Biological Resources Technical Report

Patterson Commerce Center Project Site
City of Perris, California

FINAL REPORT

APNs 314-110-008 to -010, 314-110-016 to -018, 314-110-020 to -023, 31-110-030, 314-110-043 to -046, 314-110-052, -053, -058, -059, and Right-of-Ways

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CADRE Environmental

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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 1st 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

EXECUTIVE SUMMARY

The Patterson Commerce Center Project Site, 14.00-acres onsite and 5.51-acres offsite (19.51-acres total) is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Mead Valley Plan Area and is not located within an MSHCP Criteria Area Cell, Cell Group, or Linkage Area (Western Riverside County Regional Conservation Authority (RCA) Geographic Information System (GIS) Data Downloads 2022). Therefore, no Habitat Evaluation and Acquisition Negotiation Strategy (HANS) or Joint Project Review (JPR) are required.

The Project Site is completely devoid of natural undisturbed vegetation communities and is characterized as disturbed/developed. The property is currently utilized as an equipment storage and repair facility and a few scattered ornamental trees and palms are located onsite adjacent to the developed structures. A total of 19.51 acres of disturbed and developed habitats will be directly impacted as a result of Project implementation including offsite impacts within the paved bordering reaches of Nance Street, Wade Avenue and Patterson Avenue extending south of Harley Knox Boulevard to West Markham Street.

The Project applicant shall pay MSHCP Local Development Mitigation fees as established and implemented by the City of Perris - Industrial Development $16,358 per acre.

The Project Site is located within the Stephens' kangaroo rat (SKR) Fee Area outlined in the Riverside County SKR Habitat Conservation Plan (HCP). The Project applicant shall pay the fees pursuant to and implemented by County of Riverside Ordinance 663.10 - $500 per acre.

The Project Site possesses scattered ornamental vegetation including trees and shrubs expected to potentially provide nesting habitat for migratory birds protected under the federal Migratory Bird Treaty Act (MBTA) and California Department of Fish and Game (CDFG) Codes. As required by Perris Valley Commerce Center Specific Plan (PVCCSP) Environmental Impact Report (EIR) mitigation measure (MM) Bio 1 as revised by the City: If site-preparation activities for an implementing project are proposed during the nesting/breeding season, a pre-activity field survey shall be conducted by a qualified biologist prior to the issuance of grading permits for such project, to determine if active nests of species protected by the MBTA or CDFG Codes are present in the construction zone (**mitigation measure MM Bio 1**). Mitigation measure MM Bio 1 is being incorporated into the Project as required by the City of Perris for all projects within the PVCCSP planning area.

The Project Site does not occur within an MSHCP predetermined Survey Area for narrow endemic plant species; therefore, no surveys are required (RCA GIS Data Downloads 2022). The Project is consistent with MSHCP Section 6.1.3

The Project Site is not located within a Criteria Area 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 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 occurs partially within a predetermined Survey Area for the burrowing owl. No suitable burrowing owl burrows greater than 4 inches in diameter potentially utilized for refugia and/or nesting were documented within the Project Site. No burrowing owl or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within the Project Site boundary during the site assessment. Focused surveys are not warranted. Regardless, as required for all development in the PVCCSP area, a pre-construction survey will be conducted within 30 days prior to the initiation of construction to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP (**mitigation measure MM Bio 2**). PVCCSP EIR mitigation measure MM Bio 2, as revised by the City, is being incorporated into the Project as required by the City of Perris for all projects in the PVCCSP planning area. Implementation of mitigation measure MM Bio 2 will ensure the Project is consistent with MSHCP Section 6.3.2.

No vernal pool or seasonal depression resources representing suitable habitat for sensitive fairy shrimp were detected onsite. No riparian scrub, forest or woodland habitat suitable for the least Bell's vireo, southwestern willow flycatcher or western yellow-billed cuckoo is present within or adjacent to the Project Site. No MSHCP Section 6.1.2 vernal pool, riparian or riverine resources are located within or adjacent to the Project Site. An MSHCP Determination of Biological Equivalent or Superior Preservation (DBESP) will not be required.

No wetlands or jurisdictional resources regulated by the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, or Regional Water Quality Control Board were documented within or adjacent to the Project Site.

Implementation of **mitigation measures MM Bio 1** and **MM Bio 2** would reduce all potentially significant impacts on biological resources below a level of significance, ensuring compliance and consistency with all MSHCP conservation goals, California Environmental Quality Act guidelines and applicable mitigation measures.

INTRODUCTION

The following biological technical report describes a detailed assessment of potential sensitive natural resources located within and immediately adjacent to the Patterson Commerce Center Project, including offsite areas which will be disturbed in connection with development of the Project (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 thorough 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 14.00-acre Project Site, Assessor's Parcel Numbers (APNs) 314-110-008 to -010, 314-110-016 to -018, 314-110-020 to -023, 31-110-030, 314-110-043 to -046, 314-110-052, -053, -058, -059, and Right-of-Ways is located south of Nance Street, west of Patterson Avenue, east of Wade Avenue and north of Washington Street in the City of Perris, western Riverside County, California (U.S. Geological Survey (USGS)) 7.5' series Steele Peak Quadrangle, Riverside County, Township 4 South, Range 4 West, Section 1 as shown in Figure 1, *Regional Location Map*. Additionally, the Project includes 5.51-acres of off-site improvement areas for roadway improvements and utility installation. Therefore, the study area for this report and associated physical impact area is 19.51-acres total.

Specifically, the Project Site is located within the Western Riverside County MSHCP Mead Valley Plan Area and is not located within an MSHCP Criteria Area Cell, Cell Group, or Linkage Area (Western Riverside County Regional Conservation Authority (RCA) Geographic Information System (GIS) Data Downloads 2022).

