted as a result of project implementation, as outlined in Table 6, *Vegetation Community Impacts* and illustrated on Figure 12, *Vegetation Communities Impact Map*. As previously stated, no vegetation communities listed by CDFW as sensitive were documented within or adjacent to the Project Site. No native or undisturbed vegetation will be impacted as a result of project implementation.

Table 6.
Vegetation Community Impacts

Vegetation Community	Project Site Acres	Offsite Impact Acres	Project Site Impact Acres	Total Impact Acres
Disturbed/Ruderal	76.40	5.37	76.40	81.77
Developed	10.06	4.77	10.06	14.83
Agricultural Drainage Ditch	0.17	0.71	0.17	0.88
Ornamental (Eucalyptus)	1.05	0.13	1.05	1.18
TOTAL	87.68	10.98	87.68	98.66

Source: Cadre Environmental 2022

The project applicant would be required to pay MSHCP Local Development Mitigation fees as established by the RCA and implemented by the City of Perris. Five categories of the fee are defined and include: Residential, density less than 8.0 dwelling units per acre \$4,236 per dwelling unit; Residential, density between 8.1 and 14.0 dwelling units per acre \$1,766 per dwelling unit; Residential, density greater than 14.1 dwelling units per acre \$781 per dwelling unit; Commercial development \$19,066 per acre; and Industrial development \$19,066 per acre.

City of Perris Urban Forestry Establishment and Care Ordinance (19.71).

Several mature eucalyptus trees are located along the northern Project Site boundary. Eucalyptus trees will be removed as a result of the project. Therefore, a site-specific tree study conducted by a certified arborist will be conducted and comply with all ordinance requirements outlined in the City of Perris Urban Forestry Establishment and Care Ordinance (19.71).

Jurisdictional Resources

Permanent impacts to 0.12 acre of resources regulated by Section 404 under the USACE and Clean Water Act Section 401 under RWQCB will occur as a result of project implementation as outlined in Table 7, *USACE/RWQCB Jurisdictional Resources Impacts*, and Figure 13, *Jurisdictional Resources Impact Map*. (Carlson Strategic Land Solutions, Inc. 2022). No temporary impacts to USACE/RWCQB resources will result from project implementation.

**Table 7.
USACE/RWCQB Jurisdictional Resources Impacts**

Drainage	Type	Location	Total Impacts (acres)
Agricultural Drainage Ditch	Non-Wetland	Onsite	0.03
Agricultural Drainage Ditch	Non-Wetland	Offsite	0.09
TOTAL			0.12

Source: Carlson Strategic Land Solutions, Inc. 2022

Permanent impacts to 0.88 acre of resources regulated by FGC Section 1600 under the CDFW and Section 6.1.2 under the MSHCP will occur as a result of project implementation as outlined in Table 8, *CDFW/MSHCP Jurisdictional Resources Impacts*, and Figure 13, *Jurisdictional Resources Impact Map*. (Carlson Strategic Land Solutions, Inc. 2022). No temporary impacts to CDFW/MSHCP resources will result from project implementation.

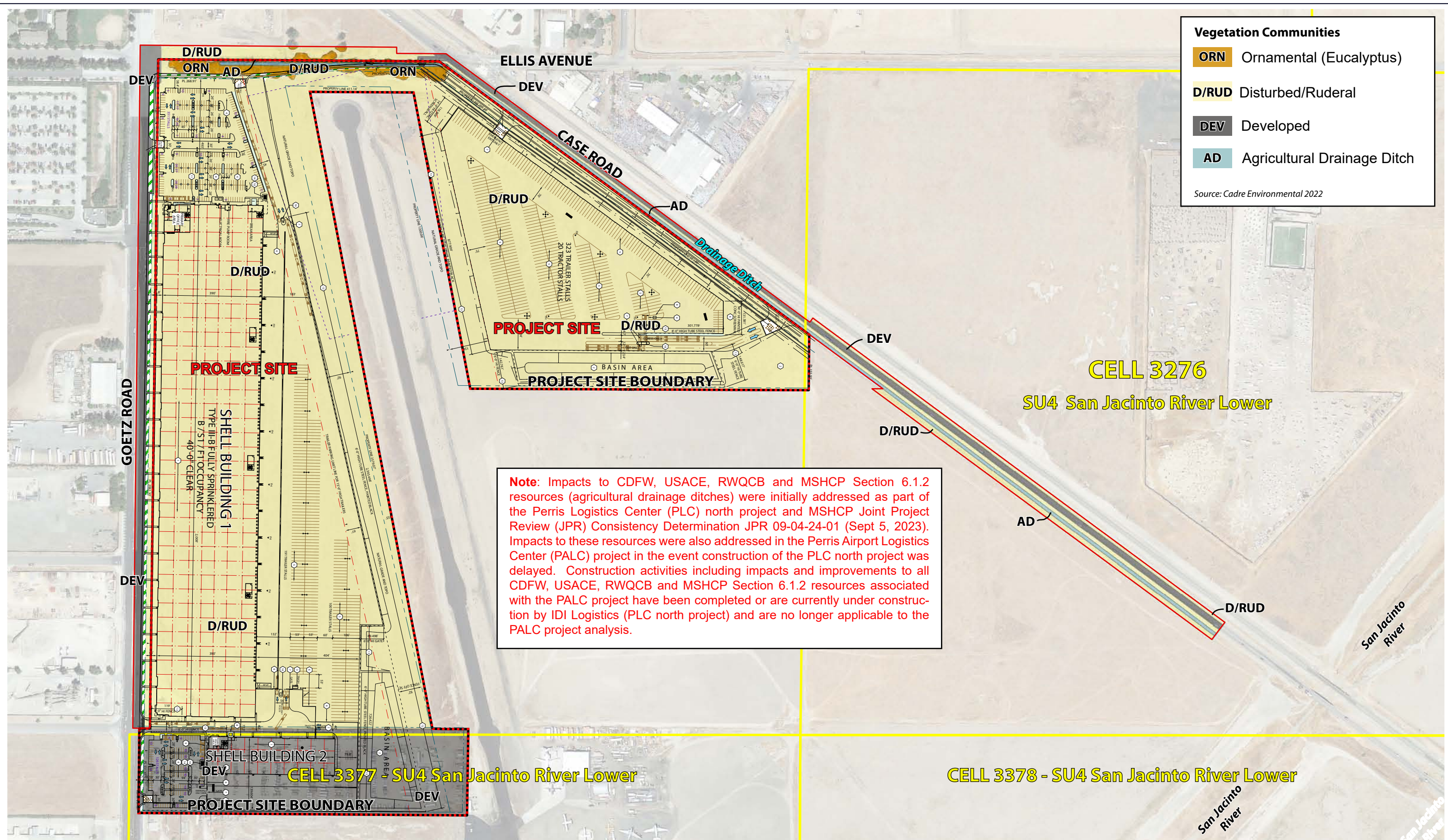
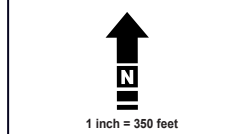
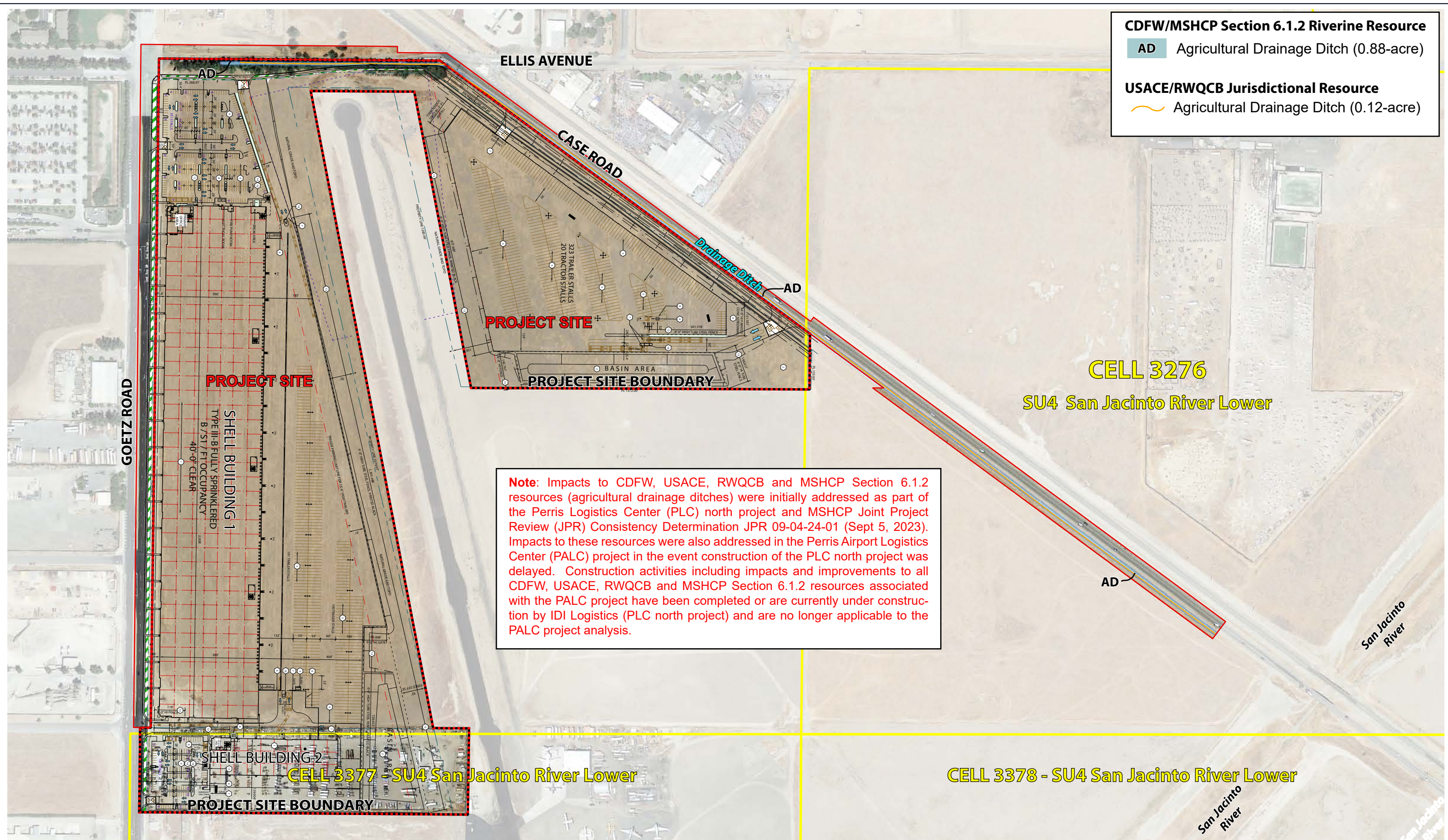


