Biological Resources Technical Report

Arlington Mixed Use Project Site
City of Riverside, California

FINAL REPORT

APN 226-180-015 & Right-of-Way

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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
EPA	United States Environmental Protection Agency
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
NEPS	Narrow Endemic Plant Species
NEPSA	Narrow Endemic Plant Survey Areas
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
RCIP	Riverside County Integrated Project
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSC	California Species of Special Concern
SWRCB	State Water Resources Control Board
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

INTRODUCTION

The following biological technical report describes a detailed assessment of potential sensitive natural resources located within and immediately adjacent to the Arlington Mixed Use Project. 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 Riverside. 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 measures.

PROJECT LOCATION & DESCRIPTION

The 17.43-acre Project Site, Assessor Parcel Numbers (APN) 226-180-015 is located south of Sierra Street, east of Streeter Avenue, and north of Arlington Avenue in the City of Riverside, western Riverside County, California (U.S. Geological Survey (USGS)) 7.5' series Riverside West Quadrangle, Riverside County, Township 2 South, Range 5 West, Section 33, as shown in Figure 1, *Regional Location Map*. A 13.10-acre offsite impact area extends north along Streeter Avenue, west along Central Avenue and north along Hillside Avenue within existing right-of-way's as illustrated in Figure 2, *Project Site Map.*

The Project Site and offsite impact area are located within the Western Riverside County MSHCP Cities of Riverside and Norco Plan Area outside of a designated Linkage Area (Western Riverside County Regional Conservation Authority (RCA) Geographic Information System (GIS) Data Downloads 2022). The northern 0.15-acre of the offsite impact area located within the Hillside Avenue right-of-way at the confluence of Mountain View Avenue extends into MSHCP Criteria Cell 621, Subunit 1 – Santa Ana River South.

The Project Site and offsite impact area are completely developed with scattered ornamental vegetation, as illustrated in Figure 2, *Project Site Map.*

The proposed action represents a redevelopment project that will demolish a closed Sears department store, appurtenant structures and facilities for a mixed-use development including high-density residential homes, park, retail and grocery store.

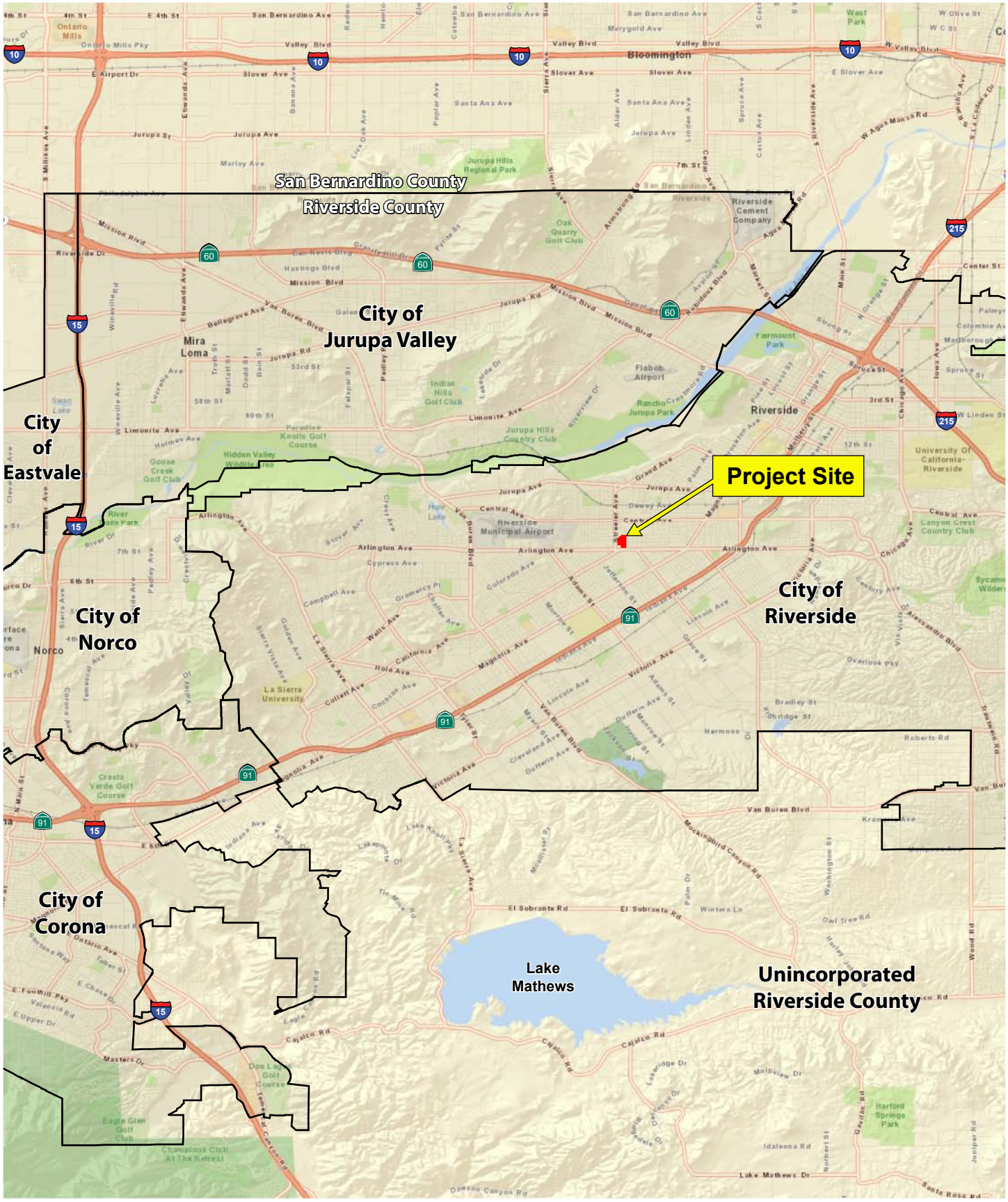

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Figure 1 - Regional Location Map

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Arlington Mixed Use Project Site, City of Riverside

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not to scale

Offsite Impact Area Boundary
Hillside Avenue
Criteria Cell 621
Arlington Avenue
Central Avenue
Offsite Impact Area Boundary
Streeter Avenue
Project Site
1
2
3
4
5
6
7
8
9
10
Photo Point & Direction

APN 226-180-015 and Right-of-Way

Figure 2 - Project Site Map

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Arlington Mixed Use Project Site, City of Riverside

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1 inch = 400 feet

LITERATURE REVIEW

Existing biological resource conditions within and adjacent to the Project Site and offsite impact area 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 and offsite impact area. The California Natural Diversity Database (CNDDB 2022a), a CDFW Natural Heritage Division species account database, was also reviewed for all pertinent information regarding the locations of known occurrences of sensitive species in the vicinity of the property. In addition, numerous regional floral and faunal field guides were utilized in the identification of species and suitable habitats. Combined, the sources reviewed provided an excellent baseline from which to inventory the biological resources potentially occurring in the area. Other sources of information included the review of unpublished biological resource letter reports and assessments. Other CDFW reports and publications consulted include the following:

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

FIELD SURVEYS

Reconnaissance surveys of the Project Site and offsite impact area were conducted by Ruben Ramirez, Cadre Environmental on September 9th, 2022 and February 2nd, 2023 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 and offsite impact area.