The Project Site is completely devoid of natural undisturbed vegetation communities and is characterized as disturbed/developed. A few ornamental trees are scattered onsite adjacent to the existing structures. The property is currently utilized as an equipment storage and repair facility, as illustrated in Figure 2, *Project Site Map.* Offsite impact areas where future utilities servicing the property will be placed include the paved bordering reaches of Nance Street, Wade Avenue and Patterson Avenue extending south of Harley Knox Boulevard to West Markham Street.

The Patterson Commerce Center Project applicant would construct and operate one (1) warehouse and distribution building that would total 263,820 square feet (s.f.) and include associated improvements (e.g., parking areas, landscaping, walls/fences, utility infrastructure).

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Figure 1 - Regional Location Map
Biological Resources Technical Report
Patterson Commerce Center Project Site

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N
not to scale

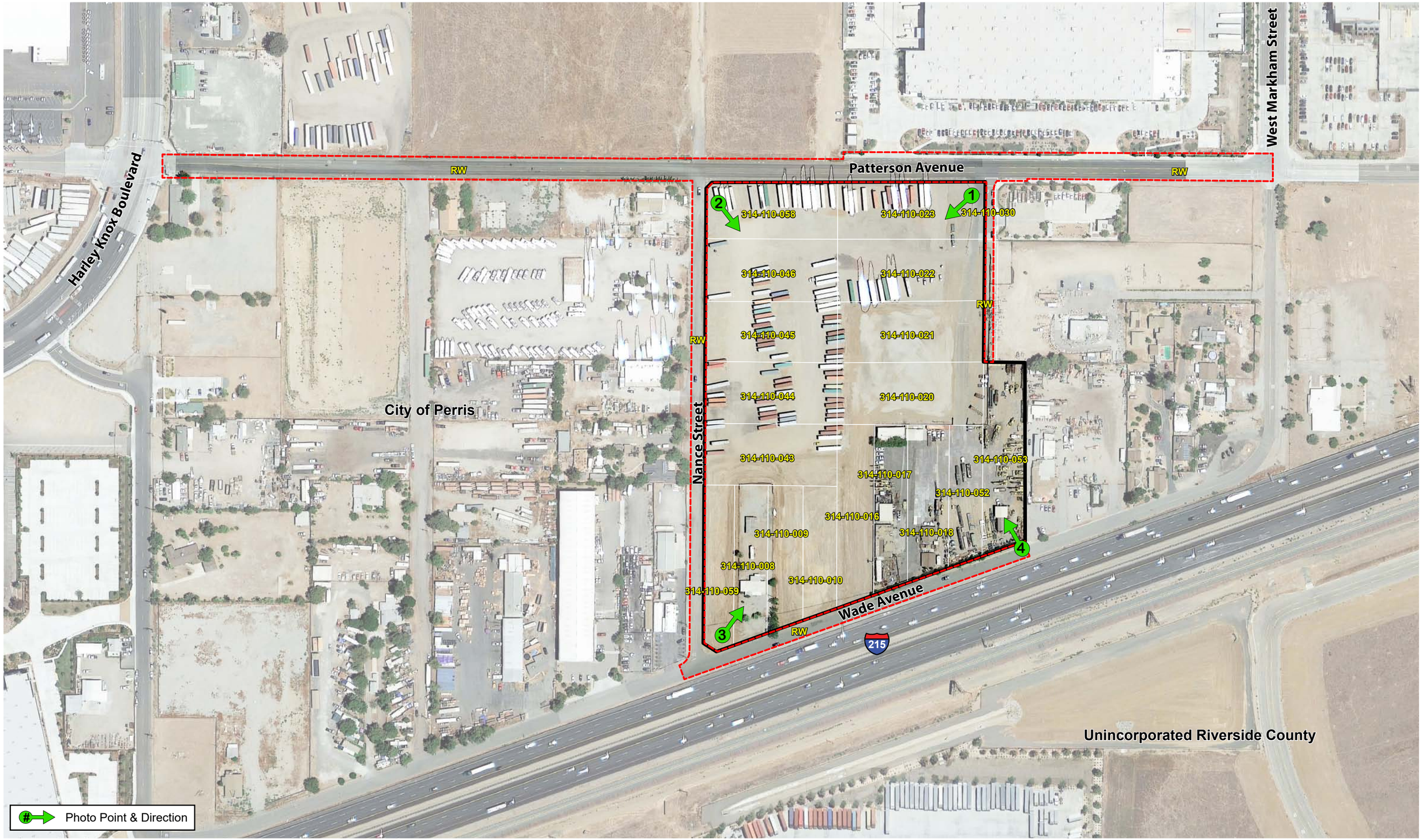

Figure 2 - Project Site Map
Biological Resources Technical Report
Patterson Commerce Center Project Site

Project Site Offsite Impact Area

CADRE Environmental

1 inch = 200 feet

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 (CNDDB 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

An initial reconnaissance survey of the Project Site was conducted by Ruben Ramirez, of Cadre Environmental in February 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 provides 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 2003). 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)].

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 Burrowing Owl Habitat Assessment

The Project Site occurs partially within a predetermined MSHCP Survey Area for the burrowing owl (*Athene cunicularia*) (RCA GIS Database 2022). Therefore, at a minimum, a habitat assessment for the species is required. 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 assessment on February 7th, 2022 throughout all regions of the Project Site and offsite impact areas. 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 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.

Jurisdictional Resources Assessment

A jurisdictional resources assessment was conducted throughout all regions of the Project Site and offsite impact areas by Cadre Environmental in February 2022. The assessment 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 (RWQCB) pursuant to Clean Water Act (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 Codes); and Riparian/Riverine Areas and Vernal Pools defined in Section 6.1.2 of the Western Riverside County MSHCP.