Figure 12 - Vegetation Communities Impact Map
 Biological Resources Technical Report
 Perris Airport Logistics Center, City of Perris





CDFW/MSHCP Section 6.1.2 Riverine Resource
 AD Agricultural Drainage Ditch (0.88-acre)

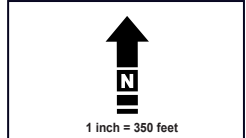
USACE/RWQCB Jurisdictional Resource
 Agricultural Drainage Ditch (0.12-acre)

Note: Impacts to CDFW, USACE, RWQCB and MSHCP Section 6.1.2 resources (agricultural drainage ditches) were initially addressed as part of the Perris Logistics Center (PLC) north project and MSHCP Joint Project Review (JPR) Consistency Determination JPR 09-04-24-01 (Sept 5, 2023). Impacts to these resources were also addressed in the Perris Airport Logistics Center (PALC) project in the event construction of the PLC north project was delayed. Construction activities including impacts and improvements to all CDFW, USACE, RWQCB and MSHCP Section 6.1.2 resources associated with the PALC project have been completed or are currently under construction by IDI Logistics (PLC north project) and are no longer applicable to the PALC project analysis.

TPM 38412, APN's 330-090-031, 330-090-033, 330-090-034, 330-090-036, 330-090-038, 330-090-040, 330-100-031 (including right of ways).

..... Project Site Impact Boundary — Offsite Impact Area

Figure 13 - Jurisdictional Resources Impact Map
 Biological Resources Technical Report
 Perris Airport Logistics Center, City of Perris



**Table 8.
CDFW/MSHCP Jurisdictional Resources Impacts**

Drainage	Type	Location	Total Impacts (acres)
Agricultural Drainage Ditch	Non-Riparian	Onsite	0.17
Agricultural Drainage Ditch	Non-Riparian	Offsite	0.71
TOTAL			0.88

Source: Carlson Strategic Land Solutions, Inc. 2022

As summarized in the following sections, CDFW jurisdiction exceeds USACE jurisdiction and any project mitigation necessary to satisfy the requirements of the CDFW would also satisfy the requirement of the USACE and RWQCB.

Impacts to 0.88-acre of resources collectively regulated by CDFW, USACE, RWQCB and MSHCP Section 6.1.2 (agricultural drainage ditches) were initially addressed as part of the Perris Logistics Center north project and MSHCP JPR Consistency Determination JPR 09-04-24-01 (Sept 5, 2023). Impacts to these resources were also addressed in the Perris Airport Logistics Center project in the event construction of the Perris Logistics Center north project was delayed. Construction activities including impacts and improvements to all regulated resources associated with the Perris Airport Logistics Center project have been completed or are currently under construction by IDI Logistics (Perris Logistics Center north project) and are no longer applicable to the Perris Airport Logistics Center project analysis. No Impact.

Sensitive Plants

The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required wildlife species if suitable habitat is documented onsite and/or if the property is located within a predetermined “Survey Area” (MSHCP 2004).

None of the six (6) MSHCP narrow endemic sensitive plant species were detected during the project surveys and are therefore not expected to occur due to lack of observation as noted in Table 4, *Sensitive Plant Species with Potential to Occur Onsite*.

One (1) of the nine (9) MSHCP criteria area sensitive plant species (smooth tarplant) was detected during the project surveys as noted in Table 3, *Sensitive Plant Species with Potential to Occur Onsite*. Specifically, a total of approximately 100 smooth tarplant (MSHCP criteria area species) were documented within the eastern region of the Project Site as shown in Figure 11, *Sensitive Species Observation Map*.

One (1) additional CNPS species, paniculate tarplant, CRPR 4.2 (approximately 25 plants) was observed outside of the Project Site limits, as shown in Figure 11, *Sensitive Species Observation Map*.

No state or federally listed threatened or endangered plant species were detected onsite. The limited distribution of approximately 100 MSHCP covered smooth tarplant onsite is

not expected to have long-term conservation value and no additional mitigation obligations specific to this species is warranted. Regardless, the project applicant would be required to pay MSHCP Local Development Mitigation fees as established by the RCA and implemented by the City of Perris.

Sensitive Wildlife

The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required wildlife species if suitable habitat is documented onsite and/or if the property is located within a predetermined "Survey Area" (MSHCP 2004).

No evidence of vernal pools, seasonal depressions or seasonally inundated road ruts were documented within the Project Site. Vernal pools are depressions in areas where a hard-underground layer prevents rainwater from draining downward into the subsoils. When rain fills the pools in the winter and spring, the water collects and remains in the depressions. In the springtime, the water gradually evaporates away, until the pools became completely dry in the summer and fall. Vernal pools tend to have an impermeable layer that results in ponded water. The soil texture (the amount of sand, silt, and clay particles) typically contains higher amounts of fine silts and clays with lower percolation rates. Pools that retain water for a sufficient length of time will develop hydric cells. Hydric cells form when the soil is saturated from flooding for extended periods of time and anaerobic conditions (lacking oxygen or air) develop.

A review of historic aerials was conducted to determine if inundated features were present during years of high rainfall when features would certainly be documented. Historic aerials taken in 2011 represent an ideal baseline during which known (previously documented) inundated vernal pools, seasonal depressions and road ruts can easily be seen. No sign or indication of inundation was documented within the Project Site during a review of historic aerials. The man-made concrete and earthen agricultural drainage ditch has been classified as an MSHCP Section 6.1.2 Riverine resources and does not meet the definition of vernal pool. In summary, none of the conditions (i.e., no inundated depressions including road ruts, historic inundation, etc.) were observed or documented within the Project Site permanent impact area. No features are present that would support fairy shrimp.

The Project Site is not located within an MSHCP Amphibian or Mammal Species Survey Area; therefore, no surveys are required (RCA GIS Data Downloads 2022). The project is consistent with MSHCP Section 6.3.2.

The Project Site and offsite impact area occurs completely within a predetermined Survey Area for the burrowing owl. Suitable burrowing owl burrows potentially utilized for refugia and/or nesting including foraging habitat were documented within and adjacent to the Project Site. Therefore, focused surveys were conducted by Cadre Environmental during the spring of 2019, spring/summer of 2020, spring of 2022 and 2024. No burrowing owl or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within or immediately adjacent to the Project Site or offsite impact area during the 2019, 2020, 2022 or 2024 survey efforts. Regardless, at a minimum, a 30-day preconstruction survey

will be conducted immediately prior to the initiation of construction to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP (**BIO-MM1**). The project is consistent with MSHCP Section 6.1.3 and 6.3.2.

The Project Site falls within the SKR Fee Area outlined in the Riverside County SKR HCP. The project applicant would be required to pay the fees pursuant to County Ordinance 663.10 for the SKR HCP Fee Assessment Area as established and implemented by the County of Riverside.

No suitable habitat (riparian scrub, forest, or woodlands) for the least Bell's vireo, southwestern willow flycatcher or western yellow-billed cuckoo was detected within or adjacent to the Project Site as shown in Figure 4, *Vegetation Communities Map* and Figure 5 to 8, *Current Project Site Photographs*.

Potential foraging and/or breeding habitat for four (4) MSHCP covered species was detected onsite including Cooper's hawk, California horned lark, white-tailed kite, and loggerhead shrike, as outlined in Table 5, *Sensitive Wildlife Species with Potential to Occur Onsite*. Potential impacts to sensitive MSHCP covered species would be reduced to a less than significant level with the implementation of Biological Mitigation Measure (**BIO-MM2**).

No state or federally listed threatened or endangered wildlife species were detected or are expected to occur onsite.

