APPENDIX C

BIOLOGICAL TECHNICAL REPORT

BIOLOGICAL TECHNICAL REPORT

FOR

CENTRAL AND SYCAMORE PROJECT

LOCATED IN THE CITY OF RIVERSIDE, RIVERSIDE COUNTY, CALIFORNIA

Prepared For:

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June 30, 2017 [revised May 23, 2018]

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INFORMATION SUMMARY

A. Report Date: June 30, 2017 [revised May 23, 2018]

B. Report Title: Biological Technical Report for Central and Sycamore Project

C. Project site Location: City of Riverside, Riverside County

D. Owner/Applicant:
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F. Report Summary: A biological study was performed for the proposed development of a roughly 2.71-acre property (Project site) located at the northeast corner of Sycamore Canyon Boulevard and Central Avenue, Riverside, California. The Project would construct a commercial development on the entire property. This document provides the results of a field study performed to evaluate the potential occurrence of biological resources and the requirements triggered by environmental laws and regulations. The site occurs within Criteria Cell 721 of Subunit 1 of the Sycamore Canyon/Box Springs Central Area Plan of the MSHCP. The Project site is not located within the MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA), but it is located within the Criteria Area Plant Species Survey Area (CAPSSA) for Nevin's barberry (*Berberis nevinii*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), and round-leaved filaree (*California macrophylla*). The Project site is located within the MSHCP Burrowing Owl Survey Area, but is not located within the MSHCP Mammal or Amphibian Areas. Proposed Constrained Linkage 7 occurs just south of the Project site. Habitat assessments were performed for special-status plants and animals and a jurisdictional waters and wetlands evaluation was conducted. The Project site does not support potential habitat for special-status plants (including NEPPA, CAPPSA), burrowing owl, riparian birds, and fairy shrimp. The only special-status animal it supports is coastal whiptail (*Aspidoscelis tigris stejnegeri*). The Project site lacks federal and state jurisdictional waters and wetlands as well as MSHCP riparian/riverine and vernal pool resources. Development of the Project site would have no potentially significant impacts under CEQA.

G. Individuals Conducting Fieldwork: Tricia A. Campbell

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TABLE OF CONTENTS

Page #

Page #

TABLES

EXHIBITS

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1.0 INTRODUCTION

1.1 Background and Scope of Work

This document provides the results of a biological study for the approximately 2.71-acre Central and Sycamore Project (the Project) located in the City of Riverside, Riverside County, California [Exhibit 1 – Regional Map; Exhibit 2 – Vicinity Map]. This report identifies and evaluates impacts to biological resources associated with the proposed Project in the context of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the California Environmental Quality Act (CEQA), and State and Federal regulations such as the Endangered Species Act (ESA), Clean Water Act (CWA), and the California Fish and Game Code.

The scope of this report includes a discussion of existing conditions for the approximately 2.71-acre Project site, all methods employed regarding the biological study, the documentation of botanical and wildlife resources identified (including special-status species), and an analysis of impacts to biological resources. Methods of the study include a review of relevant literature, field survey, and a Geographical Information System (GIS)-based analysis of vegetation communities. As appropriate, this report is consistent with accepted scientific and technical standards and survey guideline requirements issued by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), and other applicable agencies/organizations.

For this report, the term *Project site* is defined as the approximately 2.71 acres of land proposed for direct and permanent impact by the Project.

The field study focused on a number of primary objectives that would comply with CEQA requirements, including (1) general reconnaissance survey and vegetation mapping; (2) general biological survey(s); (3) habitat assessments for special-status plant species (including species with applicable MSHCP survey requirements); (4) habitat assessments for special-status wildlife species (including species with applicable MSHCP survey requirements); (5) assessments for MSHCP riparian/riverine areas and vernal pools; and (6) assessments for areas subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps) jurisdiction pursuant to Section 404 of the Clean Water Act, and CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600–1616 of the California Fish and Game Code. Observations of all plant and wildlife species were recorded during the general biological survey and are included as Appendix A: Floral Compendium and Appendix B: Faunal Compendium.

1.2 Project Location

The Project site comprises approximately 2.71 acres in the City of Riverside, Riverside County California [Exhibit 1 – Regional Map] and is located within Section 33 of Township 2 South, Range 4 West, of the U.S. Geological Survey (USGS) 7.5" quadrangle map Riverside East (dated 1967 and photorevised in 1980) [Exhibit 2 – Vicinity Map]. The Project site is bordered by Sycamore Canyon Boulevard to the west, the Interstate 215/State Route 60 to the north and east, and Central Avenue to the south.

1.3 Project Description

The entire Project site will be developed into a commercial facility.

1.4 Existing Conditions

The Project site consists of mostly bare ground with disturbed vegetation. A small amount of Riversidean sage scrub is found along the western border of the Project site adjacent to Sycamore Canyon Boulevard. Based on the field conditions and review of historical satellite images, the Project site was heavily modified during construction of Sycamore Canyon Boulevard in 2005. The site was scraped, cut, devoid of vegetation and was used for spoil deposition (gravel, asphalt, dirt).

1.5 Relationship of the Project site to the MSHCP

1.5.1 MSHCP Background

The Western Riverside County MSHCP is a comprehensive habitat conservation/planning program for Western Riverside County. The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. The MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to special-status species and associated native habitats.

Through agreements with the U.S. Fish and Wildlife Service (USFWS) and CDFW, the MSHCP designates 146 special-status animal and plant species as Covered Species, of which the majority have no project-specific survey/conservation requirements. The MSHCP provides mitigation for project-specific impacts to these species for Projects that are compliant/consistent with MSHCP requirements, such that the impacts are reduced to below a level of significance pursuant to CEQA.

The Covered Species that are not yet adequately conserved have additional requirements in order for these species to ultimately be considered "adequately conserved". A number of these species have survey requirements based on a project's occurrence within a designated MSHCP survey area and/or based on the presence of suitable habitat. These include Narrow Endemic Plant Species (MSHCP *Volume I, Section 6.1.3*), as identified by the Narrow Endemic Plant Species Survey Areas (NEPSSA); Criteria Area Plant Species (MSHCP *Volume I, Section 6.3.2*) identified by the Criteria Area Plant Species Survey Areas (CAPSSA); animals species (burrowing owl, mammals, amphibians) identified by survey areas (MSHCP *Volume I, Section 6.3.2*); and species associated with riparian/riverine areas and vernal pool habitats, i.e., least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, and three species of listed fairy shrimp (MSHCP *Volume I, Section 6.1.2*). An additional 28 species (MSHCP *Volume I*, *Table 9.3*) not yet adequately conserved have species-specific objectives in order for the species to become adequately conserved. However, these species do not have project-specific survey requirements.

The goal of the MSHCP is to have a total Conservation Area in excess of 500,000 acres, including approximately 347,000 acres on existing Public/Quasi-Public (PQP) Lands, and approximately 153,000 acres of Additional Reserve Lands targeted within the MSHCP Criteria Area. The MSHCP is divided into 16 separate Area Plans, each with its own conservation goals and objectives. Within each Area Plan, the Criteria Area is divided into Subunits, and further divided into Criteria Cells and Cell Groups (a group of criteria cells). Each Cell Group and ungrouped, independent Cell has designated "criteria" for the purpose of targeting additional conservation lands for acquisition. Projects located within the Criteria Area are subject to the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process to determine if lands are targeted for inclusion in the MSHCP Reserve. In addition, all Projects located within the Criteria Area are subject to the Joint Project Review (JPR) process, where the Project is reviewed by the Regional Conservation Authority (RCA) to determine overall compliance/consistency with the biological requirements of the MSHCP.

1.5.2 Relationship of the Project site to the MSHCP

The Project site is located within Criteria Cell 721 of Subunit 1 of the Sycamore Canyon/Box Springs Central Area Plan [Exhibit 3 – MSHCP Overlay Map]. The Project site is not located within the MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA), but it is located within the Criteria Area Plant Species Survey Area (CAPSSA) for Nevin's barberry (*Berberis nevinii*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), and round-leaved filaree (*California macrophylla*). The Project site is located within the MSHCP Burrowing Owl Survey Area, but is not located within the MSHCP Mammal or Amphibian Areas. Proposed Constrained Linkage 7 occurs just south of the Project site.

Within the designated Survey Areas, the MSHCP requires habitat assessments, and focused surveys within areas of suitable habitat. For locations with positive survey results, the MSHCP requires that 90 percent of those portions of the property that provide for long-term conservation value for the identified species shall be avoided until it is demonstrated that conservation goals for the particular species have been met throughout the MSHCP. Findings of equivalency shall be made demonstrating that the 90-percent standard has been met, if applicable. If equivalency findings cannot be demonstrated, then "biologically equivalent or superior preservation" must be provided.

2.0 METHODOLOGY

In order to adequately identify biological resources in accordance with the requirements of CEQA, Glenn Lukos Associates (GLA) assembled biological data consisting of two main components:

- Performance of vegetation mapping for the Project site;
- Performance of habitat assessments, and site-specific biological survey(s) to evaluate the presence/absence of special-status species in accordance with the requirements of CEQA; and

- Performance of an evaluation for the presence/absence of federal and state jurisdictional waters and wetlands.

The focus of the biological surveys was determined through initial site reconnaissance, a review of the CNDDB [CDFW 2017], CNPS 8th edition online inventory (CNPS 2017), Natural Resource Conservation Service (NRCS) soil data, MSHCP species and habitat maps and sensitive soil maps (Dudek 2003), other pertinent literature, and knowledge of the region. A site-specific general survey within the Project site was conducted on foot for each target plant and/or animal species identified below.