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 and offsite impact area during the reconnaissance surveys 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, offsite impact area 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 and offsite impact area 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.

Jurisdictional Delineation

The Project Site and offsite impact area were assessed for jurisdiction resources regulated by the United States Army Corps of Engineers (USACE), CDFW, and/or Regional Water Quality Control Board (RWQCB). Specifically, the assessment determined the boundaries or absence of potential wetland and non-wetland waters regulated by the USACE pursuant to Clean Water Act (CWA) Section 404; wetland and non-wetland waters of the State subject to the regulatory jurisdiction of the RWQCB pursuant to CWA Section 401 and State Porter-Cologne Water Quality Control Act (Porter-Cologne); streambed and riparian habitat subject to the regulatory jurisdiction of

the CDFW pursuant Sections 1600 *et seq*. of the California Fish and Game Code (CDFG Code); and Riparian/Riverine Areas and Vernal Pools defined in Section 6.1.2 of the Western Riverside County MSHCP.

EXISTING ENVIRONMENTAL SETTING

SURROUNDING LAND USES/TOPOGRAPHY/SOILS

The entire Project Site and offsite impact area are developed and characterized as a closed Sears department store including scattered ornamental vegetation and developed reaches of Streeter Avenue, Central Avenue, and Hillside Avenue, as illustrated in Figure 3, *Vegetation Communities Map* and Figures 4 to 8, *Current Project Site Photographs*. Although no exposed soils are present, the Soil Survey of Western Riverside Area has the following soils mapped within the boundary of the Project Site and offsite impact area as shown on Figure 9, *Soils Association Map*:

- BhA – Buchenau loam, slightly saline-alkaline, 0 to 2 percent slopes
- BuC2 – Buren fine sandy loam, 2 to 8 precent slopes, eroded
- HcA – Hanford course sandy loam, 0 to 2 precent slopes

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	Onsite Acres	offsite Acres	Total Acres
Developed/Ornamental	17.43	13.10	30.53
TOTAL	**17.43**	**13.10**	**30.53**

**Source: Cadre Environmental 2022.*

Developed/Ornamental

As previously stated, the entire Project Site and offsite impact area are developed and characterized as a closed Sears department store, parking lots, scattered ornamental vegetation and developed reaches of Streeter Avenue, Central Avenue, and Hillside Avenue. Ornamental vegetation documented onsite includes Canary Island pine (*Pinus canariensis*), southern live oak (*Quercus virginiana*), Mexican fan palm (*Washingtonia robusta*), Chinese tallow (*Sapium sebifrum*), fern pine (*Podocarpus gracilior*), and southern magnolia (*Magnolia grandiflora*). No native vegetation is present within or adjacent to the Project Site or offsite impact area.

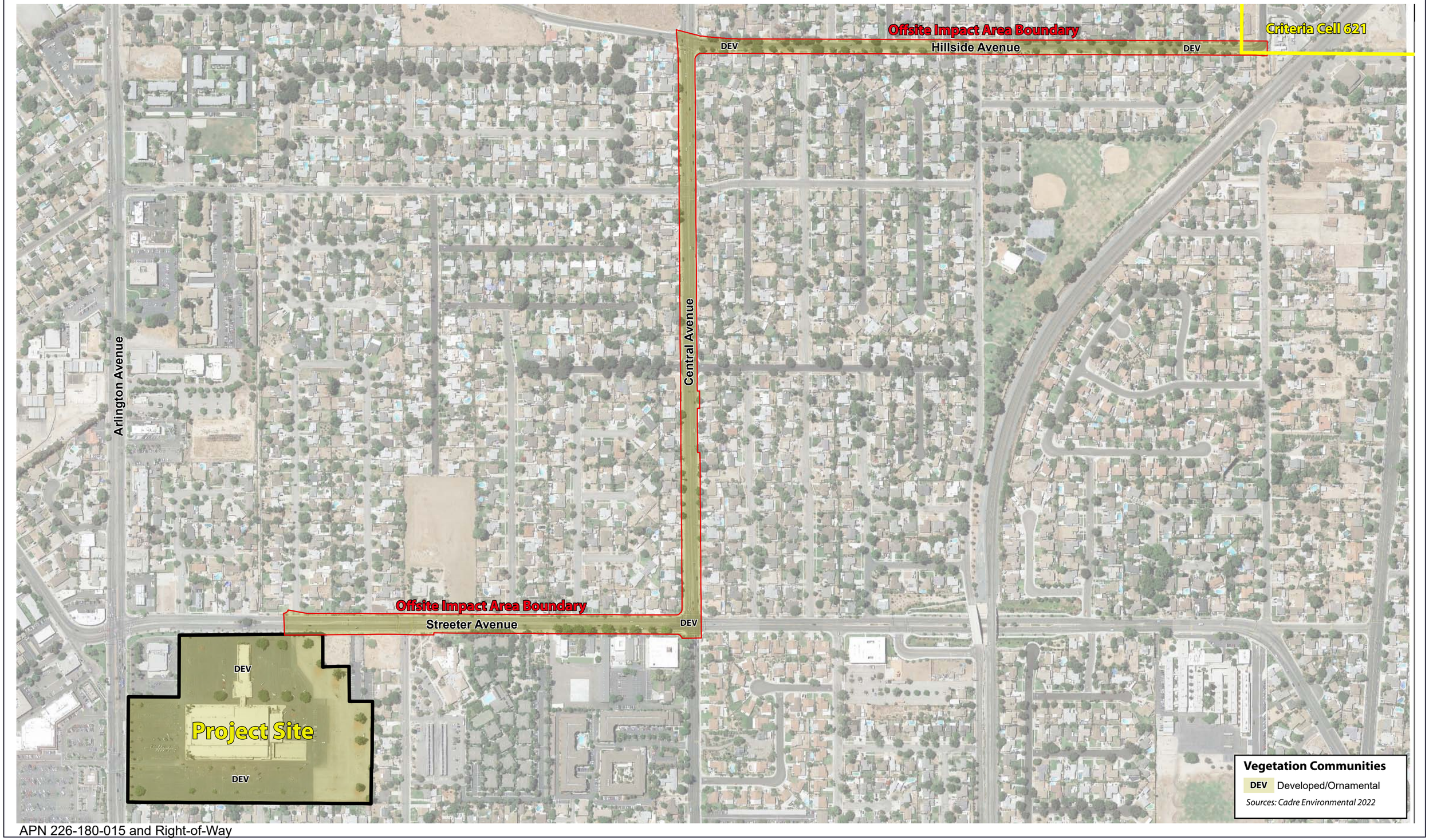

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Figure 3 - Vegetation Communities Site Map