The Project Site ornamental vegetation including Eucalyptus trees are expected to potentially provide nesting habitat for migratory birds protected under the CDFG Codes. Measures for potential direct/indirect impacts to common and sensitive bird and raptor species will require compliance with the CDFG Code Section 3503. Construction outside the nesting season (generally between September 15th and February 15th) does not require preconstruction nesting bird surveys. However, if construction is proposed during the nesting season, a qualified biologist will conduct a preconstruction nesting bird survey(s) no more than three (3) days prior to initiation of grading to document the presence or absence of nesting birds within or directly adjacent (500 feet) to the Project Site. Loss of an active nest would be considered a potentially significant impact. Impacts to potential nesting habitat would be reduced to a less than significant level with the implementation of Biological Mitigation Measure (**BIO-MM2**).

Western Riverside County Multiple Species Habitat Conservation Plan Compliance Analysis

As documented in the previous section, implementation of the proposed project will be consistent with all provisions, guidelines and objectives of the MSHCP following payment of the required MSHCP Local Development Mitigation fees.

INDIRECT IMPACTS

The MSHCP Urban/Wildlands Interface guidelines presented in Section 6.1.4 are intended to address indirect effects associated with locating commercial, mixed uses and residential developments in proximity to an MSHCP Conservation Area.

The Project Site is not located adjacent to an existing or proposed MSHCP Conservation Area. No mitigation proposed or required. The project is consistent with MSHCP Section 6.1.4. However, the proposed action will implement the following best management practices (BMP's) to ensure no potential impacts to the downstream drainage (San Jacinto River) and vernal pool habitat located within Criteria Cell 3276 result from the proposed action.

Water Quality/Hydrology

The project will comply with all applicable water quality regulations, including obtaining and complying with those conditions established in (WDRs) and a National Pollutant Discharge Elimination System (NPDES) permits. Both of these permits include the treatment of all surface runoff from paved and developed areas, the implementation of applicable BMPs during construction activities and the installation and proper maintenance of structural BMPs to ensure adequate long-term treatment of water before entering into any stream course.

A hydrology study was conducted to determine if the capture of flows onsite would indirectly impact the existing vernal pool located south of the Project Site within Criteria Cell 3276. The results of the hydrology study indicate that existing flows extend in a southeast direction from the southern Project Site boundary toward the existing agricultural drainage ditch and do not contribute to the inundation of the offsite vernal pool. No indirect impact respective of altering hydrology (contributing sheet flows) to the offsite vernal pool would result from the capture of onsite flows.

Toxics

Storm water treatment systems (infiltration basins) will be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant material, or other elements that could degrade or harm downstream biological or aquatic resources. Toxic sources within the Project Site would be limited to those commonly associated with industrial and commercial development, such as pesticides, insecticides, herbicides, fertilizers, and vehicle emissions. In order to mitigate the potential effects of these toxics, the project will incorporate structural BMPs, as required in association with compliance with WDRs and the NPDES permit system, in order to reduce or prevent the level of toxins introduced into the downstream drainage (San Jacinto River) and adjacent MSHCP Criteria Cell 3276.

Lighting

No light sensitive receptors are located adjacent to the Project Site. Regardless, night lighting associated with the proposed development will be directed away from southeastern project boundary located adjacent to MSHCP Criteria Cell 3276.

Noise

No permanent noise sensitive receptors including native vegetation or wildlife movement corridor are located adjacent to the Project Site. The majority of the Project Site is bordered by existing developed lands and/or high traffic roadways. The southeastern

region of the Project Site extends south to undeveloped lands which are mapped as field croplands and/or disturbed lands. No riparian or scrub vegetation is located adjacent to the Project Site. The closest natural vegetation community (riparian forest) is located approximately 1-mile south (5,280 feet) of the Project Site and wildlife movement corridor 0.53 mile (2,800 feet) south of the Project Site (San Jacinto River floodprone area) The proposed project will not result in indirect noise impacts to sensitive vegetative or wildlife movement corridor receptors in the region.

As previously stated, the ornamental vegetation including Eucalyptus trees are expected to potentially provide nesting habitat for migratory birds protected under the CDFG Codes. Measures for potential direct/indirect impacts to common and sensitive bird and raptor species will require compliance with the CDFG Code Section 3503. Construction outside the nesting season (generally between September 15th and February 15th) does not require preconstruction nesting bird surveys. However, if construction is proposed during the nesting season, a qualified biologist will conduct a preconstruction nesting bird survey(s) no more than three (3) days prior to initiation of grading to document the presence or absence of nesting birds within or directly adjacent (500 feet) to the Project Site. Loss of an active nest would be considered a potentially significant impact. Impacts to potential nesting habitat would be reduced to a less than significant level with the implementation of Biological Mitigation Measure (**BIO-MM2**).

Invasive Species

The landscape plans for the project shall avoid the use of invasive species for the portions of the development areas adjacent to the western blue-line drainage. Invasive plants that should be avoided are included in Table 6-2 of the MSHCP, *Plants That Should Be Avoided Adjacent to the MSHCP Conservation Area*.

Barriers

The proposed project will not include barriers that will directly or indirectly impact Proposed Constrained Linkage 19 (San Jacinto River).

As addressed below all applicable Best Management Practices (BMP) will be implemented.

The following Best Management Practices will be implemented for the proposed project to ensure compliance and consistency with MSHCP objectives and goals.

- The Project Site and adjacent vegetation is expected to potentially provide nesting habitat for migratory birds protected under the CDFG Codes. Avoidance measures for potential direct/indirect impacts to common and sensitive bird and raptor species will require compliance with the CDFG Code Section 3503. Construction outside the nesting season (generally between September 15th and February 15th) does not require preconstruction nesting bird surveys. If construction is proposed during the nesting season, a qualified biologist must conduct a preconstruction nesting bird survey. A report of the findings prepared by a qualified biologist shall be submitted to the City of Perris for review and approval prior to the initiation of project activities.

- Access to Project Site shall be via pre-existing and proposed access routes extending from Ellis Avenue, Case Street and Goetz Road.
- Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat (Drainage 1). Necessary precautions shall be taken to prevent the release of substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictions (City of Perris), USFWS, CDFW, and RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
- The Project Site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site.
- Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange silt fencing. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

CUMULATIVE IMPACTS

The permanent impacts of the project would not result in cumulative impacts (State CEQA Section 15310) to environmental resources within the region of the Project Site. Cumulative impacts refer to incremental effects of an individual project when assessed with the effects of past, current, and proposed projects. The Project Site is located completely within the City of Perris, an MSHCP permittee and is not located within or adjacent to a designated conservation area. As stated in the County of Riverside Transportation and Land Management Agency:

"Implementation of the MSHCP and Covered Projects will not result in a cumulative adverse effect, either directly or through habitat modifications, on any of the Covered Species, including the 31 species that are currently listed as threatened or endangered and the one species that is currently proposed for listing. Implementation of the MSHCP will benefit the Covered Species by preserving their habitat in order to address their life cycle needs. Thus, based on the features of the Plan itself, impacts to Covered Species are mitigated below a level of significance." (County of Riverside Transportation and Land Management Agency 2003)

Although the project would result in the permanent loss of 98.66 acres of disturbed/ruderal, developed, ornamental, and agricultural drainage ditch habitats, as referenced above, the MSHCP was developed to address the comprehensive regional planning effort and anticipated growth in the City of Perris.

As stated in the County of Riverside Transportation and Land Management Agency:

“However, implementation of the MSHCP will result in cumulatively significant impacts on the Non-Covered Species because the issuance of incidental take permits will remove an impediment to development outside of the MSHCP Conservation Area. Non-Covered Species would receive little or no protection outside the reserves under existing ordinances and regulations” (County of Riverside Transportation and Land Management Agency 2003)

Non-covered sensitive floral or faunal species were not detected or expected to occur within or adjacent to the project and therefore the development of the Project Site would not result or contribute to a cumulative impact to non-covered species. No Impact.

As stated in the County of Riverside Transportation and Land Management Agency:

“The Plan will not cause adverse cumulative effects related to the reduction of sensitive vegetation communities within the Plan Area; rather, the Plan is designed to preserve sufficient acreage of the sensitive vegetation communities present in western Riverside County. Similarly, the Plan will not cause adverse cumulative effects related to interference with the movement of any native resident or migratory fish or wildlife species or obstruction of genetic flow for the identified Planning Species. Part of the purpose and goals of the MSHCP is to use regional planning efforts to assemble a reserve that will preserve contiguous blocks of habitat in large enough areas to ensure that the reserve will allow movement of species and flow of genetic information.

The MSHCP will not cause adverse cumulative impacts by conflicting with the provisions of any adopted Habitat Conservation Plan, Natural Communities Conservation Plan or other approved local, regional, or State habitat conservation plan either within or outside of the Plan area. Rather, the MSHCP has been written specifically to complement existing HCPs, such as the Stephens’ kangaroo rat long-term HCP.” (County of Riverside Transportation and Land Management Agency 2003)

The proposed project has been designed and conservation measures will be implemented to remain in compliance with all MSHCP conservation goals and guidelines and therefore will not result in an adverse cumulative impact. No Impact.

MITIGATION MEASURES

The following biological mitigation measures address those adverse impacts determined to be potentially significant or are relevant to the protection of biological resources to the extent practicable as part of ensuring compliance and consistency with all MSHCP conservation goals and CEQA guidelines.