2.1 Summary of Surveys

GLA conducted biological studies to identify and analyze actual or potential impacts to biological resources associated with development of the Project site. Observations of all plant and wildlife species were recorded during the above survey effort(s) [Appendix A: Floral Compendium and Appendix B: Faunal Compendium]. The study conducted include the following:

- Performance of vegetation mapping;
- Performance of site-specific habitat assessments to evaluate the potential presence/absence of special-status species (or potentially suitable habitat) to the satisfaction of CEQA, federal and state regulations, and MSHCP requirements;
- Burrowing Owl burrow survey; and
- Performance of an aquatic resources assessment (including wetlands and riparian habitat) to evaluate the potential presence of resources subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and CDFW.

Table 2-1 provides a summary list of survey date(s), survey type(s) and personnel.

Table 2-1. Summary of Biological Survey(s) for the Project Site.

Survey Type	2017 Survey Dates	Biologist
General Biological Survey and Habitat Assessment	April 26 2017	Tricia Campbell
Burrowing Owl Burrow Survey	April 26, 2017	Tricia Campbell

Individual plants and wildlife species are evaluated in this report based on their "special-status." For the purpose of this report, plants were considered "special-status" based on one or more of the following criteria:

- Listing through the Federal and/or State Endangered Species Act (ESA);
- Occurrence in the CNPS Rare Plant Inventory (Rank 1A/1B, 2A/2B, 3, or 4); and/or
- Occurrence in the CNDDB inventory.

Wildlife species were considered "special-status" based on one or more of the following criteria:

- Listing through the Federal and/or State ESA; and
- Designation by the State as a Species of Special Concern (SSC) or California Fully Protected (CFP) species.

Vegetation communities and habitats were considered "special-status" based on one or more of the following criteria:

- Global (G) and/or State (S) ranking of category 3 or less based on CDFW (see Section 3.2.2 below for further explanation); and
- Aquatic habitat types.

2.2 Botanical Resources

A site-specific survey program was designed to accurately document the botanical resources within the Project site, and consisted of five components: (1) a literature search; (2) preparation of a list of target special-status plant species and sensitive vegetation communities that could occur within the Project site; (3) general field reconnaissance survey; (4) vegetation mapping according to Holland (1986) and (5) habitat assessments for special-status plants (including those with MSHCP requirements).

2.2.1 Literature Search

Prior to conducting fieldwork, pertinent literature on the flora of the region was examined. A thorough archival review was conducted using available literature and other historical records. These resources included the following:

- CNPS *Inventory of Rare and Endangered Plants of California* (eighth edition). Rare Plant Advisory Committee, David Tibor, Convening Editor, California Native Plant Society. Sacramento, CA x + 388pp; (CNPS 2010); and

- CNDDB for the USGS 7.5' quadrangles: Riverside East, San Bernardino South, Redlands, Sunnymead, Perris, Steele Peak, Lake Matthews, Riverside West, and Fontana. (CNDDB 2017).

2.2.2 Vegetation Mapping

Vegetation communities within the Project site were mapped according to Holland (1986). Where necessary, deviations were made when areas did not fit into exact habitat descriptions. Plant communities were mapped in the field directly onto a 200-scale (1"=200') aerial

photograph. A vegetation map is included as Exhibit 4. Representative site photographs are included as Exhibit 5.

2.2.3 Special-Status Plant Species and Habitats Evaluated for the Project site

A literature search was conducted to obtain a list of special-status plants with the potential to occur within the Project site. The CNDDB was initially consulted to determine well-known occurrences of plants and habitats of special concern in the region. Other sources used to develop a list of target species for the survey program included the CNPS online inventory (2017).

Based on this information, vegetation profiles and a list of target sensitive plant species and habitats that could occur within the Project site were developed and incorporated into a mapping and survey program to achieve the following goals: (1) characterize the vegetation associations and land use; (2) prepare a detailed floristic compendium; (3) identify the potential for any special status plants that may occur within the Project site; and (4) prepare a map showing the distribution of any sensitive botanical resources associated with the Project site, if applicable.

The Project site is not located within the MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA), but it is located within the Criteria Area Plant Species Survey Area (CAPSSA) for Nevin's barberry, smooth tarplant, and round-leaved filaree. Pursuant to the MSHCP, these target species must be evaluated through habitat assessments and focused surveys (if suitable habitat is present).

2.2.4 Botanical Surveys

GLA biologist Tricia Campbell visited the site on April 26, 2017 to conduct a general plant survey and habitat assessment for special-status plant species. An aerial photograph, a soil map, and/or a topographic map were used to determine the community types and other physical features that may support sensitive and uncommon taxa or communities within the Project site. The survey was conducted by following meandering transects within the Project site. All plant species encountered during the field surveys were identified and recorded following the above-referenced guidelines adopted by CNPS (2010) and CDFW by Nelson (1984). A complete list of the plant species observed is provided in Appendix A. Scientific nomenclature and common names used in this report follow Baldwin et al (2012) and Munz (1974).

2.3 Wildlife Resources

Wildlife species were evaluated and detected during the field survey by sight, call, tracks, and scat. Site reconnaissance was conducted in such a manner as to allow inspection of the entire Project site by direct observation, including the use of binoculars. Observations of physical evidence and direct sightings of wildlife were recorded in field notes during the visit. A complete list of wildlife species observed within the Project site is provided in Appendix B. Scientific nomenclature and common names for vertebrate species referred to in this report follow the Complete List of Amphibian, Reptile, Bird, and Mammal Species in California (CDFG 2008), Standard Common and Scientific Names for North American Amphibians,

Turtles, Reptiles, and Crocodilians 6th Edition, Collins and Taggert (2009) for amphibians and reptiles, and the American Ornithologists' Union Checklist 7th Edition (2009) for birds. The methodology (including any applicable survey protocols) utilized to conduct general survey(s), habitat assessment(s), and/or focused survey(s) for special-status animals are included below.

2.3.1 General Surveys

Birds

During the general biological and reconnaissance survey within the Project site, birds were identified incidentally within each habitat type. Birds were detected by both direct observation and by vocalizations, and were recorded in field notes.

Mammals

During general biological and reconnaissance survey within the Project site, mammals were identified incidentally within each habitat type. Mammals were detected both by direct observations and by the presence of diagnostic sign (i.e., tracks, burrows, scat, etc.).

Reptiles and Amphibians

During general biological and reconnaissance surveys within the Project site, reptiles and amphibians were identified incidentally during surveys within each habitat type. Habitats were examined for diagnostic reptile sign, which include shed skins, scat, tracks, snake prints, and lizard tail drag marks. All reptiles and amphibian species observed, as well as diagnostic sign, were recorded in field notes.

2.3.2 Special-Status Animal Species Evaluated for the Project site

A literature search was conducted to obtain a list of special-status wildlife species with the potential to occur within the Project site. Species were evaluated based on two factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Project site, and 2) any other special-status animals that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs on the Project site.

2.3.3 Habitat Assessment for Special Status Animal Species

GLA biologist Tricia Campbell conducted habitat assessments for special-status animal species on April 26, 2017. An aerial photograph, soil map and/or topographic map were used to determine the community types and other physical features that may support special-status and uncommon taxa within the Project site.

During the field survey, the entire site was walked by foot, looking for potentially suitable burrows and indirect sign of burrowing owl.

2.3.4 Focused Surveys for Special-Status Animals Species

The Project site is located within the MSHCP survey area for the burrowing owl (*Athene cunicularia*) [Exhibit 3 – MSHCP Overlay Map]. Within areas of suitable habitat, the MSHCP first requires a focused burrow survey to map all suitable burrows. The focused burrow survey was conducted on April 26, 2017. As discussed in Section 2.3.3 above, the entire site was walked by foot, looking for potentially suitable burrows and indirect sign of burrowing owl. No burrows or owl sign were present, thus, a focused survey was not performed.

The Project site did not provide habitat for any other species with special status that would trigger a focused survey.

2.4 Federal and State Jurisdictional Waters and Wetlands Assessment

Prior to beginning the field study a 200-scale color aerial photograph and the previously cited USGS topographic maps were examined to determine any the locations of potential areas of Corps/CDFW jurisdiction. The entire Project site was checked in the field on foot for the presence of definable channels and/or wetland vegetation, soils and hydrology. A jurisdictional delineation of federal and state waters and wetlands was deemed unnecessary.

2.5 MSHCP Riparian/Riverine Areas and Vernal Pools

GLA surveyed the site for riparian/riverine areas and vernal pool/seasonal pool habitat. *Volume I, Section 6.1.2* of the MSHCP describes the process through which protection of riparian/riverine areas and vernal pools would occur within the MSHCP Plan Area. The purpose is to ensure that the biological functions and values of these areas throughout the MSHCP Plan Area are maintained such that habitat values for species inside the MSHCP Conservation Area are maintained. The MSHCP requires that as projects are proposed within the overall Plan Area, the effect of those projects on riparian/riverine areas and vernal pools must be addressed.

The MSHCP defines riparian/riverine areas as *lands which contain Habitat dominated by trees, shrubs, persistent emergent mosses and lichens, which occur close to or which depend upon soils moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.*

The MSHCP defines vernal pools 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 wetland indictors of hydrology and/or vegetation during the drier portion of the growing season.*

With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions.

3.0 REGULATORY SETTING

The proposed Project is subject to state and federal regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including: state- and federally listed plants and animals; aquatic resources including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species which are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities.

3.1 State and/or Federally Listed Plants or Animals

3.1.1 State of California Endangered Species Act

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 the Federal Endangered Species Act (FESA), CESA does not list invertebrate species.

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

3.1.2 Federal Endangered Species Act

The FESA of 1973 defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any

species that 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 in Section 3(18) of 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 that result in injury to, or death of species as forms of "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.