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1 inch = 400 feet

PHOTOGRAPH 1

PHOTOGRAPH 2

Refer to Figure 2 - Project Site Map for Photographic Key

Figure 4 - Current Project Site Photographs

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PHOTOGRAPH 3

PHOTOGRAPH 4

Refer to Figure 2 - Project Site Map for Photographic Key

Figure 5 - Current Project Site Photographs

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PHOTOGRAPH 5

PHOTOGRAPH 6

Refer to Figure 2 - Project Site Map for Photographic Key

Figure 6 - Current Project Site Photographs

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PHOTOGRAPH 7

PHOTOGRAPH 8

Refer to Figure 2 - Project Site Map for Photographic Key

Figure 7 - Current Project Site Photographs

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PHOTOGRAPH 9

PHOTOGRAPH 10

Refer to Figure 2 - Project Site Map for Photographic Key

Figure 8 - Current Project Site Photographs

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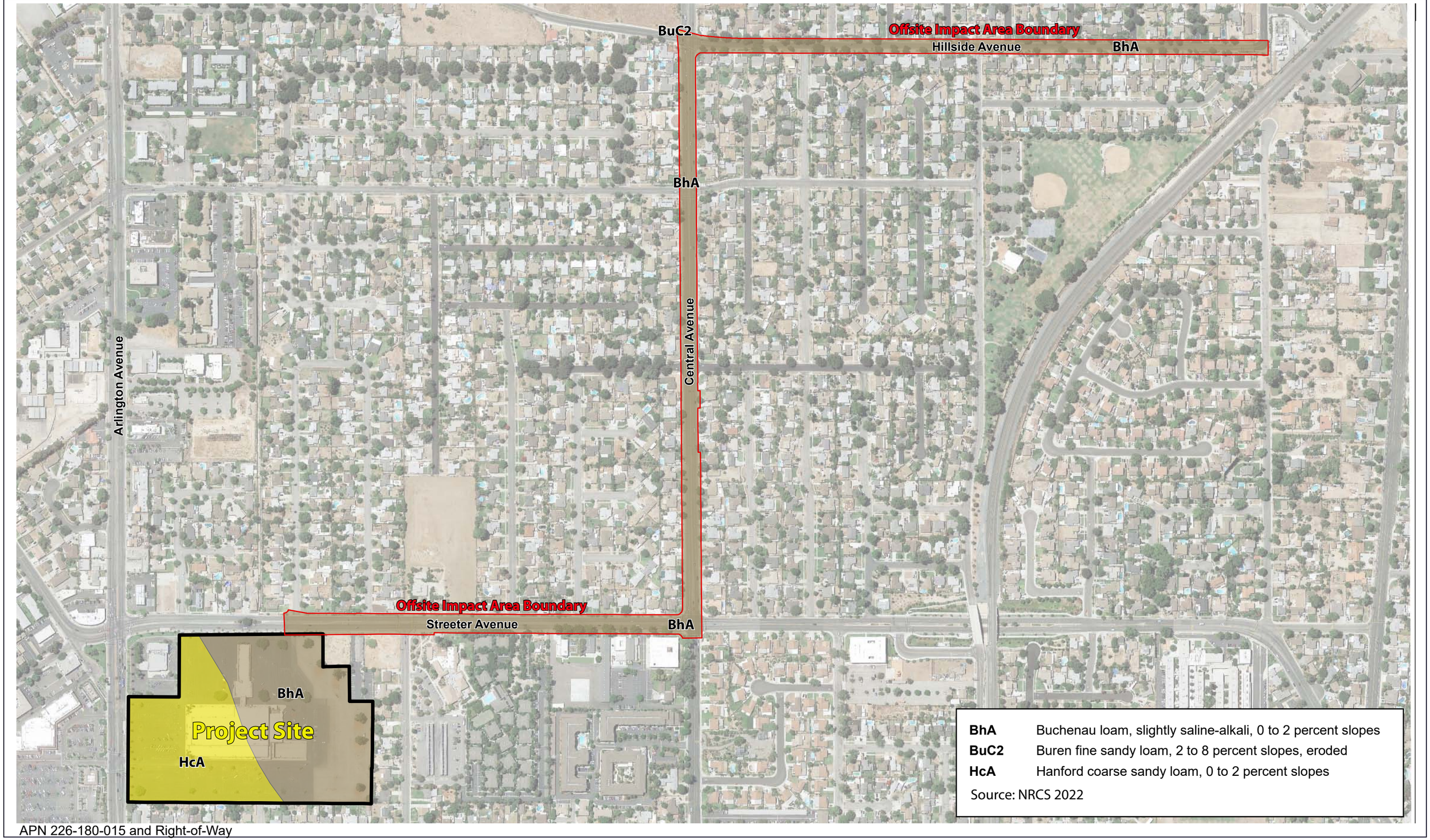

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Figure 9 - Soils Association Map

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GENERAL PLANT & WILDLIFE SPECIES

A complete list of plants documented onsite is presented in the previous section, Vegetation Communities.

General wildlife species documented on site include American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), and house sparrow (Passer domesticus).

JURISDICTIONAL RESOURCES

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

MSHCP Riparian/Riverine/Vernal Pool Resources

No MSHCP Section 6.1.2 vernal pool, riparian or riverine resources are located within or adjacent to the Project site of offsite impact area. Specifically, no riparian scrub, forest or woodland habitat is located within or adjacent to the Project Site or offsite impact area.

No evidence of vernal pools, seasonal depressions, seasonally inundated road ruts or other wetland features were recorded on the Project Site or offsite impact area. 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 and offsite impact area are characterized as Buchenau loam, slightly saline-alkaline, 0 to 2 percent slopes (BhA), Buren fine sandy loam, 2 to 8 precent slopes, eroded (BuC2), and Hanford course sandy loam, 0 to 2 precent slopes (HcA), all types possessing well drained substrates (drainage class). No indication of clay substrates or hydric soils were documented within the Project Site or offsite impact area. 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 or offsite impact area 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 or offsite impact area. 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. CDFW uses various terminology and classifications to describe vulnerable species. There are additional sensitive species classifications applicable in California. These are described below.

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

Plants: USFWS (2022), 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 (2022).

Habitats: CNDDB (CDFW 2022).