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 is completely devoid of undisturbed natural vegetation communities and is characterized as disturbed/developed. A few scattered ornamental trees and palms are located onsite. The property is currently utilized as an equipment storage and repair facility, as illustrated in Figure 3, *Vegetation Communities Map* and Figures 4 and 5, *Current Project Site Photographs*. The Soil Survey of Western Riverside Area has the following soils mapped within the boundary of the Project Site and offsite improvement areas as shown on Figure 6, *Soils Association Map*:

- GyA – Greenfield sandy loam, 0 to 2 percent slopes
- GyC2 - Greenfield sandy loam, 2 to 8 percent slopes, eroded
- HcC – Hanford course sandy loam, 2 to 8 percent slopes
- PaP – Pachappa fine sandy loam, 0 to 2 percent slopes
- RaA - Ramona sandy loam, 0 to 2 percent slopes, MLRA 19

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 Type	Acreage (onsite)	Acres (offsite)	Acres (total)
Disturbed	11.22	0.00	11.22
Developed	2.78	5.51	8.29
TOTALS	**14.00**	**5.51**	**19.51**

**Source: Cadre Environmental 2022.*

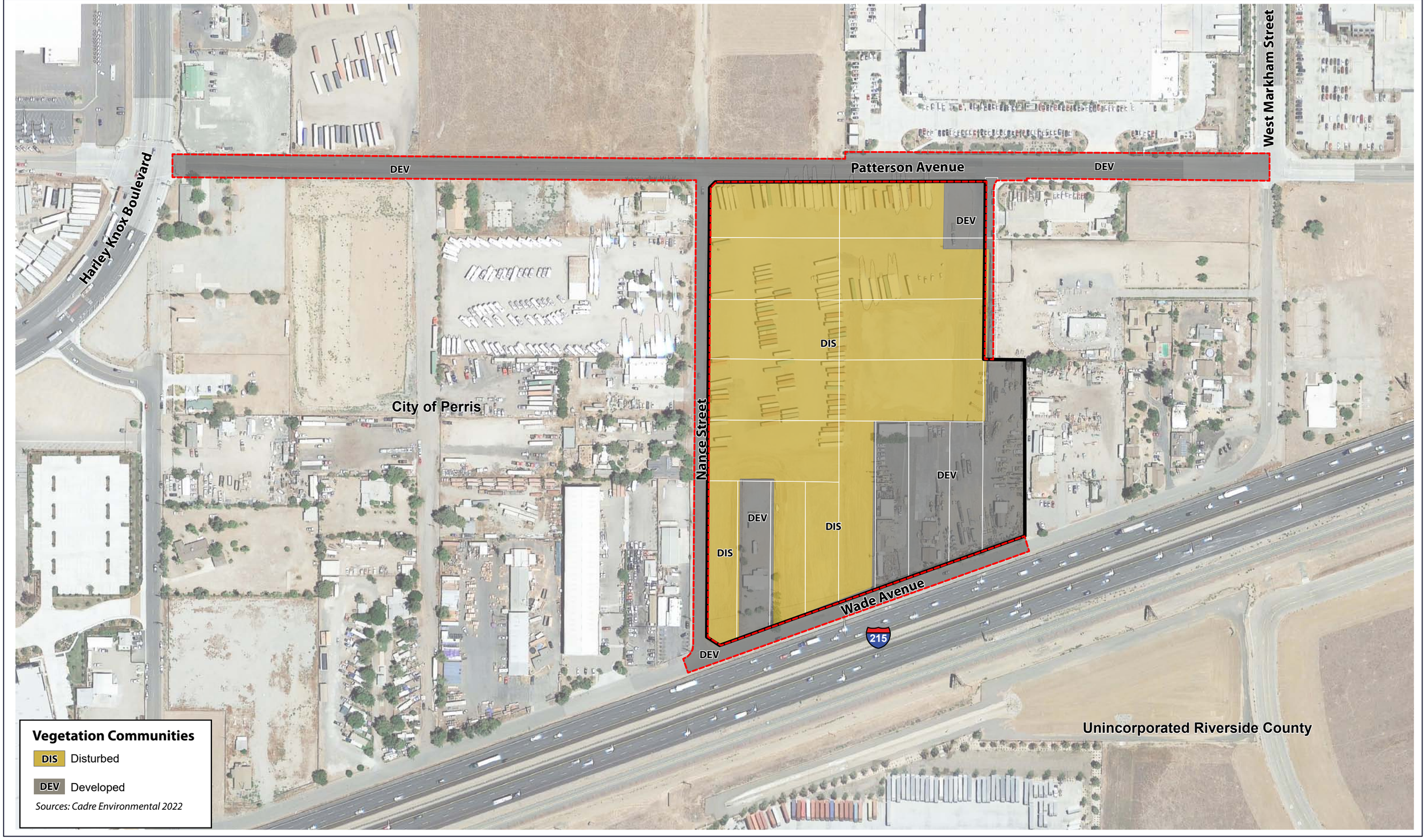

Figure 3 - Vegetation Communities Map
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Patterson Commerce Center Project Site

Project Site Offsite Impact Area

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1 inch = 200 feet

PHOTOGRAPH 1 - Northwest view of Project Site from southeast corner adjacent to Patterson Avenue.

PHOTOGRAPH 2 - Southwest view of Project Site from Patterson Avenue/Nance Street intersection.

Refer to Figure 2 - Project Site Map for Photographic Key

Figure 4 - Current Project Site Photographs

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PHOTOGRAPH 3 - Southeast view of Project Site near northwest corner adjacent to Nance Street/Wade Avenue intersection.

PHOTOGRAPH 4 - Northeast view of Project Site from southeast corner.