3.1.3 State and Federal Take Authorizations for Listed Species

Federal or state authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in one of the following ways:

- Section 7 of the FESA stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 U.S.C. 1536(a)(2).
- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCP) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.
- Sections 2090-2097 of the CESA require that the state lead agency consult with CDFW on projects with potential impacts on state-listed species. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed as well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

3.1.4 Take Authorizations Pursuant to the MSHCP

The Western Riverside County MSHCP was adopted on June 17, 2003, and an Implementing Agreement (IA) was executed between the Federal and State Wildlife Agencies (USFWS and CDFW) and participating entities. The MSHCP is a comprehensive habitat conservation-planning program for western Riverside County. The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. As such, the MSHCP is intended to streamline review of individual projects with respect to the species and habitats addressed in the MSHCP, and to provide for an overall

Conservation Area that would be of greater benefit to biological resources than would result from a piecemeal regulatory approach. The MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to sensitive species.

Through agreements with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW), the MSHCP designates 146 special-status animal and plant species that receive some level of coverage under the plan. Of the 146 "Covered Species" designated under the MSHCP, the majority of these species has no additional survey/conservation requirements. In addition, through project participation with the MSHCP, the MSHCP provides mitigation for project-specific impacts to Covered Species so that the impacts would be reduced to below a level of significance pursuant to CEQA. As noted above, project-specific survey requirements exist for species designated as "Covered Species not yet adequately conserved". These include Narrow Endemic Plant Species, as identified by the Narrow Endemic Plant Species Survey Areas (NEPSSA); Criteria Area Plant Species identified by the Criteria Area Species Survey Areas (CASSA); animal species as identified by survey area; and plant and animal species associated with riparian/riverine areas and vernal pool habitats (*Volume I, Section 6.1.2* of the MSHCP document).

3.2 California Environmental Quality Act

3.2.1 CEQA Guidelines Section 15380

CEQA requires evaluation of a project's impacts on biological resources and provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts. Sections 5.1.1 and 5.2.2 below set forth these thresholds and guidelines. Furthermore, pursuant to the CEQA Guidelines Section 15380, CEQA provides protection for non-listed species that could potentially meet the criteria for state listing. For plants, CDFW recognizes that plants on Lists 1A, 1B, or 2 of the CNPS *Inventory of Rare and Endangered Plants in California* may meet the criteria for listing and should be considered under CEQA. CDFW also recommends protection of plants, which are regionally important, such as locally rare species, disjunct populations of more common plants, or plants CNPS Ranked 3 or 4.

3.2.2 Non-Listed Special-Status Plants, Wildlife and Vegetation Communities Evaluated Under CEQA

Federally Designated Special-Status Species

Within recent years, the USFWS instituted changes in the listing status of 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) 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. 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 this report the following acronyms are used for federal special-status species:

- FE Federally listed as Endangered
- FT Federally listed as Threatened
- FPE Federally proposed for listing as Endangered
- FPT Federally proposed for listing as Threatened

State-Designated Special-Status Species

Some mammals and birds are protected by the state as Fully Protected (SFP) Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California SSC are designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFW's CNDDB project. Informally listed taxa are not protected, 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 this report the following acronyms are used for State special-status species:

- SE State-listed as Endangered
- ST State-listed as Threatened
- SR State-listed as Rare
- SCE State Candidate for listing as Endangered
- SCT State Candidate for listing as Threatened
- SFP State Fully Protected
- SP State Protected
- SSC State Species of Special Concern

California Native Plant Society

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. The CNPS's Eighth Edition of the *California Native Plant Society's Inventory of Rare and Endangered Plants of California* separates plants of interest into five ranks. CNPS 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. The list serves as the candidate list for listing as threatened and endangered by CDFW. CNPS has developed five categories of rarity that are summarized in Table 3-1.

Table 3-1. CNPS Ranks 1, 2, 3, & 4, and Threat Code Extensions

CNPS Rank	Comments
Rank 1A – Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere	Thought to be extinct in California based on a lack of observation or detection for many years.
Rank 1B – Plants Rare, Threatened, or Endangered in California and Elsewhere	Species, which are generally rare throughout their range that are also judged to be vulnerable to other threats such as declining habitat.
Rank 2A – Plants presumed Extirpated in California, But Common Elsewhere	Species that are presumed extinct in California but more common outside of California
Rank 2B – Plants Rare, Threatened or Endangered in California, But More Common Elsewhere	Species that are rare in California but more common outside of California
Rank 3 – Plants About Which More Information Is Needed (A Review List)	Species that are thought to be rare or in decline but CNPS lacks the information needed to assign to the appropriate list. In most instances, the extent of surveys for these species is not sufficient to allow CNPS to accurately assess whether these species should be assigned to a specific rank. In addition, many of the Rank 3 species have associated taxonomic problems such that the validity of their current taxonomy is unclear.
Rank 4 – Plants of Limited Distribution (A Watch List)	Species that are currently thought to be limited in distribution or range whose vulnerability or susceptibility to threat is currently low. In some cases, as noted above for Rank 3 species, CNPS lacks survey data to accurately determine status in California. Many species have been placed on Rank 4 in previous editions of the "Inventory" and have been removed as survey data has indicated that the species are more common than previously thought. CNPS recommends that species currently included on this list should be monitored to ensure that future substantial declines are minimized.
Extension	**Comments**
.1 – Seriously endangered in California	Species with over 80% of occurrences threatened and/or have a high degree and immediacy of threat.
.2 – Fairly endangered in California	Species with 20-80% of occurrences threatened.
.3 – Not very endangered in California	Species with <20% of occurrences threatened or with no current threats known.

3.3 Jurisdictional Waters

3.3.1 Army Corps of Engineers

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a) as:

(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 foreign commerce including any such waters:
(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
(ii) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or
(iii) Which are used or could be used for industrial purpose by industries in interstate commerce;
(4) All impoundments of waters otherwise defined as waters of the United States under the definition;
(5) Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;
(6) The territorial seas;
(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.
(8) Waters of the United States do not include prior converted cropland.[1]

Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(e) as:

> *...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as 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.*

[1] The term "prior converted cropland" is defined in the Corps' Regulatory Guidance Letter 90-7 (dated September 26, 1990) as "wetlands which were both manipulated (drained or otherwise physically altered to remove excess water from the land) and cropped before 23 December 1985, to the extent that they no longer exhibit important wetland values. Specifically, prior converted cropland is inundated for no more than 14 consecutive days during the growing season…." [Emphasis added.]

The term “wetlands” (a subset of “waters of the United States”) is defined at 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987 the Corps published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the 1987 Wetland Delineation Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual and Supplement provide great detail in methodology and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

- more than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands[2]);

- soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and

- Whereas the 1987 Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with “problematic hydrophytic vegetation”, which require a minimum of 14 days of ponding to be considered a wetland.

On January 9, 2001 and June 5, 2007 the Supreme Court of the United States issued two rulings *Solid Waste Agency of Northern Cook County* v. *United States Army Corps of Engineers, et al* [SWANCC] and *Rapanos* v. *United States* and *Carabell* v. *United States Army Corps of Engineers* [Rapanos], respectively). The first case reiterated that “isolated” waters (those with no interstate commerce connection) are not subject to federal jurisdiction under Section 404 of the Clean Water Act. The second case determined (in a plurality vote) that a water must have a nexus with a “traditionally navigable water” (an undefined term) to be subject to federal jurisdiction under Section 404 of the Clean Water Act. The Corps and EPA has continued to grapple with providing clear guidance on these two decisions and continue to propose and/or issue guidance.

On June 29, 2015, the EPA and the Corps issued the Clean Water Rule in the *Federal Register*, Volume 80, No. 124, which defines the scope of waters of the United States protected under the CWA. The rule becomes effective on August 28, 2015 and is a definitional rule intended to clarify the scope of “waters of the Unites States”. In this rule, waters of the Unites States would include the following categories of jurisdictional waters: (1) traditional navigable waters, (2) interstate waters, (3) territorial seas, (4) impoundments of jurisdictional waters, (5) tributary waters, (6) adjacent waters, and (7) regional features subject to a case-specific analysis to determine if a significant nexus exists, and (8) waters in the 100-year floodplain, or within 4,000

[2] Lichvar, R. W. 2013. *The National Wetland Plant List:* 2013 wetland ratings. Phytoneuron 2013-49: 1-241.

feet of a water of the United States, subject to a case-specific analysis, to determine if a significant nexus exists.

Each of these features, as necessary, are described below.

Traditional Navigable Waters, Interstate Waters, Territorial Seas, Impoundments of Jurisdictional Waters

There is no change to the definitions of the first four types: traditional navigable waters, interstate waters, territorial seas, impoundments of jurisdictional waters.

Tributaries

The terms tributary and tributaries, as described in 33 CFR Part 328.3, each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (a)(4) of this section), to a water identified in paragraphs (a)(1) through (3) of this section that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark. These physical indicators demonstrate there is volume, frequency, and duration of flow sufficient to create a bed and banks and an ordinary high water mark, and thus to qualify as a tributary. A tributary can be a natural, man-altered, or man-made water and includes waters such as rivers, streams, canals, and ditches not excluded under paragraph (b) of this section. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if, for any length, there are one or more constructed breaks (such as bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands along the run of a stream, debris piles, boulder fields, or a stream that flows underground) so long as a bed and banks and an ordinary high water mark can be identified upstream of the break. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if it contributes flow through a water of the United States that does not meet the definition of tributary or through a non-jurisdictional water to a water identified in paragraphs (a)(1) through (3) of this section.