FEDERAL PROTECTION AND CLASSIFICATIONS

The Federal Endangered Species Act of 1973 (FESA) defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range..." Threatened species are defined as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to "take" any listed species. "Take" is defined as follows in Section 3(18) of the FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification as forms of a "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants. Recently, the USFWS instituted changes in the listing status of former candidate species. Former C1 (candidate) species are now referred to simply as candidate species and

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

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

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

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

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

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

STATE PROTECTION AND CLASSIFICATIONS

California's Endangered Species Act (CESA) defines an endangered species as "...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation,

predation, competition, or disease." The State defines a threatened species as "...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species." Candidate species are defined as "...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike FESA, CESA does not include listing provisions for invertebrate species.

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

Additionally, some sensitive mammals and birds are protected by the State as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. SSC ("special" animals and plants) listings include special status species, including all state and federal protected and candidate taxa, Bureau of Land Management and US Forest Service sensitive species, species considered to be declining or rare by the CNPS or National Audubon Society, and a selection of species which are considered to be under population stress but are not formally proposed for listing. This list is primarily a working document for the CDFW's 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

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

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

As stated by the CNPS:

> "*Threat Rank is an extension added onto the California Rare Plant Rank and designates the level of endangerment by a 1 to 3 ranking with 1 being the most endangered and 3 being the least endangered. A Threat Rank is present for all California Rare Plant Rank 1B's, 2's, 4's, and the majority of California Rare Plant Rank 3's. California Rare Plant Rank 4 plants are seldom assigned a Threat Rank of 0.1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a California Rare Plant Rank. In addition, all California Rare Plant Rank 1A (presumed extinct in California), and some California Rare Plant Rank 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension." (CNPS 2010)*

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

SENSITIVE HABITATS

As stated by 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 CDFW as sensitive were documented within or adjacent to the Project Site or offsite impact area.

SENSITIVE PLANTS

The Project Site and offsite impact area are not located within an MSHCP narrow endemic or criteria area sensitive plant species survey area. No focused surveys required.

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**
Chaparral sand- verbena *Abronia villosa var. aurita* CRPR 1B.1	Chaparral, coastal scrub, sandy areas. 80-1,600 m elevation.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Munz's onion *Allium munzii* FE, SE CRPR 1B.1 MSHCP Covered Species	Chaparral, coastal scrub, cismontane woodland, pinyon- juniper woodland, valley and foothill grassland. Only in Riverside Co. Heavy clay soils; grows in grasslands and openings within shrublands or woodlands. 300-1,035m elevation.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
San Diego ambrosia *Ambrosia pumila* FE, CRPR 1B.1 MSHCP Covered Species	Chaparral, coastal scrub, valley and foothill grassland, vernal pools. In the U.S., known only from San Diego and Riverside Co. Sandy loam or clay soil. In valleys, persists where disturbance has been superficial. 20-415m elevation.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Marsh sandwort *Arenaria paludicola* FE, SE CRPR 1B.1	Marshes and swamps. Growing up through dense mats of *Typha*, *Juncus*, *Scirpus*, etc. in freshwater marsh.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Smooth tarplant *Centromadia pungens ssp. laevis* CRPR 1B.1 MSHCP Covered Species	Valley and foothill grassland, chenopod scrub, meadows, playas, riparian woodland. Alkali meadow, alkali scrub; also, in disturbed places. 0-480m elevation.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Parry's spineflower *Chorizanthe parryi var. parryi* CRPR 1B.1 MSHCP Covered Species	Coastal scrub, chaparral. Dry slopes and flats; sometimes at interface of 2 vegetation such as chaparral and oak woodland; dry, sandy soils. 40-1,705m elevation.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Long-spined spineflower *Chorizanthe polygonoides var. longispina* CRPR 1B.2 MSHCP Covered Species	Chaparral, coastal scrub, meadows, valley, and foothill grassland. Gabbroic clay. 30-1,450m elevation.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Slender-horned spineflower *Dodecahema leptoceras* FE, SE, CRPR 1B.2 MSHCP Covered Species	Chaparral, coastal scrub (alluvial fan sage scrub), flood deposited terraces and washes.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Many-stemmed dudleya *Dudleya multicaulis* CRPR 1B.2 MSHCP Covered Species	Chaparral, coastal scrub, valley and foothill grassland. In heavy, often clayey soils or grassy slopes. 0- 790m elevation.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
Round-leaved filaree *Erodium macrophyllum* MSHCP Covered Species	Cismontane woodland, valley and foothill grassland. Clay soils. 15- 1,200m elevation.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Coulter's goldfields *Lasthenia glabrata ssp. coulteri* CRPR 1B.1 MSHCP Covered Species	Coastal salt marshes, playas, valley and foothill grassland, vernal pools. Alkaline soils in playas, sinks, and grasslands. 1-1,400m elevation.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Robinson's pepper-grass *Lepidium virginicum var. robinsonii* CRPR 4.3 MSHCP Covered Species	Chaparral, coastal scrub. Dry soils, shrubland. 1-945m elevation.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Parish's desert- thorn *Lycium parishii* CRPR 2B.3 MSHCP Covered Species	Coastal scrub, Sonoran Desert scrub, 300-1,000m elevation.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Rayless ragwort *Senecio aphanactis* CRPR 2B.2 MSHCP Covered Species	Cismontane woodland, coastal scrub, drying alkaline flats. 20-575m elevation.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.

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 and offsite impact area do not occur within a predetermined MSHCP Survey Area for the burrowing owl (*Athene cunicularia*), amphibians or mammals (RCA GIS Database 2022). No focused surveys required.