Refer to Figure 2 - Project Site Map for Photographic Key

Figure 5 - Current Project Site Photographs
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Patterson Commerce Center Project Site

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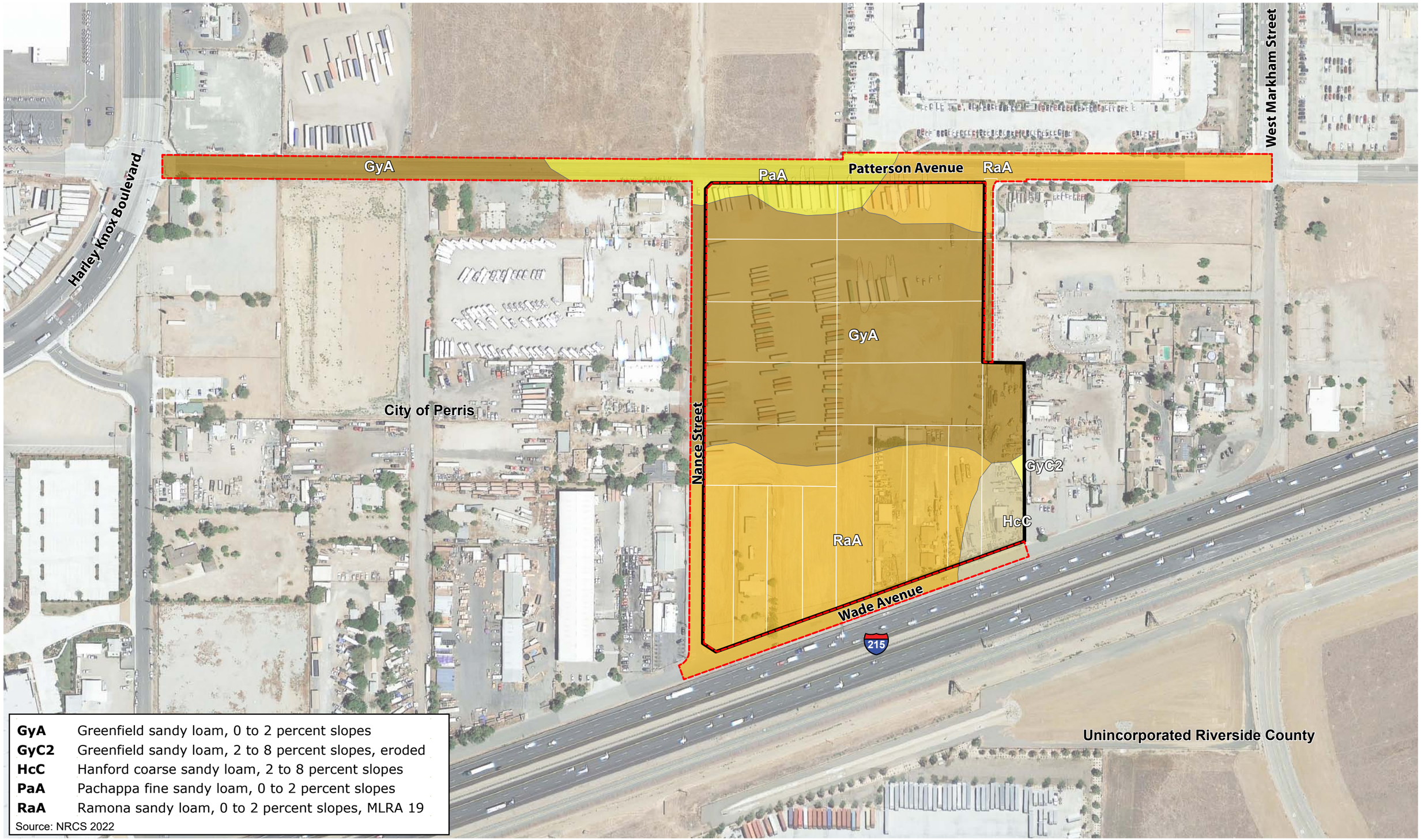

Figure 6 - Soils Association Map
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Project Site
Offsite Impact Area

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1 inch = 200 feet

Disturbed

The majority of the Project Site is characterized as disturbed habitat completely devoid of native undisturbed vegetation. Ruderal non-native species documented along the bordering fence line include prickly sow-thistle (*Sonchus asper*), ripgut grass (*Bromus diandrus*), stinknet (*Oncosiphon piluliferum*), common fiddleneck (*Amsinckia menziesii*), cheeseweed (*Malva parviflora*), burclover (*Medicago polymorpha*), black mustard (*Brassica nigra*), tocalote (*Centaurea melitensis*), red-stemmed filaree (*Erodium cicutarium*), and Russian thistle (*Salsola tragus*). A few scattered ornamental trees and palms including but not limited to Peruvian pepper tree (*Schinus mole*) and Mexican fan palm (*Washingtonia robusta*) are located onsite adjacent to the developed structures.

Developed

Developed regions of the Project Site include the paved reaches of Nance Street, Wade Avenue, Patterson Avenue, and existing onsite structures.

GENERAL PLANT & WILDLIFE SPECIES

General wildlife species documented on site include Anna's hummingbird (*Calypte anna*), mourning dove (*Zenaida macroura*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), and house finch (*Haemorhous mexicanus*).

JURISDICTIONAL RESOURCES

No wetlands or jurisdictional resources regulated by the USACE, the CDFW, or the RWQCB were documented within or adjacent to the Project Site

No MSHCP Section 6.1.2 vernal pool, riparian or riverine resources are located within or adjacent to the Project site.

Specifically, no riparian scrub, forest or woodland habitat is located within or adjacent to the Project Site.

No evidence of vernal pools, seasonal depressions, seasonally inundated road ruts or other wetland features were recorded on 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. Consistent with conditions documented onsite and as previously stated, the Project Site is characterized as Greenfield sandy loam, Hanford course sandy loam, Pachappa fine sandy loam and Ramona sandy loam, all types possessing well drained substrates (drainage class). No

indication of clay substrates or hydric soils were documented within the Project Site. A review of historic aerials was conducted to determine if inundated features (vernal pools) 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.

In summary, none of the conditions (i.e., no inundated depressions including road ruts, hydric soils, historic inundation, etc.) were observed on documented within the Project Site. No features are present that would support fairy shrimp. No standing water or other sign of areas that pond water was recorded.