BIO-MM1 MSHCP Burrowing Owl 30-Day Preconstruction Survey

The project proponent shall retain a qualified biologist to conduct a pre-construction survey for resident burrowing owls within 30 days prior to commencement of initial ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, grading, tree removal, site watering, equipment staging) at the Project Site. The survey shall include the Project Site, off-site disturbance areas, and all suitable burrowing owl habitat within a 500-foot buffer. The results of the survey shall be submitted to the City of Perris Planning Division prior to obtaining a grading permit.

In addition, a pre-construction survey for resident burrowing owls shall also be conducted within three days prior to commencement initial ground-disturbing activities. If burrowing owls are observed during the Migratory Bird Treaty Act (MBTA) nesting bird survey (BIO-MM2), to be conducted within three days of ground disturbance or vegetation clearance, the observation shall be reported to the CDFW and the USFWS. If ground disturbing activities in these areas are delayed or suspended for more than 30 days after the pre-construction survey, the area shall be resurveyed for owls. The pre-construction survey and any relocation activity will be conducted in accordance with the current Burrowing Owl Instruction for the Western Riverside MSHCP.

If burrowing owl are not detected during the pre-construction survey, no further mitigation is required.

If burrowing owl are detected, the CDFW shall be sent written notification within three days of detection of burrowing owls. If active nests are identified during the pre-construction survey, the project applicant shall not commence activities until no sign is present that the burrows are being used by adult or juvenile owls or following CDFW approval of a Burrowing Owl Plan as described below. If owl presence is difficult to determine, a qualified biologist shall monitor the burrows with motion-activated trail cameras for at least 24 hours to evaluate burrow occupancy. The qualified biologist and project applicant shall coordinate with the City of Perris Planning Division, the USFWS, and the CDFW to develop a Burrowing Owl Plan to be approved by the City in consultation with the CDFW and the USFWS prior to commencing project activities. The Burrowing Owl Plan shall be prepared in accordance with guidelines in the CDFW Staff Report on Burrowing Owl (March 2012) and MSHCP. The Burrowing Owl Plan shall describe proposed avoidance, minimization, relocation, and monitoring as applicable. The Burrowing Owl Plan shall include the number and location of occupied burrow sites and details on proposed buffers if avoiding the burrowing owls and/or information on the adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated owls may also be required in the Burrowing Owl Plan. The permittee shall

implement the Burrowing Owl Plan following CDFW and USFWS review and concurrence. A final report shall be prepared by the qualified biologist documenting the results of the Burrowing Owl Plan. The report shall be submitted to the CDFW prior to the start of project activities. The onsite qualified biologist will verify the nesting effort has finished according to methods identified in the Burrowing Owl Plan. When the biologist determines that burrowing owls are no longer occupying the Project Site per the criteria in the Burrowing Owl Plan, project activities may begin.

If burrowing owl are discovered to occupy the Project Site after project activities have started, then construction activities shall be halted immediately. The project proponent shall notify the CDFW and the USFWS within 48 hours of detection. A Burrowing Owl Plan, as detailed above, shall be implemented. The Burrowing Owl Plan shall be submitted to the CDFW for review and approval within two weeks of detection and no Project activity shall continue within 1,000 feet of the burrowing owls until the CDFW approves the Burrowing Owl Plan. The City shall be responsible for implementing appropriate avoidance and mitigation measures, including burrow avoidance, passive or active relocation, or other appropriate mitigation measures as identified in the Burrowing Owl Plan.

BIO-MM2 Regulatory Requirement MBTA & CDFG Code

In order to avoid violation of the MBTA and the CDFG Code Sections 3503, 3503.5, and 3513, site preparation activities (ground disturbance, construction activities, staging equipment, and/or removal of trees and vegetation) for the project shall be avoided, to the greatest extent possible, during the nesting season of potentially occurring native and migratory bird species (generally September 1st to February 14th for songbirds; September 1 to January 14 for raptors, although the nesting season may be extended due to weather and drought conditions).

If site-preparation activities are proposed during the nesting/breeding season, the project proponent shall retain a qualified biologist to conduct a pre-activity field survey prior to the issuance of grading permits for the project to determine if active nests of species protected by the MBTA or the California Fish and Game Code are present in the construction zone. The nest surveys shall include the Project Site and adjacent areas where project activities have the potential to cause nest failure. The survey results shall be provided to the City's Planning Division. The project applicant shall adhere to the following:

1. The project applicant shall retain a qualified biologist experienced in: identifying local and migratory bird species of special concern; conducting bird surveys using appropriate survey methodology; nesting surveying techniques, recognizing breeding and nesting behaviors, locating nests and breeding territories, and identifying nesting stages and nest success; determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures.
2. Pre-activity field surveys shall be conducted at the appropriate time of day/night, during appropriate weather conditions, no more than 3 days prior to the initiation of project activities. Surveys shall encompass all suitable areas including trees,

shrubs, bare ground, burrows, cavities, and structures. Survey duration shall take into consideration the size of the project site; density, and complexity of the habitat; number of survey participants; survey techniques employed; and shall be sufficient to ensure the data collected is complete and accurate.

If no nesting birds are observed during the survey, site preparation and construction activities may begin. However, if active nests (including nesting raptors) are located, then avoidance or minimization measures shall be undertaken in consultation with the City of Perris and the CDFW. Measures shall include immediate establishment of an appropriate buffer zone to be established by a qualified biologist, and approved by the City of Perris, based on their best professional judgement and experience. The buffer around the nest shall be delineated and flagged, and no construction activity shall occur within the buffer area until a qualified biologist determines nesting species have fledged and the nest is no longer active or the nest has failed. The biologist shall monitor the nest at the onset of project activities and at the onset of any changes in such project activities (e.g., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficacy of the buffer. If the biologist determines that such project activities may be causing an adverse reaction, the biologist shall adjust the buffer accordingly or implement alternative avoidance and minimization measures, such as redirecting or rescheduling construction or erecting sound barriers. All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The onsite biologist shall review and verify compliance with these nesting avoidance buffers and shall verify the nesting effort has finished. Work can resume within these avoidance areas when no other active nests are found.

Upon completion of the survey and nesting bird monitoring, a report shall be prepared and submitted to City of Perris Planning Division for mitigation monitoring compliance record keeping.

Implementation of Mitigation Measures **BIO-MM1** and **BIO-MM2** would reduce all potential significant unavoidable impacts on biological resources below a level of significance and ensure compliance with MSHCP conservation requirements.

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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.

Author:  Date: October 1st, 2024

September 26, 2023

15653

Mike Masterson and Philip Cyburt
CH Realty IX-MCI Riverside Perris Airport Center LP
18032 Lemon Drive, Suite 367
Yorba Linda, California 92886

Subject: Eucalyptus Inventory and Assessment – Perris Airport Logistics Center Project in Perris, California

Dear Mike Masterson and Philip Cyburt:

The following arborist report summarizes Dudek's evaluation of 107 bluegum eucalyptus (*Eucalyptus globulus*) trees located adjacent to the Perris Airport Logistics Center project (project) site. The project survey area is located along Ellis Avenue between Case Road and Goetz Road in the City of Perris (City), California (Attachment 1, Project Location). The 107 trees are located along the south side of Ellis Road. Due to concerns related to tree health and structure, CH Realty IX-MCI Riverside Perris Airport Center LP requested that Dudek conduct an arboricultural assessment and evaluation of the trees. This report provides the results of Dudek's assessment and recommendations for tree management.

To that end, a Dudek International Society of Arboriculture (ISA) Certified Arborist examined the trees by performing a visual assessment on September 20, 2023. The tree assessment focused on mapping the location of the 107 trees and collecting information that could be used to determine the trees' current health and structure to help formulate recommendations for their preservation, long-term management, and/or removal.

Assignment

Our assignment included the following tasks:

1. Perform a focused tree inventory and evaluation of 107 bluegum eucalyptus located along Ellis Avenue between Case Road and Goetz Road in Perris, California. The focused evaluations consisted of a visual inspection of the trees and observations of the external conditions and overall health; pest presence; and trunk, branch, and foliage conditions.
2. Develop a summary letter report of our observations and recommendations.

Methods

Dudek mapped and collected tree attribute information for all trees within and immediately adjacent to the tree survey area that meet the City's definition of a protected tree (over 6 inches in diameter at standard height [DSH]), which includes trees located within the City right-of-way. The cumulative diameter of multistemmed trees was calculated using the sum of the squares method (i.e., the cumulative DSH measurement for the multistemmed

trees is found by taking the square root of the sum of all squared trunk stem DSHs). The location of each individual native tree was mapped using a Trimble Pathfinder Pro XH GPS receiver, which has a horizontal accuracy of 1-meter (1-sigma) using differential code positioning techniques. Since tree canopies can sometimes cause loss of satellite lock by blocking the line-of-sight to satellites, an electronic compass and reflectorless electronic distance measuring device was also used in mapping tree locations. The electronic distance measuring device/compass combination operates in concert with the Pathfinder GPS system to position offsets, and offset information is automatically attached to the GPS position data string. Protected trees were tagged in the field with an aluminum tree tag bearing a unique identification number. The tags were placed on the trunk of each inventoried tree, and tag numbers correspond with the individual tree data presented in Attachment 2, Tree Data Matrix. GPS locations of each tree are presented in Attachment 3, Tree Locations Map.