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		
Riverside fairy shrimp *Streptocephalus woottoni* FE MSHCP Covered Species	Areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
FISH		
Santa Ana sucker *Catostomus santaanaae* FT, SSC MSHCP Covered Species	Small-medium-sized permanent streams in water of varying depth. Usually found in clear water, they are able to tolerate seasonal turbidity. Prefers substrates that are generally coarse and consist of gravel, rubble, and boulder, but are occasionally found on sandy or muddy substrates.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Arroyo chub *Gila orcuttii* SSC MSHCP Covered Species	Lowland habitats, and prefers freshwater streams and rivers with steady currents and emergent vegetation. Prefers slower-moving pools and ponded areas of streams with mud or sand substrates.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
Santa Ana speckled dace *Rhinichthys osculus ssp. 3* SSC	Requires permanent flowing streams. Typically, streams are maintained by outflows of cool springs. Inhabits shallow cobble and gravel riffles.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
AMPHIBIANS & REPTILES		
Orange throated whiptail *Aspidoscelis hyperythrus* SSC MSHCP Covered Species	Inhabits low-elevation coastal scrub, chaparral and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Coastal western whiptail *Aspidoscelis tigris stejnegeri* SSC MSHCP Covered Species	Found in deserts and semiarid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy or rocky.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Rosy boa *Charina trivirgata* SSC	Desert and chaparral. Prefers moderate to dense vegetation and rocky cover. Mix of brushy cover and rocky soil such as coastal canyons and hillsides, desert canyons, washes and mountains.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Northern red- diamond rattlesnake *Crotalus ruber ruber* SSC MSHCP Covered Species	Chaparral, woodland, grassland, and desert areas. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Coast (San Diego) Horned Lizard *Phrynosoma coronatum (blainvillei)* SSC MSHCP Covered Species	Open or sparse scrub and chaparral communities. This species prefers loose, friable soil for burrowing.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
Western spadefoot *Spea hammondii* SSC	Grassland, coastal sage scrub and habitats with open sandy gravel soils. Breeds in vernal pools and temporary ponds/pools. Primarily a species of the lowlands, frequenting washes, floodplains of rivers.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
BIRDS		
Tricolor blackbird *Agelaius tricolor* SSC MSHCP Covered Species	Freshwater marshes. Suitable breeding habitat includes cattails and bulrushes, as well as non-native thistles and mustards.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens* SSC MSHCP Covered Species	Rocky slopes, especially where a relatively open shrub cover dominated by California sagebrush is interspersed with grassy areas.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Bell's sage sparrow *Amphispiza belli belli* SSC MSHCP Covered Species	Relatively open chaparral, especially where dominated by chamise, but also occurs in sage scrub, especially in the more arid associations of this plant community.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Burrowing owl *Athene cunicularia* SSC MSHCP Covered Species	Requires fairly large expanses of relatively open level terrain, including grasslands, agricultural fields, and dairies and occasionally may use undisturbed edges of golf courses or airports.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis* FT, SE MSHCP Covered Species	Restricted to extensive deciduous riparian thickets or forest with dense, low-level or understory foliage which occur along slow-moving watercourses, backwaters or seeps.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
	Willows are almost always a dominant component-nesting habitat.	
Bald eagle *Haliaeetus leucocephalus* FT, SE MSHCP Covered Species	Open areas, forest edges and mountains near large lakes and rivers. Requires tall trees for nesting.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Yellow-breasted chat *Icteria virens* SSC MSHCP Covered Species	Edges of woods, fencerows, dense thickets and brambles in low wet places near streams, pond edges or swamps and in old overgrown clearings and fields. Nests in small trees such as wild rose, hawthorn and snowberry thickets, elderberry and saskatoon.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Loggerhead shrike *Lanius ludovicianus* SSC MSHCP Covered Species	Open areas (e.g., grassland, rangeland, fallow agricultural fields), especially where there are scattered large shrubs or trees.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Coastal California gnatcatcher *Polioptila californica californica* FT, SSC MSHCP Covered Species	Obligate resident of several distinct sub-associations of the coastal sage scrub plant community.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Least Bell's vireo *Vireo bellii pusillus* FE, SE MSHCP Covered Species	Mature riparian habitat with a dense understory of young willows, mule fat, blue elderberry, California rose, desert wild grape, and a variety of other shrubby species.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
MAMMALS		
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax* SSC MSHCP Covered Species	Coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.

Species Name (*Scientific Name*) Status	Habitat Description	Comments
	juniper and annual grassland in sandy herbaceous areas, usually in association with rocks or course gravel.	
Stephens' Kangaroo Rat *Dipodomys stephensi* FE, ST MSHCP Covered Species	Inhabits annual grassland with sparse perennial vegetation in the San Jacinto Valley and adjacent areas of western Riverside and northwestern San Diego County.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
San Diego black-tailed jackrabbit *Lepus californicus bennettii* SSC MSHCP Covered Species	Arid regions supporting short-grass habitats such as annual grassland, Riversidean sage scrub, alluvial fan sage scrub. Great Basin sagebrush, chaparral, disturbed habitat and agriculture.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.
Los Angeles pocket mouse *Perognathus longimembris Brevinasus* SSC MSHCP Covered Species	Restricted to lower elevation grasslands and coastal sage scrub associations in the Los Angeles Basin.	No Potential – The entire Project Site and offsite impact area are developed and no natural vegetation communities or exposed soils are present onsite.

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 and offsite impact area are located within USFWS critical habitat. The Project Site and offsite impact area do 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 and offsite Impact Area

The Project Site and offsite impact area do not represent a regional wildlife movement corridor and provides no cover, food, and no natural unrestricted water courses that would facilitate regional wildlife movement onsite. The Project Site and offsite impact area are not located within an MSHCP designated core, extension of existing core, non-contiguous habitat block, constrained linkage, or linkage area. The Project Site and offsite impact area are completely surrounded by high density residential/mixed use retail development and high traffic roads.

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 EPA and the USACE and was used for this Jurisdictional Delineation. However, the April 2020 definition was challenged in August 2021 in the case Pascua Yaqui Tribe v. EPA resulting in reverting to the pre-2015 interpretation. The pre-2015 definition of Navigable Waters includes (1) all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (2) All interstate waters including interstate wetlands; (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: (4) All impoundments of waters otherwise defined as waters of the United States under this definition; (5) Tributaries of waters identified in paragraphs (s)(1) through (4) of this section; (6) The territorial sea; and (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section (Carlson Strategic Land Solutions, Inc. 2022).

Wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas, are defined by 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 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 (Carlson Strategic Land Solutions, Inc. 2022). .

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 (Carlson Strategic Land Solutions, Inc. 2022).

Migratory Bird Treaty and Bald and Golden Eagle Protection Acts

Migratory birds including resident raptors and passerines are protected under the federal MBTA. The MBTA of 1918 implemented the 1916 convention between the United States and Great Britain for the protection of birds migrating between the U.S. and Canada. Similar conventions between the United States and Mexico (1936), Japan (1972) and the Union of Soviet 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 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 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 or offsite impact area.

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

The limits of Waters of the State are defined as the “body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." Therefore, the limits extend from the channel bed to the top of the bank, with the addition of the canopy of any riparian habitat associated with the watercourse.

LOCAL

Western Riverside County Multiple Species Habitat Conservation Plan Compliance Analysis

The proposed Project Site and offsite impact area are located completely within the MSHCP, which is a comprehensive multi-jurisdictional effort that includes western Riverside County and eighteen (18) cities including the City of Riverside. 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 Riverside) to issue take permits for listed species so that applicants do not need to receive endangered species incidental take authorization from the USFWS and CDFW.

On June 7th, 2003, the County Board of Supervisors adopted the MSHCP, certified the Environmental Impact Report/Environmental Impact Statement, and authorized the Chairman to sign the Implementing Agreement with the respective wildlife agencies. The Incidental Take Permit was issued by the wildlife agencies on June 22nd, 2004. The City of Riverside 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 Project Site and offsite impact area are located within the Cities of Riverside/Norco Area Plan. The Cities of Riverside/Norco Area Plan has a target conservation acreage of 3,465 to 3,615 acres.