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 (CNPS) 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), CNDDB (CDFW 2022a), CDFW (2022b), CNPS (2022), and Skinner and Pavlik (1994),

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

Habitats: CNDDB (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 federal Migratory Bird Treaty Act (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

The California 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 the FESA, the CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of the 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 the 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 CNDDB project. Informally listed taxa are not protected per se but warrant consideration in the preparation of biotic assessments. For some species, the CNDDB 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 the 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 is not located within an MSHCP narrow endemic or criteria area sensitive plant species survey area. No state or federally listed threatened or endangered plant species were detected or are expected to occur onsite. No other CNPS, special-status

plants, or species of local concern were observed onsite as outlined in Table 2, *Sensitive Plant Species with Potential to Occur Onsite*.

Table 2.
Sensitive Plant Species with Potential to Occur Onsite.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
Munz's onion (*Allium munzii*) FE/ST CRPR List 1B.1 MSHCP Covered Species	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 coastal sage scrub, or occasionally, in cismontane juniper woodlands. (MSHCP 2003)	No potential to occur onsite based on a lack of suitable substrates and habitat.
San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*) FE CRPR List 1B.1 MSHCP Covered Species	The San Jacinto Valley crownscale occurs primarily in floodplains that support alkali scrub, alkali playas, vernal pools, and occasionally alkali grasslands (Bramlet 1993).	No potential to occur onsite based on a lack of suitable substrates and habitat.
Parish's brittlebush (*Atriplex parishii*) CRPR List 1B.1 MSHCP Covered Species	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. (CNPS 2022)	No potential to occur onsite based on a lack of suitable substrates and habitat.
Smooth tarplant (*Centromadia pungens* ssp. *laevis*) CRPR 1B.1 MSHCP Covered Species	Annual herb which generally blooms from April to September within chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland (alkaline substrates). (CNPS 2022)	No potential to occur onsite based on a lack of suitable substrates and habitat.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
Parry's spineflower (*Chorizanthe parryi* var. *parryi*) CRPR 1B.1 MSHCP Covered Species	Annual herb which generally blooms from April to June within chaparral, cismontane woodland, coastal scrub and grassland habitats with sandy and/or rocky openings (CNPS 2022).	No potential to occur onsite based on a lack of suitable substrates and habitat.
Long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*) CRPR 1B.2 MSHCP Covered Species	Long-spined spine flower is associated primarily with heavy, often rocky, clay soils in southern needlegrass grassland, and openings in coastal sage scrub, and chaparral (CNPS 2001; Reiser 2001; CNDDB). (MSHCP 2003)	No potential to occur onsite based on a lack of suitable substrates and habitat.
Palmer's grapplinghook (*Harpagonella palmeri)* CRPR 4.2 MSHCP Covered Species	Palmer's grapplinghook is associated with clay, cobbly clay soils in open coastal sage scrub, chaparral, valley and foothill grasslands (Reiser 2001), and scrub oak woodland (CNDDB 2001) below 3,500 feet (Munz 1974). (MSHCP 2003)	No potential to occur onsite based on a lack of suitable substrates and habitat.
Robinson's pepper-grass (*Lepidium virginicum var. robinsonii*) CRPR 4.3	Annual herb which generally blooms from January to July within chaparral and coastal sage scrub habitats (CNPS 2022).	No potential to occur onsite based on a lack of suitable substrates and habitat.
Little mousetail (*Myosurus minimus* ssp. *apus*) CRPR 3.1 MSHCP Covered Species	Little mousetail is widespread in California. It occurs in alkaline vernal pools, and vernal alkali plains and grasslands, and blooms March to June. (CNPS 2022)	No potential to occur onsite based on a lack of suitable substrates and habitat.

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
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

Source: Cadre Environmental 2022.

SENSITIVE WILDLIFE

The Project Site occurs partially within a predetermined MSHCP Survey Area for the burrowing owl (*Athene cunicularia*) (RCA GIS Database 2022). No state or federally listed threatened or endangered wildlife species were detected or are expected to occur onsite. No other special-status wildlife species, or species of local concern were observed or expected to occur onsite as outlined in Table 3, *Sensitive Wildlife Species with Potential to Occur Onsite*.

Table 3.
Sensitive Wildlife Species with Potential to Occur Onsite.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
INVERTEBRATES		
Quino checkerspot butterfly (*Euphydryas editha quino*) 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 *Plantago erecta*, *Plantago patagonica*, *Castilleja exserta,* and *Cordylanthus rigidus*. Adult QCB often occur on open or sparsely vegetated rounded hilltops, ridgelines, and occasionally rocky outcrops. (MSHCP 2003)	No potential to occur onsite based on a lack of suitable habitat and soils. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
AMPHIBIANS		
Western spadefoot (*Spea hammondii*) SSC MSHCP Covered Species	The western spadefoot population is patchily but widely distributed throughout Riverside Lowlands, San Jacinto Foothills. Primary habitat for this species includes 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 2003)	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
REPTILES		
Orange-throated whiptail (*Aspidoscelis hyperythra*) 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.	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Coastal western whiptail (*Aspidoscelis tigris stejnegeri*) 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 2003).	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Red-diamond rattlesnake (*Crotalus ruber*) 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 2003).	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Western pond turtle (*Emys marmorata*) 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 *et al*., 1992; Holland, 1994). Pools are the preferred habitat within streams (Bury, 1972, MSHCP 2003).	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Coast horned lizard (*Phrynosoma blainvillii*) 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 2003).	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
BIRDS		
Cooper's hawk (*Accipiter cooperii*) 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.	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) 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.	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Bell's sage sparrow (*Amphispiza belli*) 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 2003).	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Burrowing owls (*Athene cunicularia*) 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 2003).	No potential burrowing owl burrows greater than 4 inches in diameter or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within or immediately adjacent to the Project Site.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
California horned lark (*Eremophila alpestris actia*) 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, *et al*. 1990). (MSHCP 2003)	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
White-tailed kite (*Elanus leucurus*) 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).	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Southwestern willow flycatcher (*Empidonax traillii extimus*) 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 2003).	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Loggerhead shrike (*Lanius ludovicianus*) 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.	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
Coastal California gnatcatcher (*Polioptila californica californica*) 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 (*Artemisia californica*), and California buckwheat (*Eriogonum fasciculatum*).	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Least Bell's vireo (*Vireo bellii pusillus*) 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.	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
MAMMALS		
Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax)* 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 2003).	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) SSC	The San Diego black-tailed jackrabbit in open habitats, primarily including grasslands, sage scrub, alluvial fan sage scrub, and Great Basin sage scrub.	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
San Diego desert woodrat (*Neotoma lepida intermedia*) 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 2003)	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
Southern grasshopper house (*Onychomys torridus ramona*) 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)	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Stephens' kangaroo rat (*Dipodomys stephensi*) 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 2003).	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Western mastiff bat (*Eumops perotis californicus*) SSC	Western mastiff bats are found in a variety of biotic environments from low desert scrub to chaparral, oak woodland and ponderosa pine.	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Yellow bat (*Lasiurus xanthinus*) 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.	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
Bobcat (*Lynx rufus*) MSHCP Covered Species	The bobcat requires large expanses of relatively undisturbed brushy and rocky habitats near springs or other perennial water sources.	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Pocketed free-tailed bat (*Nyctinomops femorosaccus*) 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).	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) 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 2003).	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
American badger (*Taxidea taxus*) SSC	The American badger prefers friable soils in open grassland and scrub habitat in southern California.	No potential to occur onsite based on a lack of suitable habitat. The Project Site is devoid of native undisturbed vegetation and is characterized as disturbed and developed.
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 Gallager 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 habits 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.