Concurrent with tree mapping efforts, Dudek arborists collected tree attribute data, including species, quantity of individual trunks, individual trunk diameters, overall height, canopy extent, and general health and structural conditions. Trunk diameter measurements were collected at 4.6 feet above the ground along the trunk axis. Tree height measurements were ocular estimates made by experienced field arborists. Tree canopy diameters were typically estimated by “pacing-off” the measurement based on the investigator’s knowledge of their stride length or by visually estimating the canopy width. The tree crown diameter measurements were made along an imaginary line intersecting the tree trunk that best approximated the average canopy diameter.

Pursuant to the Council of Tree and Landscape Appraiser’s 2000 Guide for Plant Appraisal, tree health and structure were evaluated with respect to five distinct tree components: roots, trunk(s), scaffold branches, small branches, and foliage. Each component of the tree was assessed with regard to health factors such as insect, fungal, or pathogen damage; fire damage; mechanical damage; presence of decay; presence of wilted or dead leaves; and wound closure. Components were graded as good, fair, poor, critical, or dead, with “good” representing no apparent problems, and “dead” representing a dying and/or dead tree. This method of tree condition rating is comprehensive and results in ratings that are useful for determining the status of trees based on common standards. Trees in natural settings have important habitat value, as evidenced by numerous cavity nesters and insects that thrive on and within oak trees, even when they are considered in poor structural or health condition. However, this assessment focuses on tree condition with regards to health and structure for purposes of analyzing potential tree health issues.

Upon completion of field data collection and mapping, raw GPS data was post-processed using GPS Pathfinder Office (v 5.10), and individual tree location data were compiled and updated in a geographic information system. The digital tree locations were linked to individual tree identification numbers and associated tree attribute data. This dataset was then evaluated using ArcGIS (v. 10.3) software to determine the position of individual trees related to the proposed project development areas. Data resulting from this analysis was utilized to evaluate the individual tree impact totals presented in this report.

Scope of Work limitations

No root crown excavations or investigations or internal probing were performed during the tree assessment. Therefore, the presence or absence of internal decay or other hidden inferiorities in individual trees could not be confirmed. It is recommended that any large tree proposed for preservation or relocation in an urban setting be thoroughly inspected for internal and subterranean decay by a qualified arborist before finalizing preservation or relocation plans.

General Tree and Site Conditions

There are 107 trees located within the survey area along Ellis Avenue between Case Road and Goetz Road (Attachment 3). All 107 trees meet the City's definition of a protected tree and are greater than 6 inches in DSH (4.5 feet above ground level). All 107 trees are bluegum eucalyptus trees located within a windrow along Ellis Avenue.

In total, 17 of the trees are single-stemmed, and 90 of the trees are multistemmed. Tree diameters for single-stemmed trees varied, ranging from 6 inches to 33 inches; cumulative trunk diameters for multistemmed trees ranged from 6.2 inches to 39.5 inches. Average tree heights ranged from 4 feet to 40 feet tall, and canopy widths extended 1 foot to 30 feet at their widest points. Attachment 2 provides tree height attribute information for each tree on the project site.

The trees share similar health and structural ratings, the majority of which are in fair health and poor structure. As presented in Attachment 2, 88.8% (95 trees) exhibit fair health, 2.8% (3 trees) exhibit poor health, 0.9% (1 tree) exhibits critical health, and 7.5% (8 trees) are dead. Structurally, 8.4% (9 trees) are in fair condition, 84.1% (90 trees) are in poor condition, and 7.5% (8 trees) are dead. Fair condition trees are typical, with few maladies but declining vigor. Poor condition trees exhibit declining vigor, unhealthy foliage, poor branch structure, and/or excessive lean. The most observed issue was tree topping, as a majority of the trees were previously topped, resulting in poor structural condition. The topping is believed to be associated with the adjacent powerlines (reduction in powerline impact should failure occur) and/or the adjacent airport. Individual tree attributes can be found in Attachment 2.

Regulatory Setting

Per Section 19.71.050 of Chapter 19.71 of the City's municipal code, an arborist report is required for the removal of trees over 6 inches in DSH that are located within the City right-of-way. The City further defines a protected tree as "all special status trees designated as such by age, size, species, location, cultural and/or ecological or historic importance that may not be harmed. Protected trees include, but are not limited to, city trees, heritage trees, specimen trees, and trees required by ordinance and/or as a condition of approval for development. Protected trees carry penalties for unauthorized removal." (City of Perris Municipal Code Section 19.71.020). Prior to the removal of protected trees, the City requires the preparation of an arborist report by an ISA Certified Arborist. A permit for the removal of a tree may be conditioned upon its relocation or replacement by one or more other trees of a kind or type to be specified in the permit.

Discussion and Recommendations

The 107 bluegum eucalyptus trees located along Ellis Avenue between Case Road and Goetz Road exhibit tree defects and conditions that are typical of bluegum eucalyptus trees that are experiencing drought stress and have been maintained to avoid conflict with adjacent land use and infrastructure. As previously stated, 91.6% of the trees have either poor structure (84.1%) or were found to be dead (7.5%), and nearly all of the trees were found to be either in fair health or a state of decline. The observation of poor structure is a result of historical pruning practices that have negatively impacted the trees. Based on the high occurrence of multistemmed trees, with a stem separation at less than 3 to 4 feet, it is believed that many, if not all the trees, were topped or cut to stump

height previously, which resulted in a high occurrence of resprouting. The high occurrence of resprouting has resulted in multiple codominant stems with weak attachment points. These weak attachment points are prone to failure and present a risk to the adjacent powerlines and roadway.

In addition to the excessive trunk sprouting/codominant stems, nearly all of the trees appeared to have been topped. The topping is believed to be associated with the adjacent powerlines (reduction in powerline impact should failure occur) and/or the adjacent airport. Per the City's definition, "topping means a poor pruning practice often used to control the size of trees, especially height, and involves the indiscriminate cutting of branches and stems at right angles leaving long stubs" (City of Perris Municipal Code Section 19.71.020). Topping can lead to the proliferation of growth. As a result, the tree may begin to sprout new branches and leaves quickly. However, unlike the regular branches that grow at their own pace and gain strength in the process, these branches grow quickly to compensate for the loss due to topping, and these branches turn out to be spindly and tend to be weakly attached to the tree trunk. As such, they remain prone to breaking during storms or windy conditions.

The combination of multiple codominant stems and topping has resulted in trees that have poor structural integrity and present an overall risk to the community. Based on the overall health of the trees and their current structural condition, structural and restoration pruning will not adequately address the observed issues without further stressing the trees. As such, based on the observed health and structure of the trees, along with limitations on restorative pruning, Dudek recommends that the 107 trees be removed and replaced at a 1:1 ratio with a drought tolerant/resistant tree species. Should the trees be replaced in the same and/or similar location, it is recommended that a utility-appropriate species be planted. Additional details regarding tree planting within the City can be found in Section 19.71.070 of the municipal code.

Due to the location and size of the trees, all 107 trees are considered protected by the City. As such, a permit will be required for the removal of the trees. It should be noted that a permit for removal of a tree may be conditioned upon its relocation or replacement by one or more other trees of a kind or type.

Conclusion

This report provides conclusions and recommendations based on an examination of 107 bluegum eucalyptus trees and their surrounding environment by an ISA Certified Arborist. The conclusions and findings discussed in this report and the associated tree opinions are valid for no longer than 6 months and only under normal weather conditions. Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Minimal internal probing was conducted for this project (only two trees were probed) to determine presence/absence of and general extent of wood rot. Extensive internal or subterranean evaluations were not conducted as part of this assessment. Therefore, the full extent of the internal decay condition of the trunk or roots cannot be fully determined.

Arborists cannot detect every condition that could possibly lead to the failure of a tree. Trees are living organisms that fail in ways not fully understood. Conditions are often hidden within trees and below ground. This evaluation did not include subterranean or extensive internal examination. Arborists cannot guarantee that a tree would be healthy or safe under all circumstances, or for a specified period of time. There are no guarantees that a tree's condition would not change over a short or long period due to climatic, cultural, or environmental conditions.

TO: MIKE MASTERSON AND PHILIP CYBURT
SUBJECT: EUCALYPTUS INVENTORY AND ASSESSMENT - PERRIS AIRPORT LOGISTICS CENTER PROJECT IN
PERRIS, CALIFORNIA

Trees provide many benefits to those who live near them. They also include inherent risk that can be minimized but not eliminated.

I would be pleased to answer any questions or respond to any comments regarding this tree evaluation.