Adjacent Waters

As described in 33 CFR, Part 328.3, the term adjacent means bordering, contiguous, or neighboring a water identified in paragraphs (a)(1) through (5) of this section, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like. For purposes of adjacency, an open water such as a pond or lake includes any wetlands within or abutting its ordinary high water mark. Adjacency is not limited to waters located laterally to a water identified in paragraphs (a)(1) through (5) of this section. Adjacent waters also include all waters that connect segments of a water identified in paragraphs (a)(1) through (5) or are located at the head of a water identified in paragraphs (a)(1) through (5) of this section and are bordering, contiguous, or neighboring such water. Waters being used for established normal farming, ranching, and silviculture activities (33 U.S.C. 1344(f)) are not adjacent.

Adjacent is based on whether the feature neighbors a traditional navigable water. *Neighboring* is defined in 33 CFR Part 328.3 as:

(i) All waters located within 100 feet of the ordinary high water mark of a water identified in paragraphs (a)(1) through (5) of this section. The entire water is neighboring if a portion is located within 100 feet of the ordinary high water mark;

(ii) All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1) through (5) of this section and not more than 1,500 feet from the ordinary high water mark of such water. The entire water is neighboring if a portion is located within 1,500 feet of the ordinary high water mark and within the 100-year floodplain; and

(iii) All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (a)(1) or (a)(3) of this section, and all waters within 1,500 feet of the ordinary high water mark of the Great Lakes. The entire water is neighboring if a portion is located within 1,500 feet of the high tide line or within 1,500 feet of the ordinary high water mark of the Great Lakes.

Case-Specific Waters

The final rule creates *case-specific waters*, meaning they are not jurisdictional by rule but are subject to case-specific analysis to determine if a significant nexus exists and the water is a water of the United States. They are as follows:

- Prairie potholes
- Carolina and Delmarva bays
- Pocosins
- western vernal pools in California
- Texas coastal prairie wetlands.
- Waters within the 100-year floodplain of a traditional navigable water, interstate water, or the territorial seas **and** waters within 4,000 feet of the high tide line or the ordinary high water mark of a traditional navigable water, interstate water, the territorial seas, impoundments, or covered tributary are subject to case-specific significant nexus determinations, unless the water is excluded under paragraph (b) of the rule.

Case-specific waters may be evaluated as ‘‘similarly situated,’’ but it must be first demonstrated that these waters function alike and are sufficiently close to function together in affecting downstream waters. The significant nexus analysis must then be conducted based on consideration of the functions provided by those waters in combination in the point of entry watershed.

The final rule keeps existing exclusions but now excludes by rule certain ditches from jurisdiction, including ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary, and ditches with intermittent flow that are not a relocated tributary, or excavated in a tributary, or drain wetlands. The final rule also excludes groundwater and erosional features as well as stormwater control features constructed to convey, treat, or store stormwater, and cooling ponds that are created in dry land.

SUMMARY

The agencies will assert jurisdiction over the following waters:

1. Traditional navigable waters
2. Interstate waters
3. Territorial seas
4. Impoundments of jurisdictional waters
5. Tributaries having bed and bank and ordinary high water mark
6. Adjacent waters neighboring traditional navigable waters, interstate waters, territorial seas, impoundments of jurisdictional waters, or tributaries with neighboring defined as follows: (1) Waters located in whole or in part within 100 feet of the ordinary high water mark of 1 thru 5 above; (2) Waters located in whole or in part in the 100-year floodplain and that are within 1,500 feet of the ordinary high water mark of 1 thru 5 above (floodplain waters); or (3) Waters located in whole or in part within 1,500 feet of the high tide line of 1 or 2 and waters located within 1,500 feet of the ordinary high water mark of the Great Lakes.

The agencies will decide jurisdiction over the following waters based on a case-specific analysis to determine whether they have a significant nexus:

- Prairie potholes, Carolina and Delmarva bays, pocosins, western vernal pools in California, and Texas coastal prairie wetlands; and
- Waters within the 100-year floodplain of a traditional navigable water, interstate water, or the territorial seas and waters within 4,000 feet of the high tide line or the ordinary high water mark of a traditional navigable water, interstate water, the territorial seas, impoundments, or covered tributary are subject to case-specific significant nexus determinations, unless the water is excluded under paragraph (b) of the rule.

The agencies generally will **not** assert jurisdiction over the following features:

- Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary
- Ditches with intermittent flow that are not a relocated tributary, or excavated in a tributary, or drain wetlands.
- Groundwater and erosional features as well as stormwater control features constructed to convey, treat, or store stormwater, and cooling ponds that are created in dry land.
- Prior converted cropland and waste treatment systems.
- Erosional features, including gullies, rills, and ephemeral features that do not have a bed and banks and ordinary high water mark.

The agencies will apply the significant nexus standard as follows:

- A significant nexus is present when waters ‘‘either alone or in combination with similarly situated [wet]lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as ‘navigable.’ ’’

3.3.2 Regional Water Quality Control Board

Section 401 of the Clean Water Act requires any applicant for a Section 404 permit to obtain certification from the State that the discharge (and the operation of the facility being constructed) will comply with the applicable effluent limitation and water quality standards. In California this 401 certification is obtained from the Regional Water Quality Control Board. The Corps, by law, cannot issue a Section 404 permit until a 401 certification is issued or waived.

Subsequent to the SWANCC decision, the Chief Counsel for the State Water Resources Control Board issued a memorandum that addressed the effects of the SWANCC decision on the Section 401 Water Quality Certification Program.[3] The memorandum stating that for waters that are no longer considered subject to federal jurisdiction pursuant to Section 404 of the Clean Water Act, but which remain "waters of the state", the State will continue to regulate discharges under the Porter-Cologne Act. In such cases the applicant must apply for and obtain a Waste Discharge Requirement from the Regional Board.

3.3.3 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a "stream" (including creeks and rivers) as "a 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." CDFW definition of "lake" includes "natural lakes or man-made reservoirs."

CDFW jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and wildlife. CDFW Legal Advisor has prepared the following opinion[4]:

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects and riparian vegetation will be treated like natural waterways...

- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses, should be treated by [CDFW] as natural waterways...

- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions...

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[3] Wilson, Craig M. January 25, 2001. Memorandum addressed to State Board Members and Regional Board Executive Officers.

[4] California Department of Fish and Game. Environmental Services Division (ESD). 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code.

Thus, CDFW jurisdictional limits closely mirror those of the Corps. Exceptions are CDFW's addition of artificial stock ponds and irrigation ditches constructed on uplands, and the addition of riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetland status.

4.0 RESULTS

This section provides the results of general biological survey, vegetation mapping, habitat assessments for special-status plants and animals, an assessment for MSHCP riparian/riverine areas and vernal pools, and a jurisdictional assessment for Waters of the United States (including wetlands) subject to the jurisdiction of the Corps and Regional Board, and streams (including riparian vegetation) and lakes subject to the jurisdiction of CDFW.

4.1 Existing Conditions

The Project site consists of mostly developed lands with disturbed vegetation. A small amount of Riversidean sage scrub is found long the western border of the Project site adjacent to Sycamore Canyon Boulevard.

4.2 Vegetation Mapping

During vegetation mapping of the Project site, one vegetation alliance was identified. Table 4-1 provides a summary of vegetation alliances/land uses and the corresponding acreage. Detailed descriptions of each vegetation type follow the table. A Vegetation Map is attached as Exhibit 4. Photographs depicting the various vegetation types and land uses are attached as Exhibit 5.

Table 4-1. Summary of Vegetation/Land Use Types for the Project Site

VEGETATION COMMUNITY	ACREAGE
Riversidean Sage Scrub	0.61
Developed/Disturbed Lands	2.10
TOTAL	**2.71**

4.2.1 RIVERSIDEAN SAGE SCRUB

Approximately 0.61 acre of the Project site consists of a cut slope revegetated with Riversidean sage scrub. This vegetation community on the Project site was dominated by California buckwheat (*Eriogonum fasciculatum*), brittlebush (*Encelia farinosa*), and foxtail brome (*Bromus madritensis*). Other species within the scrub included hoary saltbush (*Atriplex canescens*) and deerweed (*Acmispon glaber*).

4.2.2 DISTURBED/DEVELOPED LANDS

Approximately 2.10 acres of the Project site consist of disturbed/developed lands. Vegetation in these areas is sparse and ruderal in nature, consisting largely of invasive non-native plants including common sow thistle (*Sonchus oleraceus*), foxtail barley (*Hordeum murinum*), prickly lettuce (*Lactuca serriola*), red-stemmed filaree (*Erodium cicutarium*), Russian thistle (*Salsola tragus*), short-podded mustard (*Hirschfeldia incana*), tocalote (*Centaurea melitensis*), and yellow sweet clover (*Melilotus indicus*).

4.3 Special-Status Vegetation Communities

The CNDDB identifies the following six special-status vegetation communities for the Riverside East, San Bernardino South, Redlands, Sunnymead, Perris, Steele Peak, Lake Matthews, Riverside West, and Fontana USGS quadrangle maps: Riversidean Alluvial Fan Sage Scrub, Southern California Arroyo Chub/Santa Ana Sucker Stream, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian Woodland, and Southern Willow Scrub. The Project site does not support any of these special-status vegetation types, identified by the CNDDB.

The site does support 0.61 acre of revegetated Riversidean sage scrub, a vegetation community that has declined appreciably in extent across the past several decades due to human development and can support a wide array of special-status plants and animals. The sage scrub on the Project site is limited in size, growing on a cut slope, and is surrounded by developed roadways. It is expected to have minimal function and value relative to intact sage scrub communities in the western Riverside County. Refer to Section 5.2 for an analysis of impact to this vegetation under CEQA.

4.4 Special-Status Plants

No special-status plants were detected at the Project site, including Nevin's barberry, smooth tarplant, and round-leaved filaree. The Project site does not support potentially suitable habitat for the three MSHCP Criteria Area Plant Species needing review under the MSHCP [Exhibit 3 – MSHCP Overlay Map]. Species with Table 4-2 provides a list of special-status plants evaluated for the Project site through the general biological survey and habitat assessments. Species were evaluated based on the following factors: 1) species identified by the CNDDB and CNPS as occurring (either currently or historically) on or in vicinity of the Project site, 2) applicable MSHCP survey areas, and 3) any other special-status plants that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs within the site.