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

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 USACE that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The USACE 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 USACE (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.

Wetland Definition Pursuant to Section 404 of the Clean Water Act

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 USACE 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."

On April 21, 2020 the U.S. Environmental Protection Agency (EPA) and the USACE published the Navigable Waters Protection Rule to define "Waters of the United States" in the Federal Register. The April 2020 definition includes four simple categories of jurisdictional waters, including: (1) the territorial seas and traditional navigable waters; (2) perennial and intermittent tributaries to those waters; (3) certain lakes, ponds and impoundments; and (4) wetlands adjacent to jurisdictional waters.

The April 2020 definition provides clear exclusions for many water features that traditionally have been regulated, such as ephemeral drainages. The April 2020 definition has been formally adopted by the EPA and the USACE and was used for this Jurisdictional Delineation.

Wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas, are defined by the USACE 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 the USACE (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 USACE 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 USACE 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 USACE and potentially subject to USACE jurisdiction.

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 Socialists 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 the 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 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 threated under the CESA. No plants listed under the CESA occur on the Project Site onsite or offsite impact areas.

Regional Water Quality Control Board

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.

CDFW Streambed Alteration Agreement

Waters of the State are regulated by the 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. The 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.

LOCAL

Western Riverside County Multiple Species Habitat Conservation Plan Compliance Analysis

The proposed Project Site is located completely within the MSHCP Area, 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 MHSCP 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 the 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

Regions of the MHSCP have been organized into Area Plans that generally coincide with logical political boundaries, including city limits or long-standing unincorporated communities. The Patterson Commerce Center Project Site is located within the Mead Valley Area Plan. The Mead Valley Area Plan has a target conservation acreage of 4,980 to 6,730 acres.

The Project Site is not located within an MSHCP Criteria Area Cell, Cell Group, or Linkage Area. Therefore, no Habitat Evaluation and Acquisition Negotiation Strategy (HANS) or Joint Project Review (JPR) are required.

MSHCP Sensitive Species Surveys

The Project Site does not occur within an MSHCP predetermined Survey Area for narrow endemic plant species; therefore, no surveys are required (RCA GIS Data Downloads 2022). The Project is consistent with MSHCP Section 6.1.3

The Project Site is not located within a Criteria Area 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 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 occurs partially within a predetermined Survey Area for the burrowing owl. No suitable burrowing owl burrows greater than 4 inches in diameter potentially utilized for refugia and/or nesting were documented within the Project Site. No burrowing owl or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within the Project Site boundary during the site assessment. Focused surveys are not warranted. Regardless, as required for all development in the Perris Valley Commerce Center Specific Plan (PVCCSP) area, a pre-construction survey will be conducted within 30 days prior to the initiation of construction to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP (**mitigation measure MM Bio 2, which implements PVCCSP EIR mitigation measure MM Bio 2**). Mitigation measure MM Bio 2 is being incorporated into the Project as required by the City of Perris for all projects in the PVCCSP area. Implementation of mitigation measure MM Bio 2 will ensure the Project is consistent with MSHCP Section 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 2003)

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 2003)

No MSHCP Section 6.1.2 vernal pool, riparian or riverine resources are located within or adjacent to the Project site.

Specifically, no riparian scrub, forest or woodland habitat suitable for the least Bell's vireo, southwestern willow flycatcher or western yellow-billed cuckoo is located within or adjacent to the Project Site. Also, no evidence of vernal pools, seasonal depressions, seasonally inundated road ruts or other wetland features were recorded on 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. Consistent with conditions documented onsite and as previously stated, the Project Site is characterized as Greenfield sandy loam, Hanford course sandy loam, Pachappa fine sandy loam and Ramona sandy loam, all types possessing well drained substrates (drainage class). No indication of clay substrates or hydric soils were documented within the Project Site.

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 know (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.

In summary, none of the conditions (i.e., no inundated depressions including road ruts, hydric soils, historic inundation, etc.) were observed on documented within the Project Site. No features are present that would support fairy shrimp. No standing water or other sign of areas that pond water was recorded.

An MSHCP Determination of Biological Equivalent or Superior Preservation (DBESP) will not be required. The Project is consistent with MSHCP Section 6.1.2.

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.

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).

No heritage or protected tree species that meet the definition of the City of Perris Urban Forestry Establishment and Care Ordinance occur onsite. The removal of primarily Peruvian pepper trees would not conflict with City's tree policies.