Sincerely,



Christopher J. Kallstrand
Certified Arborist No. WE-8208A

Att.: *1, Project Location*
2, Tree Information Matrix
3, Tree Locations Map

Attachment A

Project Location

Attachment B

Tree Information Matrix

Tree Information Matrix

Tree No.	Botanical Name	Common Name	Stems	Individual Stem Diameter (in.)						Combined Diameter (in.)	Height (ft.)	Crown Width (ft.)	Health	Structural Integrity	Notes	Latitude	Longitude
				D1	D2	D3	D4	D5	D6								
1	<i>Eucalyptus</i> spp.	Eucalyptus	3	16	16	20	—	—	—	52	30	15	Fair	Poor	—	33.77202511	-117.2232126
10	<i>Eucalyptus</i> spp.	Eucalyptus	6	11	9	9	7	6	4	46	35	15	Fair	Fair	—	33.77203459	-117.2229355
100	<i>Eucalyptus</i> spp.	Eucalyptus	3	15	15	11	—	—	—	41	40	20	Dead	Dead	—	33.77202293	-117.2201985
101	<i>Eucalyptus</i> spp.	Eucalyptus	2	17	13	—	—	—	—	30	40	20	Dead	Dead	—	33.77203732	-117.2202497
102	<i>Eucalyptus</i> spp.	Eucalyptus	2	10	7	—	—	—	—	17	40	10	Dead	Dead	—	33.77203381	-117.2202597
103	<i>Eucalyptus</i> spp.	Eucalyptus	2	15	14	—	—	—	—	29	40	10	Fair	Fair	—	33.77202697	-117.2203243
104	<i>Eucalyptus</i> spp.	Eucalyptus	4	14	11	7	8	—	—	40	40	10	Fair	Poor	—	33.77203145	-117.2203324
105	<i>Eucalyptus</i> spp.	Eucalyptus	1	6	—	—	—	—	—	6	4	1	Dead	Dead	—	33.7720294	-117.2203549
106	<i>Eucalyptus</i> spp.	Eucalyptus	4	18	5	5	7	—	—	35	40	10	Fair	Poor	—	33.77204434	-117.2204038
107	<i>Eucalyptus</i> spp.	Eucalyptus	1	11	—	—	—	—	—	11	40	15	Fair	Poor	—	33.77202947	-117.2204219
11	<i>Eucalyptus</i> spp.	Eucalyptus	1	7	—	—	—	—	—	7	30	5	Fair	Fair	—	33.77203574	-117.2228964
12	<i>Eucalyptus</i> spp.	Eucalyptus	3	15	15	5	—	—	—	35	35	15	Fair	Fair	—	33.7720335	-117.2228735
13	<i>Eucalyptus</i> spp.	Eucalyptus	5	10	7	4	7	4	—	32	25	10	Fair	Poor	—	33.77204527	-117.2228513
14	<i>Eucalyptus</i> spp.	Eucalyptus	2	13	12	—	—	—	—	25	25	10	Fair	Poor	—	33.77202778	-117.2227996
15	<i>Eucalyptus</i> spp.	Eucalyptus	6	15	6	6	5	3	2	37	30	15	Fair	Poor	—	33.77205162	-117.2227882
16	<i>Eucalyptus</i> spp.	Eucalyptus	1	25	—	—	—	—	—	25	35	15	Fair	Poor	—	33.77203537	-117.2227215
17	<i>Eucalyptus</i> spp.	Eucalyptus	3	16	9	7	—	—	—	32	35	15	Fair	Poor	—	33.77204501	-117.2227168
18	<i>Eucalyptus</i> spp.	Eucalyptus	3	18	11	4	—	—	—	33	35	15	Fair	Poor	—	33.77203908	-117.2226915
19	<i>Eucalyptus</i> spp.	Eucalyptus	4	14	14	3	3	—	—	34	35	15	Fair	Poor	—	33.77203053	-117.2226792
2	<i>Eucalyptus</i> spp.	Eucalyptus	3	9	7	6	—	—	—	22	30	15	Fair	Poor	—	33.77202303	-117.2231721
20	<i>Eucalyptus</i> spp.	Eucalyptus	6	10	10	6	4	3	2	35	35	15	Fair	Poor	—	33.77204978	-117.222634
21	<i>Eucalyptus</i> spp.	Eucalyptus	3	14	10	4	—	—	—	28	35	15	Fair	Poor	—	33.77203954	-117.2226111
22	<i>Eucalyptus</i> spp.	Eucalyptus	2	25	14	—	—	—	—	39	35	15	Fair	Poor	—	33.77203962	-117.2225635
23	<i>Eucalyptus</i> spp.	Eucalyptus	2	5	4	—	—	—	—	9	15	10	Poor	Poor	—	33.77204098	-117.2225503
24	<i>Eucalyptus</i> spp.	Eucalyptus	2	6	2	—	—	—	—	8	5	3	Dead	Dead	Stump	33.77203888	-117.2225444
25	<i>Eucalyptus</i> spp.	Eucalyptus	1	30	—	—	—	—	—	30	35	15	Fair	Poor	—	33.77204186	-117.2225282
26	<i>Eucalyptus</i> spp.	Eucalyptus	4	15	16	9	5	—	—	45	35	15	Fair	Poor	—	33.7720248	-117.2224796
27	<i>Eucalyptus</i> spp.	Eucalyptus	3	9	8	6	—	—	—	23	35	15	Fair	Poor	—	33.77203541	-117.2224662
28	<i>Eucalyptus</i> spp.	Eucalyptus	2	22	6	—	—	—	—	28	35	15	Fair	Poor	—	33.772039	-117.2224316
29	<i>Eucalyptus</i> spp.	Eucalyptus	4	18	12	14	14	—	—	58	40	20	Fair	Poor	—	33.77202818	-117.222367
3	<i>Eucalyptus</i> spp.	Eucalyptus	2	18	19	—	—	—	—	37	30	15	Fair	Fair	—	33.7720215	-117.2231368
30	<i>Eucalyptus</i> spp.	Eucalyptus	2	18	11	—	—	—	—	29	40	20	Fair	Poor	—	33.77202892	-117.2223279
31	<i>Eucalyptus</i> spp.	Eucalyptus	2	17	7	—	—	—	—	24	40	20	Fair	Poor	—	33.77200258	-117.2223001
32	<i>Eucalyptus</i> spp.	Eucalyptus	4	15	10	9	7	—	—	41	40	20	Fair	Poor	—	33.77201199	-117.2222765
33	<i>Eucalyptus</i> spp.	Eucalyptus	2	18	17	—	—	—	—	35	40	20	Fair	Poor	—	33.77202654	-117.2222631
34	<i>Eucalyptus</i> spp.	Eucalyptus	7	11	10	5	5	4	4	42	40	20	Fair	Poor	3	33.77202821	-117.2222439
35	<i>Eucalyptus</i> spp.	Eucalyptus	5	12	11	8	11	6	—	48	40	20	Fair	Poor	—	33.77203088	-117.2222287
36	<i>Eucalyptus</i> spp.	Eucalyptus	4	12	11	10	6	—	—	39	40	20	Fair	Poor	—	33.7720413	-117.2222017
37	<i>Eucalyptus</i> spp.	Eucalyptus	3	13	10	4	—	—	—	27	40	20	Fair	Poor	—	33.77202244	-117.2221858
38	<i>Eucalyptus</i> spp.	Eucalyptus	3	16	18	27	—	—	—	61	40	20	Fair	Poor	—	33.77203652	-117.2221567