Table 4-2. Special-Status Plants Evaluated for the Project Site

Status	
Federal	**State**
FE – Federally Endangered	SE – State Endangered
FT – Federally Threatened	ST – State Threatened
CNPS	

Rank 1A – Plants presumed extirpated in California and either rare or extinct elsewhere.
Rank 1B – Plants rare, threatened, or endangered in California and elsewhere.
Rank 2A – Plants presumed extirpated in California, but common elsewhere.
Rank 2B – Plants rare, threatened, or endangered in California, but more common elsewhere.
Rank 3 – Plants about which more information is needed (a review list).
Rank 4 – Plants of limited distribution (a watch list).

Threat Code extension
.1 – Seriously endangered in California (over 80% occurrences threatened)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

MSHCP
MSHCP = No additional action necessary
MSHCP(a) = Surveys may be required as part of wetlands mapping
MSHCP(b) = Surveys may be required within the Narrow Endemic Plant Species survey area
MSHCP(c) = Surveys may be required within locations shown on survey maps
MSHCP(d) = Surveys may be required within Criteria Area
MSHCP(e) = Conservation requirements identified in species-specific conservation objectives need to be met before classified as a Covered Species
MSHCP(f) = Covered species when a Memorandum of Understanding is executed with the Forest Service Land

Occurrence

- Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- Absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.
- Present – The species was detected onsite incidentally or through focused surveys.

Species Name	Status	Habitat Requirements	Occurrence
Alvin Meadow beadstraw *Galium californicum* ssp. *primum*	Federal: None State: None CNPS: Rank 1B.2 MSHCP(f)	Granitic and sandy soils in chaparral and lower montane coniferous forest.	Does not occur. Project site is outside of species' geographic range and habitat is absent.
Brand's star phacelia *Phacelia stellaris*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(b)	Coastal dunes and coastal sage scrub.	Does not occur at the Project site; suitable soils are absent and sage scrub is too disturbed to support species.
Bristly sedge *Carex comosa*	Federal: None State: None CNPS: Rank 2B.1	Coastal prairie, marshes and swamps (lake margins), and valley and foothill grassland.	Does not occur at the Project site; suitable hydrology absent.

Species Name	Status	Habitat Requirements	Occurrence
California satintail *Imperata brevifolia*	Federal: None State: None CNPS: Rank 2B.1	Mesic soils in chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), and riparian scrub.	Does not occur at the Project site; suitable hydrology absent.
Chaparral ragwort *Senecio aphanactis*	Federal: None State: None CNPS: Rank 2B.2	Chaparral, cismontane woodland, coastal scrub. Sometimes associated with alkaline soils.	Does not occur at the Project site; soils unsuitable and sage scrub present is revegetated and too disturbed to support the species.
Chaparral sand-verbena *Abronia villosa* var. *aurita*	Federal: None State: None CNPS: Rank 1B.1	Sandy soils in chaparral, coastal sage scrub.	Does not occur at the Project site; soils not suitable.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(d)	Playas, vernal pools, marshes and swamps (coastal salt).	Does not occur at the Project site; suitable soils and mesic conditions absent.
Coulter's matilija poppy *Romneya coulteri*	Federal: None State: None CNPS: Rank 4.2 MSHCP	Often in burns in chaparral and coastal scrub.	Absent. Species would have been detectible at time of field survey.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	Federal: None State: None CNPS: Rank 1B.2 MSHCP(d)	Alkaline soils in coastal sage scrub, coastal bluff scrub.	Does not occur at the Project site; soils and conditions unsuitable.
Gambel's water cress *Nasturtium gambelii*	Federal: FE State: ST CNPS: Rank 1B.1	Marshes and swamps (freshwater or brackish).	Does not occur at the Project site; hydrology absent.
Horn's milk-vetch *Astragalus hornii* var. *hornii*	Federal: None State: None CNPS: Rank 1B.1	Lake margins with alkaline soils, meadows and seeps, and playas.	Does not occur at the Project site; hydrology and suitable soils absent.
Little mousetail *Myosurus minimus* ssp. *apus*	Federal: None State: None CNPS: Rank 3.1 MSHCP(d)	Valley and foothill grassland, vernal pools (alkaline soils).	Does not occur at the Project site; hydrology and suitable soils absent.
Long-spined spineflower *Chorizanthe polygonoides* var. *longispina*	Federal: None State: None CNPS: Rank 1B.2 MSHCP	Clay soils in chaparral, coastal sage scrub, meadows and seeps,and valley and foothill grasslands	Does not occur at the Project site; soils and site conditions inappropriate.
Los Angeles sunflower *Helianthus nuttallii* ssp. *parishii*	Federal: None State: None CNPS: Rank 1A	Marshes and swamps (coastal salt and freshwater).	Does not occur at the Project site; hydrology and conditions unsuitable.

Species Name	Status	Habitat Requirements	Occurrence
Many-stemmed dudleya *Dudleya multicaulis*	Federal: None State: None CNPS: Rank 1B.2 MSHCP(b)	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Does not occur at the Project site; soils unsuitable and sage scrub present is a cut slope.
Marsh sandwort *Arenaria paludicola*	Federal: FE State: SE CNPS: Rank 1B.1	Bogs and fens, freshwater marshes and swamps.	Does not occur at the Project site; hydrology and conditions unsuitable.
Mesa horkelia *Horkelia cuneata* var. *puberula*	Federal: None State: None CNPS: Rank 1B.1	Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub.	Does not occur at the Project site; suitable soils absent and site lacks natural topography and top soil.
Munz's onion *Allium munzii*	Federal: FE State: ST CNPS: Rank 1B.1 MSHCP(b)	Clay soils in chaparral, coastal sage scrub, and valley and foothill grasslands	Does not occur at the Project site; suitable soils absent and site too disturbed and modified to support species.
Nevin's barberry *Berberis nevinii*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP(d)	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub.	Species was confirmed absent and no survey is required. No potential habitat is present and if the species was present, it would have been observed during the April 26, 2017 field survey as it is a perennial species. Site does not provide the necessary soils and conditions for species.
Palmer's grapplinghook *Harpagonella palmeri*	Federal: None State: None CNPS: Rank 4.2 MSHCP	Chaparral, coastal sage scrub, valley and foothill grassland. Occurring in clay soils.	Does not occur at the Project site. Site does not provide the necessary soils and conditions for species.
Paniculate tarplant *Deinandra paniculata*	Federal: None State: None CNPS: Rank 4.2	Usually in vernally mesic, sometimes sandy soils in coastal scrub, valley and foothill grassland, and vernal pools.	Does not occur at the Project site. This species tolerates high levels of disturbance but was confirmed absent during the field visit.
Parish's brittlescale *Atriplex parishii*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(d)	Chenopod scrub, playas, vernal pools.	Does not occur at the Project site. Site lacks suitable soils and conditions.

Species Name	Status	Habitat Requirements	Occurrence
Parish's bush-mallow *Malacothamnus parishii*	Federal: None State: None CNPS: Rank 1A	Chaparral and coastal scrub	Does not occur at the Project site; conditions too disturbed and topography modified.
Parish's desert-thorn *Lycium parishii*	Federal: None State: None CNPS: Rank 2B.3	Coastal sage scrub, Sonoran desert scrub	Absent. Conditions not suitable and the species would have been detectable at the time of the field visit. Species confirmed absent.
Parish's gooseberry *Ribes divaricatum* var. *parishii*	Federal: None State: None CNPS: Rank 1A	Riparian woodland	Does not occur at the Project site; hydrology and conditions not suitable.
Parry's spineflower *Chorizanthe parryi* var. *parryi*	Federal: None State: None CNPS: Rank 1B.1 MSHCP	Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	Does not occur at the Project site; soils and conditions not suitable.
Payson's jewelflower *Caulanthus simulans*	Federal: None State: None CNPS: Rank 4.2 MSHCP	Sandy or granitic soils in chaparral and coastal scrub.	Does not occur at the Project site; soils and conditions not suitable.
Peninsular spineflower *Chorizanthe leptotheca*	Federal: None State: None CNPS: Rank 4.2 MSHCP	Alluvial fan, granitic. Chaparral, coastal scrub, lower montane coniferous forest.	Does not occur at the Project site; soils and conditions not suitable.
Peruvian dodder *Cuscuta obtusiflora* var. *glandulosa*	Federal: None State: None CNPS: Rank 2B.2	Marshes and swamps (freshwater). Annual vine (parasitic).	Does not occur at the Project site; hydrology and suitable conditions absent.
Plummer's mariposa lily *Calochortus plummerae*	Federal: None State: None CNPS: Rank 4.2 MSHCP	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Does not occur at the Project site; soils and conditions not suitable.
Prairie wedge grass *Sphenopholis obtusata*	Federal: None State: None CNPS: Rank 2B.2	Mesic soils in cismontane woodland, meadows and seeps.	Does not occur at the Project site; hydrology and suitable conditions absent.
Pringle's monardella *Monardella pringlei*	Federal: None State: None CNPS: Rank 1A	Sandy soils in coastal sage scrub.	Does not occur at the Project site; soils and conditions not suitable.
Robinson's pepper grass *Lepidium virginicum* var. *robinsonii*	Federal: None State: None CNPS: Rank 4.3	Chaparral, coastal sage scrub	Does not occur at the Project site; too disturbed with top soils removed.