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 are 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 disturbed and developed. The proposed Project 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 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 $3,365 per dwelling unit; Residential, density between 8.1 and 14.0 dwelling units per acre $1.515 per dwelling unit; Residential, density greater than 14.1 dwelling units per acre $670 per dwelling unit; Commercial development $16,358 per acre; and Industrial development $16,358 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) of the Public Resources Code. 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 Tittle 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 19.51-acres of onsite and offsite disturbed/developed habitats will be directly impacted as a result of Project implementation as summarized in Table 4, *Vegetation Community Impacts,* and illustrated on Figure 7*, Vegetation Communities Impact Map*. Offsite impacts include road improvements and tie-ins with existing infrastructure. As previously stated, no vegetation communities listed by the 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. No impact.

The Project applicant shall pay MSHCP Local Development Mitigation fees as established and implemented by the City of Perris - Industrial Development $16,358 per acre.

Table 4.
Vegetation Community Impacts

*Vegetation Type	Acreage (onsite)	Acres (offsite)	Acres (total)	Impact Totals
Disturbed	11.22	0.00	11.22	11.22
Developed	2.78	5.51	8.29	8.29
TOTALS	**14.00**	**5.51**	**19.51**	**19.51**

**Source: Cadre Environmental 2022.*

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

No heritage or protected tree species that meet the definition of the City of Perris Urban Forestry Establishment and Care Ordinance occur onsite. The removal of primarily Peruvian pepper trees would not conflict with City's tree policies.

Jurisdictional Resources

No wetlands or jurisdictional resources regulated by the USACE, the CDFW, or the RWQCB were documented within or adjacent to the Project Site. Impacts to water quality would be less than significant during both construction and operation (i.e., if warranted, compliance with National Pollutant Discharge Elimination System (NPDES) permit and Municipal Separate Storm Sewer System (MS4) code provisions would ensure no impacts to species, and compliance with County of Riverside Phase 1 MS4 permit requirements and LID manual would also ensure no impacts to species. No Impact.

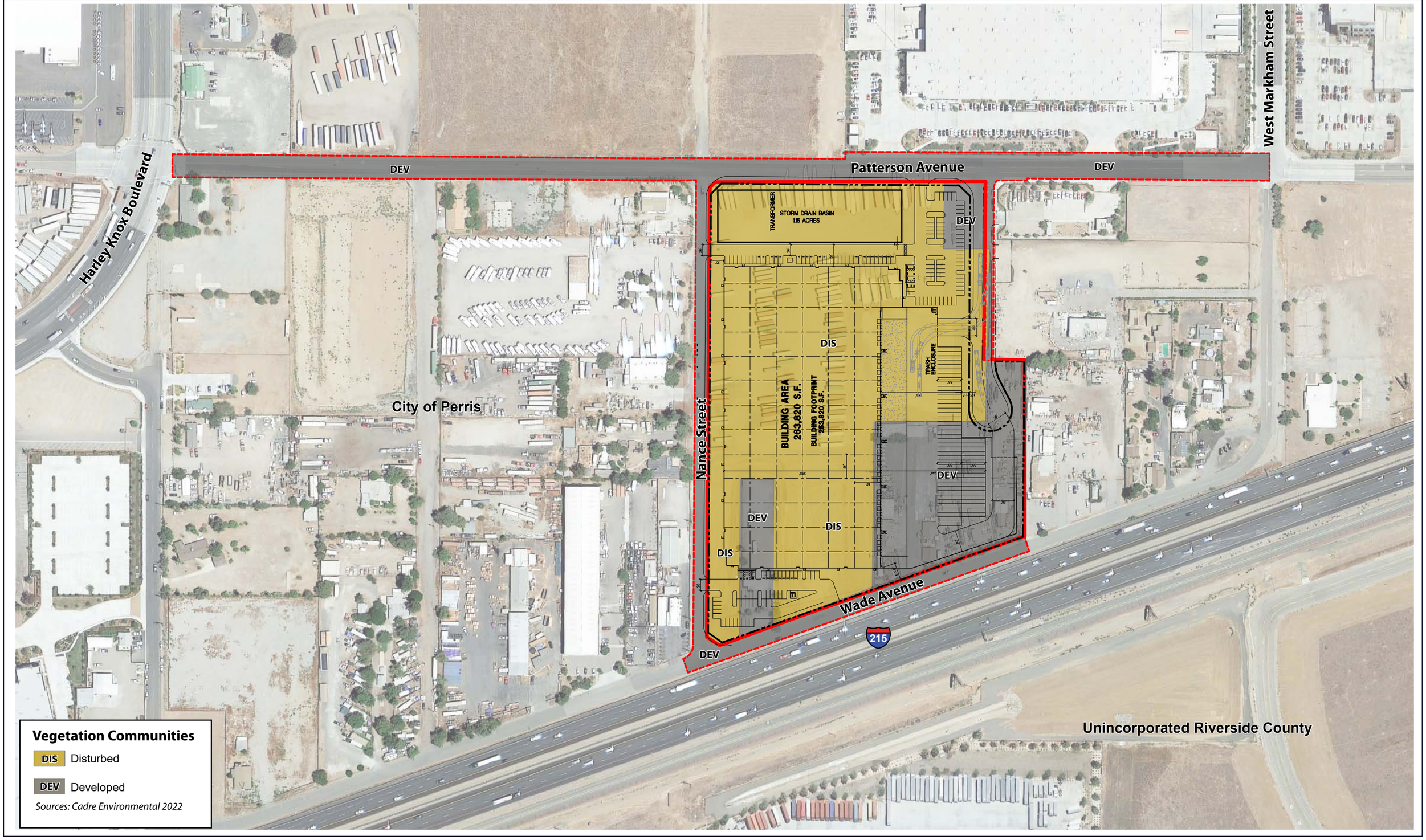

Figure 7 - Vegetation Communities Impact Map
Biological Resources Technical Report
Patterson Commerce Center Project Site

Project Site Impact Area

Offsite Impact Area

CADRE Environmental

1 inch = 200 feet

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 2003).