Tree Information Matrix

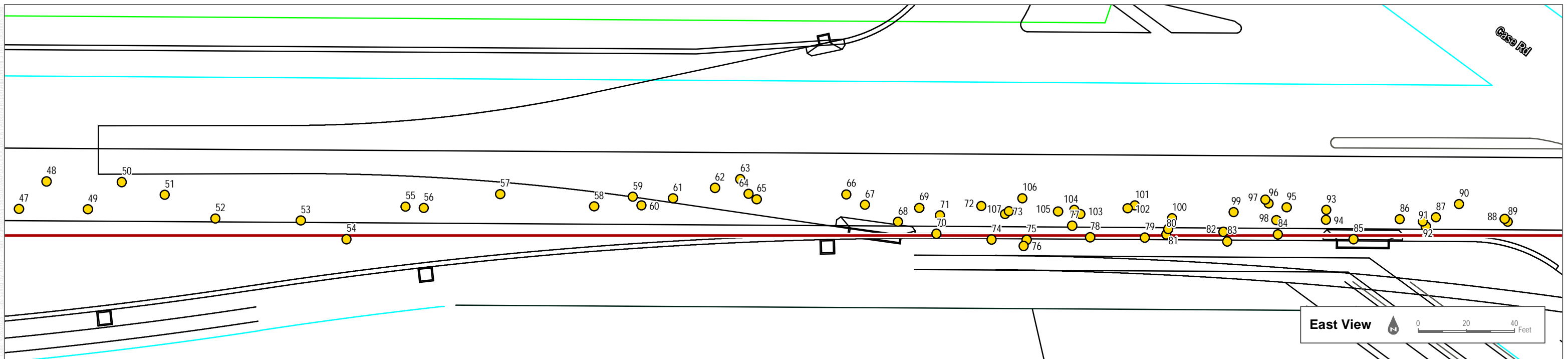
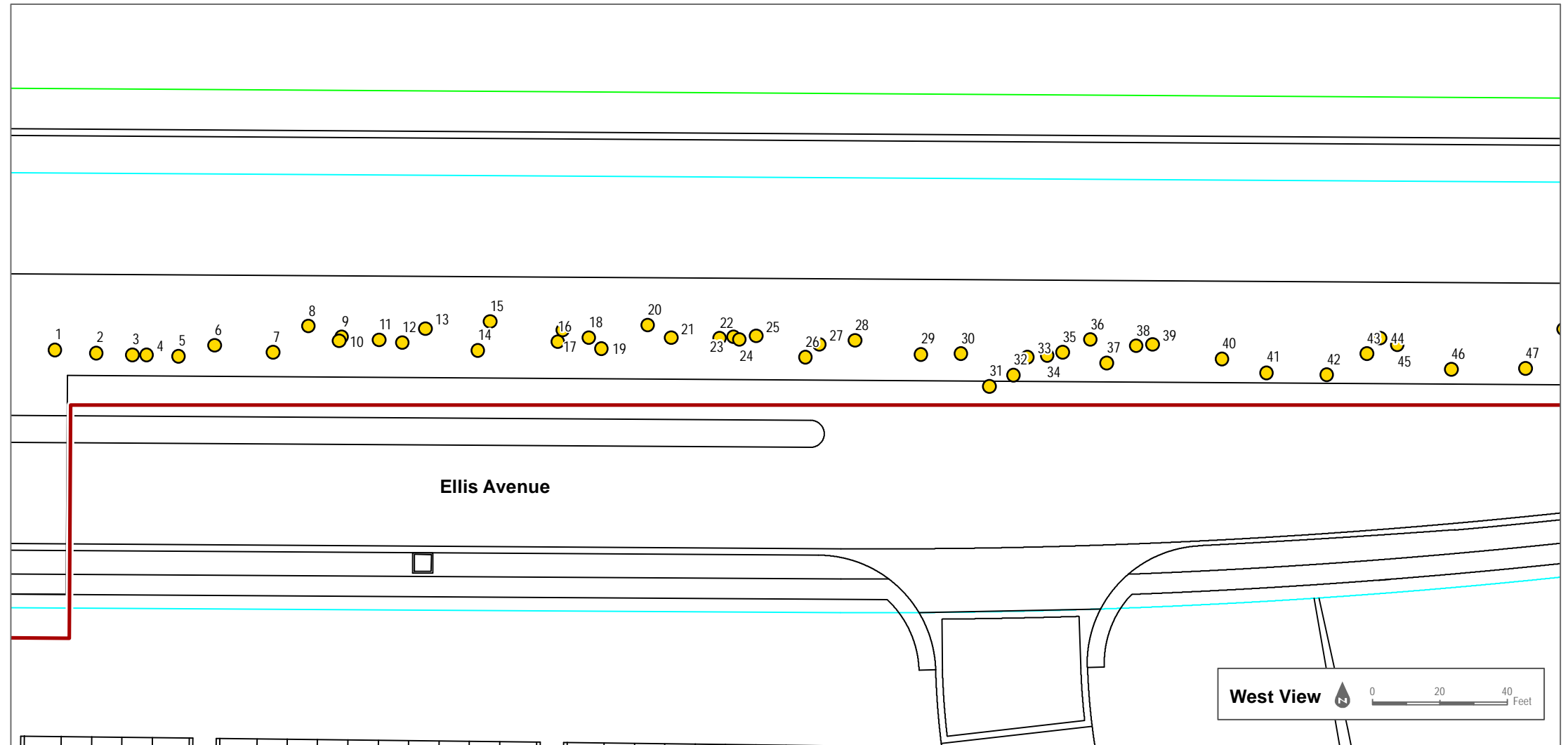
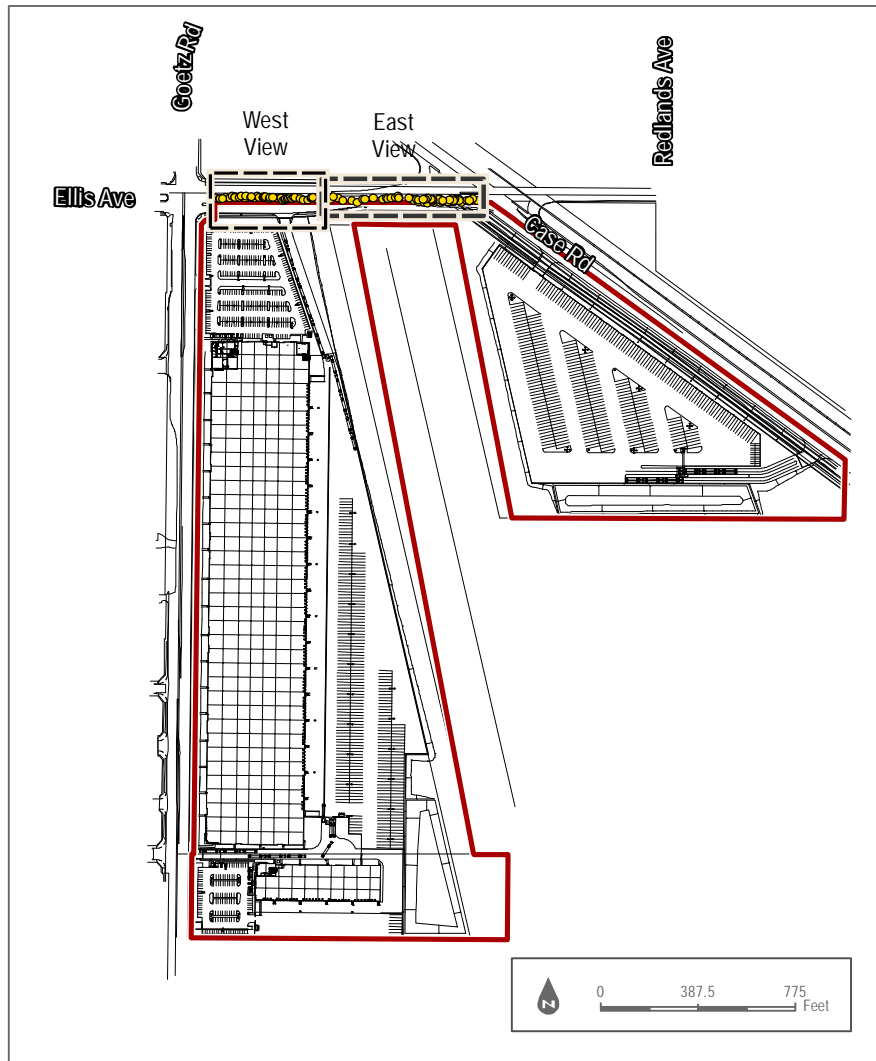
Tree No.	Botanical Name	Common Name	Stems	Individual Stem Diameter (in.)						Combined Diameter (in.)	Height (ft.)	Crown Width (ft.)	Health	Structural Integrity	Notes	Latitude	Longitude
				D1	D2	D3	D4	D5	D6								
39	<i>Eucalyptus</i> spp.	Eucalyptus	4	15	19	10	6	—	—	50	40	20	Fair	Poor	—	33.77203782	-117.2221411
4	<i>Eucalyptus</i> spp.	Eucalyptus	2	14	9	—	—	—	—	23	30	10	Fair	Poor	—	33.77202168	-117.2231231
40	<i>Eucalyptus</i> spp.	Eucalyptus	4	15	14	14	13	—	—	56	40	20	Fair	Poor	—	33.77202679	-117.2220729
41	<i>Eucalyptus</i> spp.	Eucalyptus	3	13	18	6	—	—	—	37	40	20	Fair	Poor	—	33.77201578	-117.2220293
42	<i>Eucalyptus</i> spp.	Eucalyptus	3	6	7	5	—	—	—	18	30	15	Fair	Poor	—	33.7720145	-117.2219706
43	<i>Eucalyptus</i> spp.	Eucalyptus	7	18	18	17	7	5	14	87	40	20	Fair	Poor	8	33.77203211	-117.2219317
44	<i>Eucalyptus</i> spp.	Eucalyptus	3	13	6	5	—	—	—	24	40	20	Fair	Poor	—	33.77204472	-117.2219192
45	<i>Eucalyptus</i> spp.	Eucalyptus	3	18	9	9	—	—	—	36	40	20	Fair	Poor	—	33.77203924	-117.221902
46	<i>Eucalyptus</i> spp.	Eucalyptus	2	22	20	—	—	—	—	42	40	20	Fair	Poor	—	33.77201997	-117.221849
47	<i>Eucalyptus</i> spp.	Eucalyptus	1	32	—	—	—	—	—	32	40	20	Fair	Poor	—	33.77202128	-117.2217766
48	<i>Eucalyptus</i> spp.	Eucalyptus	4	25	14	14	17	—	—	70	40	20	Fair	Poor	—	33.77205326	-117.2217396
49	<i>Eucalyptus</i> spp.	Eucalyptus	4	10	9	9	2	—	—	30	30	15	Fair	Poor	—	33.77202167	-117.2216823
5	<i>Eucalyptus</i> spp.	Eucalyptus	4	18	3	3	3	—	—	27	30	15	Fair	Fair	—	33.77202089	-117.223092
50	<i>Eucalyptus</i> spp.	Eucalyptus	2	19	8	—	—	—	—	27	30	15	Fair	Poor	—	33.77205333	-117.2216363
51	<i>Eucalyptus</i> spp.	Eucalyptus	3	18	15	9	—	—	—	42	40	20	Fair	Poor	—	33.77203906	-117.2215772
52	<i>Eucalyptus</i> spp.	Eucalyptus	3	23	23	17	—	—	—	63	40	20	Fair	Poor	—	33.77201233	-117.2215078
53	<i>Eucalyptus</i> spp.	Eucalyptus	1	18	—	—	—	—	—	18	40	20	Fair	Poor	—	33.77201131	-117.2213909
54	<i>Eucalyptus</i> spp.	Eucalyptus	5	25	7	9	9	20	—	70	40	20	Fair	Poor	—	33.77199048	-117.2213279
55	<i>Eucalyptus</i> spp.	Eucalyptus	5	17	14	9	10	15	—	65	40	20	Fair	Poor	—	33.77202804	-117.2212478
56	<i>Eucalyptus</i> spp.	Eucalyptus	5	14	8	7	9	12	—	50	40	20	Fair	Poor	—	33.7720268	-117.2212227
57	<i>Eucalyptus</i> spp.	Eucalyptus	5	20	9	15	16	14	—	74	40	20	Fair	Poor	—	33.77204325	-117.2211183
58	<i>Eucalyptus</i> spp.	Eucalyptus	6	7	12	15	15	6	6	61	40	20	Fair	Poor	—	33.77203057	-117.22099
59	<i>Eucalyptus</i> spp.	Eucalyptus	4	9	7	6	6	—	—	28	15	20	Fair	Poor	—	33.77204194	-117.2209366
6	<i>Eucalyptus</i> spp.	Eucalyptus	1	8	—	—	—	—	—	8	30	7	Poor	Poor	—	33.77203002	-117.2230566
60	<i>Eucalyptus</i> spp.	Eucalyptus	7	24	22	17	9	7	9	97	40	20	Fair	Poor	9	33.77203199	-117.2209248
61	<i>Eucalyptus</i> spp.	Eucalyptus	5	6	6	5	5	4	—	26	30	20	Fair	Poor	—	33.77204028	-117.2208819
62	<i>Eucalyptus</i> spp.	Eucalyptus	1	33	—	—	—	—	—	33	40	20	Fair	Poor	—	33.77205288	-117.2208248
63	<i>Eucalyptus</i> spp.	Eucalyptus	3	15	15	14	—	—	—	44	40	20	Fair	Poor	—	33.77206319	-117.2207899
64	<i>Eucalyptus</i> spp.	Eucalyptus	3	26	20	14	—	—	—	60	40	20	Fair	Poor	—	33.77204644	-117.2207783
65	<i>Eucalyptus</i> spp.	Eucalyptus	1	18	—	—	—	—	—	18	40	20	Fair	Poor	—	33.77204042	-117.2207675
66	<i>Eucalyptus</i> spp.	Eucalyptus	3	18	23	20	—	—	—	61	40	20	Fair	Poor	—	33.77204687	-117.2206445
67	<i>Eucalyptus</i> spp.	Eucalyptus	5	23	9	12	12	6	—	62	40	20	Fair	Poor	—	33.77203526	-117.2206192
68	<i>Eucalyptus</i> spp.	Eucalyptus	6	8	6	7	11	12	14	58	40	20	Fair	Poor	—	33.77201608	-117.2205738
69	<i>Eucalyptus</i> spp.	Eucalyptus	1	20	—	—	—	—	—	20	40	20	Fair	Poor	—	33.77203226	-117.2205448
7	<i>Eucalyptus</i> spp.	Eucalyptus	5	21	8	9	8	4	—	50	30	15	Fair	Poor	—	33.77202496	-117.2229996
70	<i>Eucalyptus</i> spp.	Eucalyptus	4	15	16	15	5	—	—	51	40	20	Fair	Poor	—	33.77200314	-117.2205207
71	<i>Eucalyptus</i> spp.	Eucalyptus	2	17	16	—	—	—	—	33	40	20	Fair	Poor	—	33.77202388	-117.2205162
72	<i>Eucalyptus</i> spp.	Eucalyptus	2	16	9	—	—	—	—	25	20	10	Dead	Dead	—	33.77203481	-117.2204597
73	<i>Eucalyptus</i> spp.	Eucalyptus	2	23	9	—	—	—	—	32	40	20	Fair	Fair	—	33.77202617	-117.2204274
74	<i>Eucalyptus</i> spp.	Eucalyptus	13	5	5	5	5	4	3	37	40	20	Fair	Poor	3, 2, 2, 1, 1, 1, 1	33.77199698	-117.2204452