The Project Site is not located within an MSHCP Criteria Area Cell, Cell Group, or Linkage Area. However, the northern 0.15-acre of the offsite impact area located within the Hillside Avenue right-of-way at the confluence of Mountain View Avenue extends into MSHCP Criteria Cell 621, Subunit 1 – Santa Ana River South. As stated in the MSHCP:

> "*Conservation within this Cell will contribute to assembly of Existing Core A. Conservation within this Cell will focus on lands expanding existing conserved wetland habitat along the Santa Ana River. Conservation within this Cell will be approximately 5% of the Cell focusing in the northeastern portion of the Cell*" (MSHCP 2004)

The 0.15-acre portion of the offsite impact area which extends into the southeastern region of MSHCP Criteria Cell 621 is characterized as the paved portion of the Hillside Avenue right-of-way. This area is completely surrounded by existing residential development and power grid facility and is not located within the northeastern region of Criteria Cell 621 where conservation is identified. The proposed impacts within the offsite impact area would not conflict with the reserve design goals, Existing Core A or the Santa Ana River.

MSHCP Sensitive Species Surveys

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

The Project Site and offsite impact area do not occur within a predetermined Survey Area for the burrowing owl; therefore, no surveys are required (RCA GIS Data Downloads 2022). 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 2004)

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

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

No MSHCP Section 6.1.2 vernal pool, riparian or riverine resources are located within or adjacent to the Project Site or offsite impact area.

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

No evidence of vernal pools, seasonal depressions, seasonally inundated road ruts or other wetland features were recorded on the Project Site or offsite impact area. 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 and offsite impact area are characterized as Buchenau loam, slightly saline-alkaline, 0 to 2 percent slopes (BhA), Buren fine sandy loam, 2 to 8 precent slopes, eroded (BuC2), and Hanford course sandy loam, 0 to 2 precent slopes (HcA), all types possessing well drained substrates (drainage class). No indication of clay substrates or hydric soils were documented within the Project Site or offsite impact area. 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 or offsite impact area 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 or offsite impact area. No features are present that would support fairy shrimp. No standing water or other sign of areas that pond water was recorded.

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 or offsite impact area. The project is consistent with MSHCP Section 6.1.2.

An MSHCP Determination of Biological Equivalent or Superior Preservation (DBESP) will not be required.

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 and offsite impact area are 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 and offsite impact area are not located adjacent to an existing or proposed MSHCP Conservation Area. The project is consistent with MSHCP Section 6.4.

City of Riverside Municipal Code 13.25.020

13.25.020 - Removal, trimming, and trenching around. No trees or shrubs planted or growing along the public streets of the City shall be removed except pursuant to the policy established by the Park, Recreation and Community Services Commission and no trees along the streets shall be cut, pruned or trimmed except pursuant to the policy established by the Commission and approved by the City Council; nor shall anyone not authorized by said policy trench around or alongside of any tree, plant or shrub with a view to cutting the roots of same. (Ord. 7459 § 27, 2019; Ord. 7362 § 5, 2017)

A total of 72 ornamental trees and palms will be removed as a result of the proposed action. No native oak trees will be impacted as a result of project initiation. A landscape

plan will be submitted to the City of Riverside Planning Department for review and approval.

City of Riverside General Plan - Open Space and Conservation Element

As outlined below, the City of Riverside's 2025 General Plan Open Space and Conservation Element (Chapter 12) Goals and Polices for the preservation and protection of critical open space and natural resources have been assessed for compliance.

Policy OS-5.1: Preserve significant habitat and environmentally sensitive areas, including hillsides, rock outcroppings, creeks, streams, viewsheds and arroyos through application of the RC Zone standards and the Hillside/Arroyo standards of the City's Grading Code.

Policy OS-5.2: Continue to participate in the MSHCP Program and ensure all projects comply with applicable requirements

Policy OS-5.3: Continue to participate in the Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan including collection of mitigation fees.

Policy OS-5.4: Protect native plant communities in the General Plan Area, including sage scrub, riparian areas and vernal pools, consistent with the MSHCP.

Policy OS-6.1: Protect and enhance known wildlife migratory corridors and create new corridors as feasible

Policy OS-6.2: Support regional and local efforts to acquire, develop and maintain open space linkages.

Policy OS-6.3: Preserve the integrity of Riverside's arroyos and riparian habitat areas through the preservation of native plants.

Policy OS-6.4: Continue with efforts to establish a wildlife movement corridor between Sycamore Canyon Wilderness Park and the Box Springs Mountain Regional Park as shown on the MSHCP. New developments in this area shall be conditioned to provide for the corridor and Caltrans shall be encouraged to provide an underpass at the 60/215 Freeway.

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

The entire Project Site and offsite impact area are developed by a closed Sears department store including scattered ornamental vegetation as illustrated in Figure 3, *Vegetation Communities Map* and Figures 4 to 8, *Current Project Site Photographs*. The Project Site and offsite impact area are not located within or adjacent to the Santa Ana River, regulated arroyo (Ordinance 17.08.011) or wildlife movement corridor. The proposed action would not conflict with any General Plan Open Space and Conservation

Element (Chapter 12) Goals and Polices for the preservation and protection of critical open space and natural resources.

Also, as previously stated, the 0.15-acre portion of the offsite impact area which extends into the southeastern region of MSHCP Criteria Cell 621 is characterized as the paved portion of the Hillside Avenue right-of-way. This area is completely surrounded by existing residential development and power grid facility and is not located within the northeastern region of Criteria Cell 621 where conservation is identified. The proposed impacts within the offsite impact area would not conflict with the reserve design goals, Existing Core A or the Santa Ana River.

City of Riverside 16.72.040 - Establishment of the Multiple Species Habitat Conservation Plan Fee

The project applicant shall pay MSHCP Local Development Mitigation fees as established and implemented by the City of Riverside (Municipal Code Sec. 16.72.040 - Western Riverside County Multiple Species Habitat Conservation Plan mitigation fee). Five categories of the fee are defined and include: Residential, density less than 8.0 dwelling units per acre $1,651 per dwelling unit; Residential, density between 8.1 and 14.0 dwelling units per acre $1.057 per dwelling unit; Residential, density greater than 14.1 dwelling units per acre $859 per dwelling unit; Commercial $5,620 per acre; and Industrial $5,620 per acre.

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 the 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 17.43 acres of existing developed lands will be directly and permanently impacted as a result of project implementation as summarized in Table 4, *Vegetation Community Impacts,* and illustrated on Figure 10*, Onsite Vegetation Communities Impact Map*. A total of 13.10 acres of existing developed lands may be temporarily impacted as a result of infrastructure improvements proposed within the offsite impact area as summarized in Table 4, *Vegetation Community Impacts,* and illustrated on Figure 11*, offsite Vegetation Communities Impact Map*. As previously stated, no vegetation communities listed by CDFW as sensitive were documented within or adjacent to the Project Site or offsite impact area. The project applicant will be required to comply with the City of Riverside Municipal Code 16.72.040, which requires the project applicant to pay MSHCP Local Development Mitigation fees.