The Project Site does not occur within an MSHCP predetermined Survey Area for narrow endemic plant species; therefore, no surveys are required (RCA GIS Data Downloads 2022). The Project is consistent with MSHCP Section 6.1.3

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

No state or federally listed threatened or endangered plant species were detected or are expected to occur onsite. No other CNPS, special-status plants, or species of local concern were observed onsite as outlined in Table 3, *Sensitive Plant Species with Potential to Occur Onsite*. No Impact.

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 2003).

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 occurs partially within a predetermined Survey Area for the burrowing owl. No suitable burrowing owl burrows greater than 4 inches in diameter potentially utilized for refugia and/or nesting were documented within the Project Site. No burrowing owl or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within the Project Site boundary during the site assessment. Focused surveys are not warranted. Regardless, as required for all development in the PVCCSP area, a pre-construction survey will be conducted within 30 days prior to the initiation of construction to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP (**mitigation measure MM Bio 2, which implements PVCCSP EIR mitigation measure MM Bio 2**). Mitigation measure MM Bio 2 is being incorporated into the Project as required by the City of Perris for all projects in the PVCCSP planning area. Implementation of mitigation measure MM Bio 2 will ensure the Project is consistent with MSHCP Section 6.3.2.

No state or federally listed threatened or endangered wildlife species were detected or are expected to occur onsite. No other special-status wildlife species, or species of local

concern were observed or expected to occur onsite as outlined in Table 4, *Sensitive Wildlife Species with Potential to Occur Onsite*. No Impact.

A few scattered ornamental trees and palms including but not limited to Peruvian pepper tree and Mexican fan palm are located onsite and are expected to potentially provide nesting habitat for migratory birds protected under the CDFG Codes and MBTA. As required by mitigation measure MM Bio 1, which implements PVCCSP EIR mitigation measure MM Bio 1: If site-preparation activities for an implementing project are proposed during the nesting/breeding season, a pre-activity field survey shall be conducted by a qualified biologist prior to the issuance of grading permits for such project, to determine if active nests of species protected by the MBTA or CDFG Codes are present in the construction zone (**mitigation measure MM Bio 1**). Mitigation measure MM Bio 1 is being incorporated into the Project as required by the City of Perris for all projects in the PVCCSP area.

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 MSHCP Local Development Mitigation fees and implementation of **mitigation measure MM Bio 2**.

INDIRECT IMPACTS

All 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 and is not located adjacent to an existing or proposed MSHCP Conservation Area. The Project is consistent with MSHCP Section 6.1.4.

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 NPDES permits. Both of these permits include the treatment of all surface runoff from paved and developed areas, the implementation of applicable Best Management Practices (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. No Impact.

Toxics

Storm water treatment systems 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 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 into the surrounding areas. No Impact.

Lighting

No open space or sensitive receptor sites are located within or adjacent to the Project Site. No Impact.

Noise

No open space or sensitive receptor sites are located within or adjacent to the Project Site. No Impact.

Invasive Species

The landscape plans for the residential, commercial and mixed development shall avoid the use of invasive species for the portions of the development areas adjacent to the open space areas. No open space or sensitive receptor sites are located within or adjacent to the Project Site. No Impact.

Barriers

Barriers are intended to reduce or minimize unauthorized public access and associated impacts to protected resources. The Project Site and is not located adjacent to an existing or proposed MSHCP Conservation Area or protected resources. No Impact.

CUMULATIVE IMPACTS

The temporary direct and/or indirect impacts of the Project would not result in significant cumulative impacts (CEQA Guidelines 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. Although the Project would result in the permanent onsite and offsite loss of 19.51-acres of disturbed and developed habitats, the MSHCP was developed to address the comprehensive regional planning effort and anticipated growth in the City of Perris. The proposed Project has been designed and mitigated to remain in compliance with all MSHCP conservation goals and guidelines and therefore will not result in an adverse cumulative impact.

The following biological mitigation and avoidance 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, CEQA guidelines and all applicable PVCCSP EIR Mitigation Measures. These mitigation measures implement PVCCSP EIR mitigation measures MM BIO 1 and MM Bio 2, which have subsequently been revised by the City of Perris per CDFW recommendations.

MM Bio 1 Regulatory Requirement BMTA & CDFG Codes

In order to avoid violation of the MBTA and the California Fish and Game Code, 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.

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.

If active nests are not located within the Project site and an appropriate buffer of 500 feet of an active listed species or raptor nest, 300 feet of other sensitive or protected bird nests (non-listed), or 100 feet of sensitive or protected songbird nests, construction may be conducted during the nesting/breeding season. However, if active nests are located during the pre-activity field survey, the Biologist shall immediately establish a conservative avoidance buffer surrounding the nest based on their best professional judgement and experience. 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 on-site qualified biologist will review and verify compliance with these nesting avoidance buffers and will 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 for mitigation monitoring compliance record keeping.

MM Bio 2 MSHCP Burrowing Owl 30-Day Pre-construction 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 grading and

construction activities on the Project site. The survey will include the Project site and all suitable burrowing owl habitat within a 500-foot buffer. The results of the survey will be submitted to the City prior to obtaining a grading permit. In addition, if burrowing owls are observed during the MBTA nesting bird survey, to be conducted within three days prior to ground disturbance or vegetation clearance, the observation shall be reported to the Wildlife Agencies. 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 Survey Instructions for the Western Riverside MSHCP.

If burrowing owl are detected, the CDFW shall be sent written notification by the City, within three days of detection of burrowing owls. If active nests are identified during the pre-construction survey, the nests shall be avoided and the qualified biologist and Project Applicant shall coordinate with the City of Perris Planning Department, 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 letter report shall be prepared by the qualified biologist documenting the results of the Burrowing Owl Plan. The letter shall be submitted to the CDFW prior to the start of Project activities. When a qualified 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 owls occupy the Project site after Project activities have started , then construction activities shall be halted immediately. The Project proponent shall notify the City and the City shall notify the CDFW and the USFWS within 48 hours of detection. A Burrowing Owl Plan, as detailed above, shall be implemented.

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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.*

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