Tree Information Matrix

Tree No.	Botanical Name	Common Name	Stems	Individual Stem Diameter (in.)						Combined Diameter (in.)	Height (ft.)	Crown Width (ft.)	Health	Structural Integrity	Notes	Latitude	Longitude
				D1	D2	D3	D4	D5	D6								
75	<i>Eucalyptus</i> spp.	Eucalyptus	15	4	1	1	1	1	1	18	10	15	Fair	Poor	Rest 1s	33.77199681	-117.2203974
76	<i>Eucalyptus</i> spp.	Eucalyptus	1	7	—	—	—	—	—	7	30	10	Fair	Fair	—	33.77199004	-117.2204012
77	<i>Eucalyptus</i> spp.	Eucalyptus	6	9	6	5	5	4	4	33	35	15	Fair	Poor	—	33.77201369	-117.2203355
78	<i>Eucalyptus</i> spp.	Eucalyptus	1	14	—	—	—	—	—	14	30	10	Dead	Dead	—	33.77200074	-117.2203107
79	<i>Eucalyptus</i> spp.	Eucalyptus	3	10	5	4	—	—	—	19	30	20	Poor	Poor	—	33.77200075	-117.2202356
8	<i>Eucalyptus</i> spp.	Eucalyptus	6	22	5	4	4	4	3	42	30	15	Fair	Poor	Bees	33.77204644	-117.2229652
80	<i>Eucalyptus</i> spp.	Eucalyptus	3	5	2	2	—	—	—	9	15	10	Dead	Dead	—	33.77200462	-117.2202061
81	<i>Eucalyptus</i> spp.	Eucalyptus	5	15	9	9	6	5	—	44	40	20	Fair	Poor	—	33.77201088	-117.2202036
82	<i>Eucalyptus</i> spp.	Eucalyptus	4	5	5	4	2	—	—	16	25	15	Fair	Poor	—	33.77200835	-117.2201281
83	<i>Eucalyptus</i> spp.	Eucalyptus	5	15	8	5	6	2	—	36	40	30	Fair	Poor	—	33.77199741	-117.2201228
84	<i>Eucalyptus</i> spp.	Eucalyptus	4	6	4	7	2	—	—	19	30	15	Fair	Poor	—	33.77200597	-117.2200535
85	<i>Eucalyptus</i> spp.	Eucalyptus	5	9	9	6	10	7	—	41	40	25	Fair	Poor	—	33.77200107	-117.21995
86	<i>Eucalyptus</i> spp.	Eucalyptus	4	13	7	15	7	—	—	42	40	20	Fair	Poor	—	33.7720244	-117.219887
87	<i>Eucalyptus</i> spp.	Eucalyptus	1	10	—	—	—	—	—	10	5	2	Critical	Poor	—	33.77202679	-117.2198377
88	<i>Eucalyptus</i> spp.	Eucalyptus	2	1	16	—	—	—	—	17	40	20	Fair	Poor	—	33.77202593	-117.2197434
89	<i>Eucalyptus</i> spp.	Eucalyptus	7	18	15	17	16	13	11	102	40	20	Fair	Poor	12	33.77202253	-117.2197393
9	<i>Eucalyptus</i> spp.	Eucalyptus	2	10	9	—	—	—	—	19	35	10	Fair	Fair	—	33.77203775	-117.2229328
90	<i>Eucalyptus</i> spp.	Eucalyptus	3	16	12	5	—	—	—	33	40	20	Fair	Poor	—	33.77204209	-117.2198062
91	<i>Eucalyptus</i> spp.	Eucalyptus	3	17	15	14	—	—	—	46	40	20	Fair	Poor	—	33.77201658	-117.2198515
92	<i>Eucalyptus</i> spp.	Eucalyptus	5	17	15	16	11	11	—	70	40	20	Fair	Poor	—	33.77202199	-117.2198554
93	<i>Eucalyptus</i> spp.	Eucalyptus	2	19	14	—	—	—	—	33	40	20	Fair	Poor	—	33.77203414	-117.2199875
94	<i>Eucalyptus</i> spp.	Eucalyptus	4	17	14	10	10	—	—	51	40	20	Fair	Poor	—	33.77202279	-117.2199881
95	<i>Eucalyptus</i> spp.	Eucalyptus	3	19	12	10	—	—	—	41	40	20	Fair	Poor	—	33.77203661	-117.2200421
96	<i>Eucalyptus</i> spp.	Eucalyptus	1	12	—	—	—	—	—	12	40	20	Fair	Poor	—	33.7720408	-117.2200669
97	<i>Eucalyptus</i> spp.	Eucalyptus	4	5	4	4	3	—	—	16	40	20	Fair	Poor	—	33.77204514	-117.2200712
98	<i>Eucalyptus</i> spp.	Eucalyptus	1	33	—	—	—	—	—	33	40	20	Fair	Poor	—	33.77202181	-117.2200558
99	<i>Eucalyptus</i> spp.	Eucalyptus	1	16	—	—	—	—	—	16	40	20	Fair	Poor	—	33.7720308	-117.2201146

Attachment C

Tree Locations Map



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