Species Name	Status	Habitat Requirements	Occurrence
Round-leaved filaree *California macrophylla*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(d)	Clay soils in cismontane woodland, valley and foothill grassland	Suitable soils (clay soils) and vegetation are absent from the Project site. There is no potential for the species to occur and thus, no survey is required.
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	Federal: FE State: SE CNPS: Rank 1B.2	Coastal dune, coastal salt marshes and swamps.	Does not occur at the Project site; hydrology and suitable conditions absent.
Salt Spring checkerbloom *Sidalcea neomexicana*	Federal: None State: None CNPS: Rank 2B.2	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Does not occur at the Project site; suitable soils and mesic conditions absent.
San Bernardino aster *Symphyotrichum defoliatum*	Federal: None State: None CNPS: Rank 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Does not occur at the Project site; hydrology and other needed conditions absent.
San Diego ambrosia *Ambrosia pumila*	Federal: FE State: None CNPS: Rank 1B.1 MSHCP(b)	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools. Often in disturbed habitats.	Does not occur at the Project site; natural topography absent due to cut and spoil deposition. Site too disturbed.
San Diego sagewort *Artemisia palmeri*	Federal: None State: None CNPS: Rank 4.2	Sandy and mesic soils in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland.	Does not occur at the Project site; suitable soils and conditions absent.
San Jacinto Valley crownscale *Atriplex coronata* var. *notatior*	Federal: FE State: None CNPS: Rank 1B.1 MSHCP(d)	Alkaline soils in chenopod scrub, valley and foothill grassland, vernal pools.	Does not occur at the Project site; soils and hydrology needed by species absent from site.
Santa Ana River woolly star *Eriastrum densifolium* ssp. *sanctorum*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP	Alluvial fan sage scrub, chaparral. Occurring on sandy or rocky soils.	Does not occur at the Project site; hydrology and soils absent.
Slender-horned spineflower *Dodecahema leptoceras*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP(b)	Sandy soils in alluvial scrub, chaparral, cismontane woodland.	Does not occur at the Project site; hydrology and soils absent.

Species Name	Status	Habitat Requirements	Occurrence
Small-flowered microseris *Microseris douglasii* spp. *platycarpha*	Federal: None State: None CNPS: Rank 4.2 MSHCP	Cismontane woodland, coastal sage scrub, valley and foothill grassland, vernal pools. Occurring on clay soils.	The Project site lacks clay soils, the necessary vegetation community this species occurs in, and the site is far too disturbed to support this species. A survey is not needed because there is no potential for the species to be present.
Small-flowered morning-glory *Convolvulus simulans*	Federal: None State: None CNPS: Rank 4.2	Chaparral (openings), coastal sage scrub, valley and foothill grassland. Occurring on clay soils and serpentinite seeps.	Does not occur at the Project site; suitable soils and conditions absent.
Smooth tarplant *Centromadia pungens* spp. *laevis*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(d)	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Species does not have potential to occur at the Project site. The species occurs in alkaline, silty soils where soils are wet/damp for extended periods of time. No survey is needed.
Snake cholla *Cylindropuntia californica* var. *californica*	Federal: None State: None CNPS: Rank 1B.1	Chaparral, coastal sage scrub.	Absent. Species would have been detectable if present during field visit.
South coast saltscale *Atriplex pacifica*	Federal: None State: None CNPS: Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, playas.	Does not occur at the Project site; soils and conditions unsuitable.
Spreading navarretia *Navarretia fossalis*	Federal: FT State: None CNPS: Rank 1B.1 MSHCP(b)	Vernal pools, playas, chenopod scrub, marshes and swamps (assorted shallow freshwater).	Does not occur at the Project site; hydrology and other conditions absent.
Thread-leaved brodiaea *Brodiaea filifolia*	Federal: FT State: SE CNPS: Rank 1B.1 MSHCP(d)	Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.	Does not occur at the Project site; suitable soils absent and site too disturbed.
Vernal barley *Hordeum intercedens*	Federal: None State: None CNPS: Rank 3.2 MSHCP	Coastal dunes, coastal sage scrub, valley and foothill grassland (saline flats and depressions), vernal pools.	Does not occur at the Project site; mesic conditions not present and site too disturbed.
Western spleenwort *Asplenium vespertinum*	Federal: None State: None CNPS: Rank 4.2	Rocky soils in chaparral, cismontane woodland, and coastal scrub.	Does not occur at the Project site; suitable soils and conditions absent.

Species Name	Status	Habitat Requirements	Occurrence
White rabbit-tobacco *Pseudognaphalium leucocephalum*	Federal: None State: None CNPS: Rank 2B.2	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland.	Does not occur at the Project site; hydrology and suitable conditions absent.
Woven-spored lichen *Texosporium sancti-jacobi*	Federal: None State: None CNPS: Rank 3	On soil, small mammal pellets, dead twigs, and on *Selaginella* spp. Chaparral (openings).	Does not occur at the Project site; site too disturbed.
Wright's trichocoronis *Trichocoronis wrightii* var. *wrightii*	Federal: None State: None CNPS: Rank 2B.1 MSHCP(b)	Alkaline soils in meadows and seeps, marshes and swamps, riparian scrub, vernal pools.	Does not occur at the Project site; suitable soils and hydrology absent.

4.4.1 Special-Status Plants Detected at the Project site

No special-status plants were detected. No special-status plant has potential to be present based on hydrology, soils, vegetation association, and/or site disturbances.

4.5 Special-Status Animals

A single special-status animal was found, coastal whiptail (*Aspidoscelis tigris stejnegeri*). Refer to Section 4.5.1 for more detail. No other special-status animals were detected at the Project site, including burrowing owl. Table 4-3 provides a list of special-status animals evaluated for the Project site through a general biological survey and habitat assessments. Species were evaluated based on the following factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Project site, 2) applicable MSHCP survey areas, and 3) any other special-status animals that are known to occur within the vicinity of the Project site, for which potentially suitable habitat occurs on the site.

Table 4-3. Special Status Animals Evaluated for the Project Site

Status	
Federal	**State**
FE – Federally Endangered	SE – State Endangered
FT – Federally Threatened	ST – State Threatened
FPT – Federally Proposed Threatened	SCE – State Endangered Candidate
FC – Federal Candidate	CFP – California Fully-Protected Species
	SSC – Species of Special Concern
MSHCP	
MSHCP = No additional action necessary	
MSHCP(a) = Surveys may be required as part of wetlands mapping	
MSHCP(b) = Surveys may be required within the Narrow Endemic Plant Species survey area	
MSHCP(c) = Surveys may be required within locations shown on survey maps	
MSHCP(d) = Surveys may be required within Criteria Area	
MSHCP(e) = Conservation requirements identified in species-specific conservation objectives need to be met before classified as a Covered Species	

MSHCP(f) = Covered species when a Memorandum of Understanding is executed with the Forest Service Land

Western Bat Working Group (WBWG)
H – High Priority
LM – Low-Medium Priority
M – Medium Priority
MH – Medium-High Priority

Occurrence

- Absent – The species is absent from the site, either because the site lacks suitable habitat for the species, the site is located outside of the known range of the species, or focused surveys has confirmed the absence of the species.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.
- Present – The species was detected onsite incidentally or through focused surveys.

Species Name	Status	Habitat Requirements	Occurrence
Invertebrates			
Delhi-sands flower-loving fly *Rhaphiomidas terminatus abdominalis*	Federal: FE State: None MSHCP	Fine, sandy soils, often associated with wholly or partially consolidated dunes referred to as the "Delhi" series. Vegetation consists of a sparse cover, including Californica buckwheat, California croton, deerweed, and evening primrose.	Absent from Project site due to lack of suitable habitat (soils unsuitable).
Quino checkerspot butterfly *Euphydryas editha quino*	Federal: FE State: None MSHCP	Larval and adult phases each have distinct habitat requirements tied to host plant species and topography. Larval host plants include *Plantago erecta* and *Castilleja exserta*. Adults occur on sparsely vegetated rounded hilltops and ridgelines, and are known to disperse through disturbed habitats to reach suitable nectar plants.	Absent from Project site due to lack of suitable habitat (too disturbed and isolated).
Riverside fairy shrimp *Streptocephalus woottoni*	Federal: FE State: None MSHCP(a)	Restricted to deep seasonal vernal pools, vernal pool-like ephemeral ponds, and stock ponds.	Absent from Project site due to lack of suitable habitat (lacks season ponds or depressions).

Species Name	Status	Habitat Requirements	Occurrence
Fish			
Santa Ana speckled dace *Rhinichthys osculus* spp. *3*	Federal: None State: SSC	Occurs in the headwaters of the Santa Ana and San Gabriel Rivers. May be extirpated from the Los Angeles River system. Requires permanent flowing streams with summer water temperatures of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	Absent from Project site due to lack of suitable habitat.
Santa Ana sucker *Catostomus santaanae*	Federal: FT State: SSC MSHCP	Small, shallow streams, less than 7 meters in width, with currents ranging from swift in the canyons to sluggish in the bottom lands. Preferred substrates are generally coarse and consist of gravel, rubble, and boulders with growths of filamentous algae, but occasionally they are found on sand/mud substrates.	Absent from Project site due to lack of suitable habitat.
Amphibians			
Southern mountain yellow-legged frog *Rana muscosa*	Federal: FE State: SE, SSC MSHCP(c)	Streams and small pools in ponderosa pine, montane hardwood-conifer, and montane riparian habitat types.	Absent from Project site due to lack of suitable habitat (montane species).
Western spadefoot *Spea hammondii*	Federal: None State: SSC MSHCP	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Absent from Project site due to lack of suitable habitat.
Reptiles			
California glossy snake *Arizona elegans occidentalis*	Federal: None State: SSC	Inhabits arid scrub, rocky washes, grasslands, chaparral.	Absent from Project site due to lack of suitable habitat (site too disturbed and isolated).
Coastal whiptail *Aspidoscelis tigris stejnegeri (multiscutatus)*	Federal: None State: SSC MSHCP	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Single individual detected during field visit. Refer to Section 4.5.1 for more detail and Section 5.4 for an analysis of impact to the species from development of the Project.
Coast horned lizard *Phrynosoma blainvillii*	Federal: None State: SSC MSHCP	Occurs in a variety of vegetation types including coastal sage scrub,	Not expected to occur on the Project site. Site too