Table 4. Vegetation Community Impacts

*Vegetation Type	Onsite Permanent Impacts Acres	offsite Temporary Impacts Acres
Developed/Ornamental	17.43	13.10
TOTAL	**17.43**	**13.10**

**Source: Cadre Environmental 2022.*

Protected Trees

No native trees or oak species occur onsite and the removal of ornamental trees and palms would not conflict with the City of Riverside Municipal Code 13.25.020 – "*Removal, trimming, and trenching around. No trees or shrubs planted or growing along the public streets of the City shall be removed except pursuant to the policy established by the Park, Recreation and Community Services Commission and no trees along the streets shall be cut, pruned or trimmed except pursuant to the policy established by the Commission and approved by the City Council; nor shall anyone not authorized by said policy trench around or alongside of any tree, plant or shrub with a view to cutting the roots of same. (Ord. 7459 § 27, 2019; Ord. 7362 § 5, 2017)*"

A landscape plan will be submitted to the City of Riverside Planning Department for review and approval. No Impact.

EXISTING TREE LEGEND

NO.	BOTANICAL NAME	COMMON NAME	CONDITION
1	PINUS CANARIENSIS	CANARY ISLAND PINE	GOOD
2	PINUS CANARIENSIS	CANARY ISLAND PINE	GOOD
3	PINUS CANARIENSIS	CANARY ISLAND PINE	GOOD
4	PINUS CANARIENSIS	CANARY ISLAND PINE	GOOD
5	PINUS CANARIENSIS	CANARY ISLAND PINE	GOOD
6	PINUS CANARIENSIS	CANARY ISLAND PINE	GOOD
7	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	GOOD
8	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	GOOD
9	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	GOOD
10	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	GOOD
11	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	GOOD
12	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	GOOD
13	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	GOOD
14	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	GOOD
15	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	POOR
16	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
17	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
18	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
19	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
20	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
21	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
22	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
23	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
24	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
25	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
26	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
27	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
28	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
29	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
30	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
31	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
32	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
33	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
34	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
35	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
36	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
37	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
38	SAPIUM SEBIFERUM	CHINESE TALLOW	FAIR
39	SAPIUM SEBIFERUM	CHINESE TALLOW	FAIR
40	SAPIUM SEBIFERUM	CHINESE TALLOW	FAIR
41	SAPIUM SEBIFERUM	CHINESE TALLOW	FAIR
42	SAPIUM SEBIFERUM	CHINESE TALLOW	FAIR
43	PODOCARPUS GRACILIOR	FERN PINE	GOOD
44	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	POOR
45	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	POOR
46	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	POOR
47	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	POOR
48	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	POOR
49	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	POOR
50	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	POOR
51	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	POOR
52	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
53	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
54	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
55	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
56	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
57	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
58	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
59	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
60	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
61	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
62	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
63	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
64	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
65	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
66	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
67	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
68	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
69	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
70	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
71	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD
72	WASHINGTONIA ROBUSTA	MEXICAN FAN PALM	GOOD

Vegetation Communities

DEV Developed/Ornamental

Sources: Cadre Environmental 2022

Sierra Street

Arlington Avenue

Streeter Avenue

Project Site

EXISTING SEARS

EXISTING SEARS AUTO CENTER

BANK OF AMERICA (NOT A PART)

LIMIT OF WORK - PROPERTY LINE

APN 226-180-015

Project Site Impact Boundary

Figure 10 - Onsite Vegetation Communities Impact Map

Biological Resources Technical Report
Arlington Mixed Use Project Site, City of Riverside

Source: Architects Orange 2022

CADRE Environmental

1 inch = 100 feet

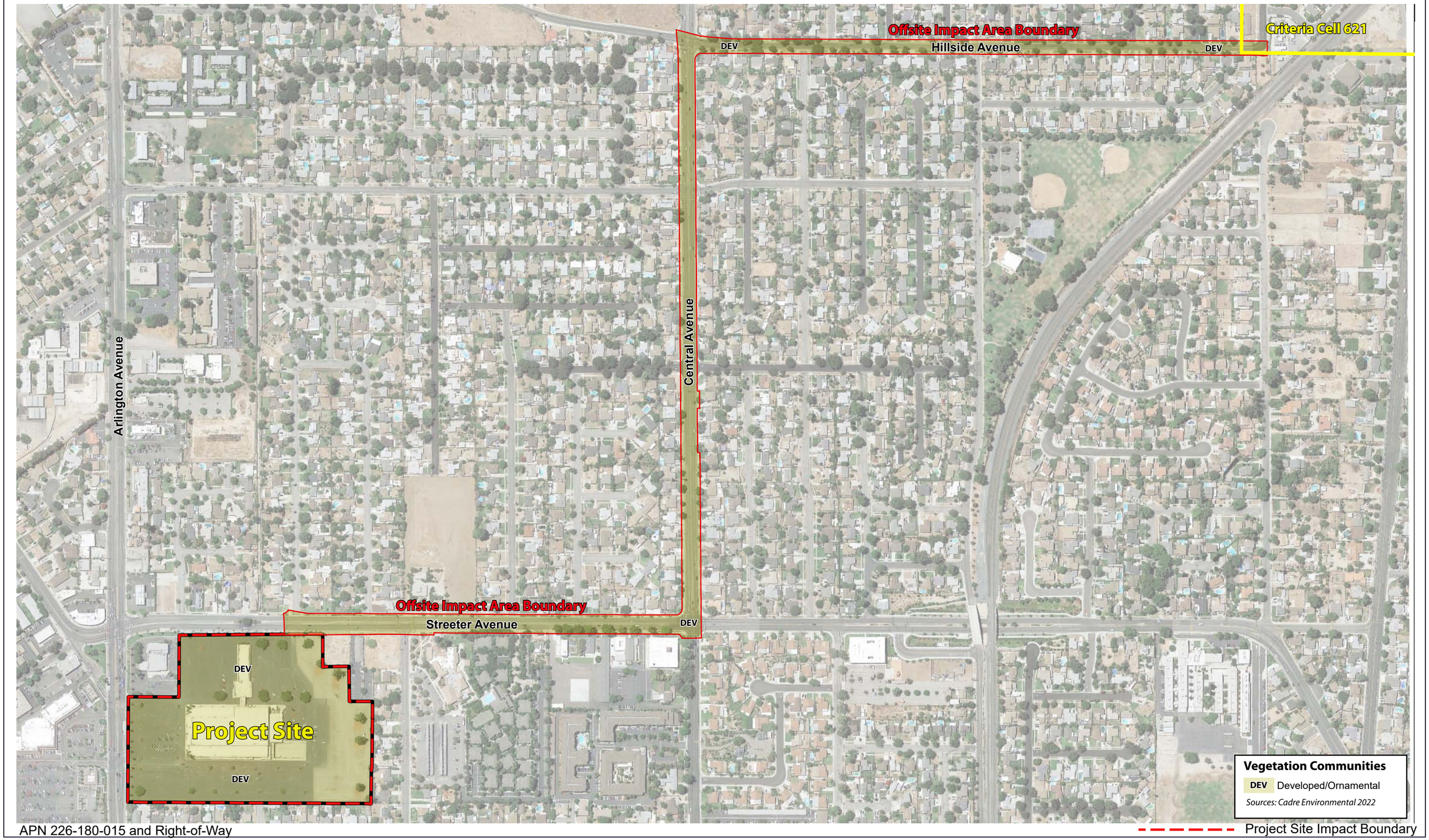

Figure 11 - Offsite Vegetation Communities Site Map

Biological Resources Technical Report
Arlington Mixed Use Project Site, City of Riverside