Species Name	Status	Habitat Requirements	Occurrence
		chaparral, annual grassland, oak woodland, and riparian woodlands.	disturbed, isolated, and conditions not suitable.
Coast patch-nosed snake *Salvadora hexalepis virgultea*	Federal: None State: SSC	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.	Absent from Project site due to lack of suitable habitat.
Red-diamond rattlesnake *Crotalus ruber*	Federal: None State: SSC MSHCP	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	No potential for the species to be present due to the site being surrounded by city roads and I-215.
San Diego banded gecko *Coleonyx variegatus abbotti*	Federal: None State: SSC MSHCP	Primarily a desert species, but also occurs in cismontane chaparral, desert scrub, and open sand dunes.	Absent from Project site due to lack of suitable habitat (site too small and "isolated" from other potential habitat).
Silvery legless lizard *Anniella pulchra pulchra*	Federal: None State: SSC	Occurs primarily in areas with sandy or loose organic soil, or where there is plenty of leaf litter. Associated with coastal sage scrub, chaparral, coastal dunes, valley/foothill grasslands, oak woodlands, and pine forests.	Absent from Project site due to lack of suitable habitat (site too small and "isolated" from other potential habitat).
Two-striped garter snake *Thamnophis hammondii*	Federal: None State: SSC	Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.	Absent from Project site due to lack of suitable habitat (no aquatic habitats).
Western pond turtle *Emys marmorata*	Federal: None State: SSC MSHCP	Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons. Abundant basking sites and cover necessary, including logs, rocks, submerged vegetation, and undercut banks.	Absent from Project site due to lack of suitable habitat (no aquatic habitats).
Birds			
Bald eagle (nesting & wintering) *Haliaeetus leucocephalus*	Federal: Delisted State: SE, CFP MSHCP	Primarily in or near seacoasts, rivers, swamps, and large lakes. Perching sites consist of large trees or snags with heavy limbs or broken tops.	Absent from Project site due to lack of suitable habitat (no nesting or foraging).

Species Name	Status	Habitat Requirements	Occurrence
Burrowing owl (burrow sites & some wintering sites) *Athene cunicularia*	Federal: None State: SSC MSHCP(c)	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	The Project site occurs within the MSHCP survey area for burrowing owl. During the field survey, the entire site was walked by foot, looking for potentially suitable burrows and indirect sign of the species. No burrows or sign were found. Per the MSHCP survey protocol, when potential burrow habitat is absent, no survey is required.
Coastal California gnatcatcher *Polioptila californica californica*	Federal: FT State: SSC MSHCP	Low elevation coastal sage scrub and coastal bluff scrub.	The Riversidean sage scrub present is too limited in extent and isolated from other adjacent potential habitat for this species. This species is judged to have no potential to be present on the Project site.
Least Bell's vireo (nesting) *Vireo bellii pusillus*	Federal: FE State: SE MSHCP(a)	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Absent from Project site due to lack of suitable habitat (riparian scrub).
Long-eared owl (nesting) *Asio otus*	Federal: None State: SSC	Riparian habitats are required by the long-eared owl, but it also uses live-oak thickets and other dense stands of trees.	Absent from Project site due to lack of suitable habitat (riparian, oak woodland).
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	Federal: FE State: SE MSHCP(a)	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Absent from Project site due to lack of suitable habitat (mature riparian forest/scrub).
Swainson's hawk (nesting) *Buteo swainsoni*	Federal: None State: ST MSHCP	Summer in wide open spaces of the American West. Nest in grasslands, but can use sage flats and agricultural lands. Nests are placed in lone trees.	Not expected to occur on the Project site. The Project site is outside the nesting range of this species and the Project site does not support potential foraging habitat for wintering or migrating individuals. During migration/winter this species occurs in groups and is associated with large expanses of agriculture and/or open grasslands. The Project site lacks potential habitat and conditions for this

Species Name	Status	Habitat Requirements	Occurrence
			species. No potential to be present.
Tricolored blackbird (nesting colony) *Agelaius tricolor*	Federal: None State: SCE MSHCP	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Absent from Project site due to lack of suitable habitat (extensive freshwater marsh, agriculture, grasslands).
Western yellow-billed cuckoo (nesting) *Coccyzus americanus occidentalis*	Federal: FT State: SE MSHCP(a)	Dense, wide riparian woodlands with well-developed understories.	Absent from Project site due to lack of suitable habitat.
White-tailed kite (nesting) *Elanus leucurus*	Federal: None State: FP MSHCP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	The Project site lacks the open landscape needed for foraging by the species and the site lacks shrubs or trees for nesting by this species. No potential for this species to occur.
Yellow warbler (nesting) *Setophaga petechia*	Federal: None State: SSC MSHCP	Breed in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest, and shrub habitats.	Absent from Project site due to lack of suitable habitat (riparian forest).
Mammals			
American badger *Taxidea taxus*	Federal: None State: SSC	Most abundant in drier open stages of most scrub, forest, and herbaceous habitats, with friable soils.	There is no potential for this species to occur on the Project site. During the April 26, 2017 field survey, the entire site was checked for burrows and there were no badger burrows. Because the site is surrounded by development, there is no potential for badger to use the site for foraging.
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	Federal: None State: SSC MSHCP(c)	Fine, sandy soils in coastal sage scrub and grasslands.	Absent from Project site due to lack of suitable habitat (site "isolated" and far too disturbed).
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	Federal: None State: SSC MSHCP	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Absent from Project site due to lack of suitable habitat (site "isolated" and far too disturbed).

Species Name	Status	Habitat Requirements	Occurrence
Pallid bat *Antrozous pallidus*	Federal: None State: SSC WBWG: H	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	Absent from Project site due to lack of suitable habitat.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	Federal: None State: SSC WBWG: M	Rocky areas with high cliffs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	Absent from Project site due to lack of suitable habitat.
San Bernardino kangaroo rat *Dipodomys merriami parvus*	Federal: FE State: SSC MSHCP(c)	Typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and floodplains, and along washes with nearby sage scrub.	Absent from Project site due to lack of suitable habitat (site lacks alluvial scrub).
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	Federal: None State: SSC MSHCP	Occupies a variety of habitats, but is most common among shortgrass habitats. Also occurs in sage scrub, but needs open habitats.	The Project site does not provide potential habitat for this species. The site is surrounded by development. There is no potential for this species to be present.
San Diego desert woodrat *Neotoma lepida intermedia*	Federal: None State: SSC MSHCP	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Confirmed absent from Project site lacks suitable habitat.
Southern grasshopper mouse *Onychomys torridus ramona*	Federal: None State: SSC	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	Absent from Project site due to lack of suitable habitat (site "isolated" and far too disturbed).
Stephens' kangaroo rat *Dipodomys stephensi*	Federal: FE State: ST MSHCP	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	Absent from Project site due to lack of suitable habitat (site "isolated" and far too disturbed).
Western mastiff bat *Eumops perotis californicus*	Federal: None State: SSC WBWG: H	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Absent from Project site due to lack of suitable habitat.
Western yellow bat *Lasiurus xanthinus*	Federal: None State: SSC WBWG: H	Found in valley foothill riparian, desert riparian, desert wash, and palm	Absent from Project site due to lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
		oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	
Yuma Myotis *Myotis yumanensis*	Federal: None State: None WBWG: LM	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	Absent from Project site due to lack of suitable habitat.

4.5.1 Special-Status Wildlife Species Observed within the Project Site

One special-status animal was found on the Project site, coastal whiptail (*Aspidoscelis tigris stejnegeri*). It was a single individual that may have come from the open space west of Sycamore Canyon Boulevard. No other special-status animals were found and no others have potential to occur. Refer to Section 5.4 for an analysis of impact to coastal whiptail from development of the Project.

4.5.2 Special-Status Wildlife Species Reviewed for Potential to Occur at the Project Site

Due to the Project site being limited in extent, being comprised of cut and fill, and surrounded by City and Interstate roadways, no special-status wildlife species are expected to occur at the Project site, including burrowing owl. The entire Project site was checked for burrows potentially suitable for burrowing owl and none were present. A survey was not performed for burrowing owl because the first step is to determine the presence of potentially suitable burrows. If there are no potential burrows or artificial features (e.g. concrete pile, riprap) that could provide "burrowing" habitat present, a focused survey is not required under the MSHCP.

4.5.3 Critical Habitat

The Project site does not occur within any USFWS designated or proposed critical habitat.

4.6 Raptor Use

Southern California holds a diversity of birds of prey (raptors), and many of these species are in decline. For most of the declining species, foraging requirements include extensive open, undisturbed, or lightly disturbed areas, especially grasslands. This type of habitat has declined severely in the region, affecting many species, but especially raptors.

The Project site is too limited in size to provide raptor foraging habitat and no potential nesting habitat is present. No raptors were detected during the field work.

4.7 Nesting Birds

The Project site contains shrubs, grass, and bareground that could conceivably provide suitable habitat for common nesting migratory birds. Impacts to nesting birds are prohibited under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code.[5] Refer to Section 5.6 for an analysis of impact to nesting birds by development of the Project and Section 6.2 for a mitigation measure to address the potential impact.

4.8 Wildlife Movement and Nurseries

The Project site does not support physical features that could support wildlife migration (movement), such as drainages and/or ridgelines. The Project site is a triangle of land that is surrounded by major roadways. The Project site also lacks aquatic or woodlands that may support wildlife nurseries.