CADRE Environmental

Jurisdictional Resources

No wetlands or jurisdictional resources regulated by the USACE, CDFW, or RWQCB were documented within or adjacent to the Project Site or offsite impact area. No Impact.

MSHCP Riparian/Riverine/Vernal Pool Resources

No MSHCP Section 6.1.2 vernal pool, riparian or riverine resources are located within or adjacent to the Project Site or offsite impact area. No Impact. Specifically, no riparian scrub, forest or woodland habitat is located within or adjacent to the Project Site or offsite impact area. No Impact.

No evidence of vernal pools, seasonal depressions, seasonally inundated road ruts or other wetland features were recorded on the Project Site or offsite impact area. 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 and offsite impact area are characterized as Buchenau loam, slightly saline-alkaline, 0 to 2 percent slopes (BhA) and Hanford course sandy loam, 0 to 2 precent slopes (HcA), all types possessing well drained substrates (drainage class). No indication of clay substrates or hydric soils were documented within the Project Site or offsite impact area. 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 or offsite impact area 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 or offsite impact area. No features are present that would support fairy shrimp. No standing water or other sign of areas that pond water was recorded. No Impact.

Sensitive Plants

The Project Site and offsite impact area are not located within an MSHCP narrow endemic or criteria area sensitive plant species survey area. No focused surveys required.

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*. No Impact.

Sensitive Wildlife

The Project Site and offsite impact area do not occur within a predetermined MSHCP Survey Area for the burrowing owl, amphibians or mammals (RCA GIS Database 2022). No focused surveys required.

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*. No Impact.

The Project Site and offsite impact area possess vegetation including ornamental trees and palms expected to potentially provide nesting habitat for raptors and migratory birds protected under the CDFG Codes. Measures for potential direct/indirect impacts to common and sensitive bird and raptor species will require compliance with the CDFG Code Section 3503. Construction outside the nesting season (between September 1st and February 15th) does not require preconstruction nesting bird surveys. However, if construction is proposed between February 16th and August 31st, a qualified biologist will conduct a preconstruction nesting bird survey(s) no more than three (3) days prior to initiation of grading to document the presence or absence of nesting birds or raptors within or directly adjacent (100 feet) to the Project Site and offsite impact area. Loss of an active nest would be considered a potentially significant impact. Impacts to potential nesting bird and raptor habitat would be reduced to less than significant with the implementation of Biological Mitigation and Avoidance Measure (**BIO-MM1**).

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

Western Riverside County Multiple Species Habitat Conservation Plan Compliance Analysis

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 offsite impact area are not located adjacent to an existing or proposed MSHCP Conservation Area. The project is consistent with MSHCP Section 6.1.4. No Impact.

Water Quality/Hydrology

The project will comply with all applicable water quality regulations, including obtaining and complying with those conditions established in (WDRs) and a National Pollutant Discharge Elimination System (NPDES) permits. Both of these permits include the treatment of all surface runoff from paved and developed areas, the implementation of applicable Best Management Practices (BMPs) during construction activities and the

installation and proper maintenance of structural BMPs to ensure adequate long-term treatment of water.

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 residential, commercial, and mixed-use 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.

Lighting

No natural vegetation communities or sensitive receptors are located within or adjacent to the Project Site. No Impact.

Noise

No natural vegetation communities or sensitive receptors are located within or adjacent to the Project Site. No Impact.

Invasive Species

The landscape plans for the residential and mixed development shall avoid the use of invasive species for the portions of the development areas adjacent to the open space areas. The Project Site and offsite impact area are not located within or adjacent to an open space or conservation area. No Impact.

Barriers

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

CUMULATIVE IMPACTS

The temporary direct and/or indirect impacts of the project would not result in significant cumulative impacts (CEQA Section 15310) to environmental resources within the region of the Project Site and offsite impact area. Cumulative impacts refer to incremental effects of an individual project when assessed with the effects of past, current, and proposed projects. The project would result in the permanent loss of 17.43 acres of existing developed lands and temporary impacts to 13.10 acres of exiting roadways. 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.

MITIGATION & AVOIDANCE MEASURE

The following biological mitigation and avoidance measure addresses potential adverse impacts determined to be potentially significant or is relevant to the protection of biological resources to the extent practicable as part of ensuring compliance and consistency with MSHCP and CEQA guidelines.

BIO-MM1 Regulatory Requirement CDFG Code

Regulatory requirement for potential direct/indirect impacts to nesting common bird and raptor species will require compliance with the CDFG Code Section 3503. Construction outside the nesting season (between September 1st and January 31st) do not require pre-removal nesting bird surveys. If construction is proposed between February 1st and August 31st, a qualified biologist will conduct a nesting bird survey(s) no more than three (3) days prior to initiation of grading to document the presence or absence of nesting birds within or directly adjacent (100 feet) to the Project Site and offsite impact area.

The survey(s) will focus on identifying any raptors and/or bird nests that are directly or indirectly affected by construction activities. If active nests are documented, species-specific measures will be prepared by a qualified biologist and implemented to prevent abandonment of the active nest. At a minimum, grading in the vicinity of a nest will be postponed until the young birds have fledged. The perimeter of the nest setback zone will be fenced or adequately demarcated with stakes and flagging at 20-foot intervals, and construction personnel and activities restricted from the area. A survey report by a qualified biologist verifying that no active nests are present, or that the young have fledged, will be submitted to the City of Riverside for review and approval prior to initiation of grading in the nest-setback zone.

The qualified biologist will serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts on these nests occur. A final monitoring report of the findings, prepared by a qualified biologist, will be submitted to the City of Riverside documenting compliance with the CDFG Code. Any nest permanently vacated for the season would not warrant protection pursuant to the CDFG Code.

Implementation of Mitigation and Avoidance Measure **BIO-MM1** would reduce potential significant unavoidable impacts on biological resources below a level of significance and ensure compliance with MSHCP and CEQA requirements.

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

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