4.9 Soil Mapping

The Natural Resource Conservation Service (NRCS) identifies Cieneba soils as present, and specifically Cieneba sandy loam and Cieneba rocky sandy loam [Exhibit 4]. The Cieneba soils consist of somewhat excessively drained soils on uplands that formed in coarse-grained igneous rock. Because the Project site has experienced cut and fill during construction of Sycamore Canyon Boulevard, the NRCS soil mapping may not be completely accurate.

4.10 Jurisdictional Delineation

No jurisdictional features are present on the Project site.

4.11 MSHCP Riparian/Riverine Areas and Vernal Pools

No MSHCP riparian/riverine areas and/or vernal pools are present on the Project site.

5.0 IMPACT ANALYSIS

The following discussion examines the potential impacts to plant and wildlife resources that would occur as a result of the proposed project. Impacts (or effects) can occur in two forms, direct and indirect. Direct impacts are considered to be those that involve the loss, modification or disturbance of plant communities, which in turn, directly affect the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants or animals, which may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

[5] The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

Indirect impacts pertain to those impacts that result in a change to the physical environment, but which is not immediately related to a project. Indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project, but occur at a different time or place. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects, and other off site areas where the effects of the project may be experienced by plants and wildlife. Examples of indirect impacts include the effects of increases in ambient levels of noise or light; predation by domestic pets; competition with exotic plants and animals; introduction of toxics, including pesticides; and other human disturbances such as hiking, off-road vehicle use, unauthorized dumping, etc. Indirect impacts are often attributed to the subsequent day-to-day activities associated with project build-out, such as increased noise, the use of artificial light sources, and invasive ornamental plantings that may encroach into native areas. Indirect effects may be both short-term and long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in a slow replacement of native plants by non-native invasives, as well as changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites.

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. A cumulative impact can occur from multiple individual effects from the same project, or from several projects. The cumulative impact from several projects is the change in the environment resulting from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

5.1 California Environmental Quality Act (CEQA)

5.1.1 Thresholds of Significance

Environmental impacts to biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, Section 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California:

> *"Prevent the elimination of fish or 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..."*

Determining whether a project may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA, Section 15064.7 (Thresholds of Significance), each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. In the development of thresholds of significance for impacts to biological resources CEQA provides guidance primarily

in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

> *"The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species, ..."*

Therefore, for the purpose of this analysis, impacts to biological resources are considered potentially significant (before considering offsetting mitigation measures) if one or more of the following criteria discussed below would result from implementation of the proposed project.

5.1.2 Criteria for Determining Significance Pursuant to CEQA

Appendix G of the 2017 State CEQA guidelines indicate that a project may be deemed to have a significant effect on the environment if the project is likely to:

> *a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.*
>
> *b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.*
>
> *c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*
>
> *d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.*
>
> *e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*
>
> *f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

5.2 Impacts to Native Vegetation

Table 5-1 provides a summary of proposed impacts to vegetation from development of the Project site. The proposed Project would permanently impact approximately 0.61 acre of revegetated Riversidean sage scrub. This vegetation occurs as a strip of vegetation on the cut slope adjacent to Sycamore Canyon Boulevard and thus is limited in size, highly disturbed, and does not provide the function and value indicative of intact sage scrub. Because of this, the 0.61 acre of sage scrub present would not provide habitat for species that rely on sage scrub vegetation communities [Exhibit 5]. The Project would also permanently remove 2.10 acres of developed/disturbed land. The proposed permanent removal of 0.61 acre of Riversidean sage scrub would not be a significant impact under CEQA, neither would the removal of 2.10 acres of 2.10 acres of developed/disturbed land. However, the removal of sage scrub by the proposed project would be fully mitigated under CEQA through compliance with the biological requirements of the MSHCP. Compliance meaning the permittees under the MSHCP will review each development or discretionary project application to ensure certain specifications, siting and design criteria, and general avoidance guidelines are followed, as outlined in Section 7.0 of the MSHCP. In addition, for this Project, a Joint Project Review (JPR) is necessary as the project occurs within a criteria cell.

Table 5-1. Summary of Vegetation/Land Use Impacts

VEGETATION COMMUNITY	IMPACT ACREAGE
Riversidean Sage Scrub	0.61
Developed/Disturbed Lands	2.10
TOTAL	**2.71**

5.3 Impacts to Special-Status Plants

Because there is no potential habitat for any special-status species. The proposed Project will not impact special-status plants.

5.4 Impacts to Special-Status Animals

The proposed Project may impact one special-status species, coastal whiptail. An individual was observed during the field visit. Given the small size and location of the Project site, no more than a few individuals of this species are expected to occur on the site. No other special-status animals are expected. The removal of coastal whiptail habitat and potential mortality to a few individuals would not be potentially significant under CEQA because the species remains common in western Riverside County. In addition, coastal whiptail is a fully covered species under the MSHCP, meaning that any potential impacts to the species by the proposed Project would be mitigated by the MSHCP. No mitigation is needed.

Although there was no potential for burrowing owl to be present due to a lack of burrows, the MSHCP requires that a pre-construction survey be performed. Refer to Section 6.1 for additional details.

5.5 Impacts to Critical Habitat

The proposed Project will not impact lands designated as critical habitat by the USFWS.

5.6 Impacts to Nesting Birds

The project has the potential to impact active bird nests if vegetation is removed during the nesting season (February 1 to August 31). Although impacts to native birds are prohibited by MBTA and similar provisions of California Fish and Game Code, impacts to native birds by the proposed Project would not be a significant impact under CEQA. The native birds with potential to nest on the Project site would be those that are extremely common to the region and highly adapted to human landscapes (e.g., house finch, killdeer). The number of individuals potentially affected by the Project would not significantly affect regional, or local populations of such species. However, to ensure compliance with MBTA and Fish and Game Code, an avoidance/minimization measure is provided in Section 6.2.

5.7 Impacts to MSHCP Riparian/Riverine Areas

The proposed Project will not impact MSHCP Riparian/Riverine areas as there are none on or adjacent to the Project site.

5.8 Impacts to Jurisdictional Waters

The proposed Project will not impact any jurisdictional waters as none are present on or directly adjacent to the Project site.

5.9 Impacts to Wildlife Movement/Nurseries

The Project site lacks migratory wildlife corridors and wildlife nursery sites. The Project site does not occur within MSHCP Cores or Linkages. The proposed Project would not interfere or impact (1) the movement of native resident or migratory fish or wildlife species or (2) established native resident or migratory wildlife corridors, or (3) impede the use of native wildlife nursery sites. No impact would occur.

5.10 Indirect Impacts to Biological Resources

In the context of biological resources, indirect effects are those effects associated with developing lands adjacent to native open space. Potential indirect effects associated with development include water quality impacts from associated with drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and effects from human access into adjacent open space, such as recreational activities (including off-road vehicles and hiking), pets, dumping, etc. Temporary, indirect effects may also occur as a result of construction-related activities.

The proposed Project is not directly adjacent to existing MSHCP conservation area. Proposed Constrained Linkage 7 is south of the Project site, on the south side of Central Avenue [Exhibit 3

– MSHCP Overlay Map]. The proposed Project is a commercial development with existing road infrastructure (Sycamore Canyon Boulevard and Central Avenue) and a vacant property between it and Proposed Constrained Linkage 7.

The Project is not expected to result in significant indirect impacts to special-status biological resources, with the implementation of measures pursuant to the MSHCP Urban/Wildlands Interface Guidelines (*Volume I, Section 6.1.4* of the MSHCP). These guidelines are intended to address indirect effects associated with locating projects (particularly development) in proximity to the MSHCP Conservation Area. To minimize potential edge effects, the guidelines are to be implemented in conjunction with review of individual public and private development projects in proximity to the MSHCP Conservation Area. The Project will implement measure consistent with the MSHCP guidelines to address the following:

- Drainage;
- Toxics;
- Lighting;
- Noise;
- Invasives;
- Barriers; and
- Grading/Land Development.

5.10.1 Drainage

Proposed Projects in proximity to the MSHCP Proposed Constrained Linkage 7 and shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged to the MSHCP Proposed Constrained Linkage 7 is not altered in an adverse way when compared with existing conditions. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP Proposed Constrained Linkage 7. Stormwater systems, as applicable, shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the MSHCP Proposed Constrained Linkage 7. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. Regular maintenance shall occur to ensure effective operations of runoff control systems.

The Project's contractor will develop a Stormwater Pollution Prevention Plan (SWPPP) to address runoff and water quality during construction (refer to Section 6.3). However, following the completion of activities, the Project site will not contain any developed or paved areas, that will in any way result in increased drainage to the MSHCP Proposed Constrained Linkage 7. As such, no measures would be required post-construction.

5.10.2 Toxics

Land uses proposed in proximity to the MSHCP Proposed Constrained Linkage 7 that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely

affect wildlife species, habitat or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Proposed Constrained Linkage 7. Measures such as those employed to address drainage issues shall be implemented. The proposed Project will implement a SWPPP that will address runoff during construction (refer to Section 6.3).

5.10.3 Lighting

Night lighting shall be directed away from the MSHCP Proposed Constrained Linkage 7 to protect species from direct night lighting (refer to Section 6.4). If night lighting is required during construction, shielding shall be incorporated to ensure ambient lighting in the MSHCP Proposed Constrained Linkage 7 is not increased.

5.10.4 Noise

Proposed noise generating land uses affecting MSHCP Conservation Area shall incorporate setbacks, berms or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations and guidelines related to land use noise standards. For planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards.

Given the location and existing vehicle and human activities surrounding the Project site, measures to reduce noise is not expected to be necessary.

5.10.5 Invasives

Projects adjacent to the MSHCP Conservation Area (including MSHCP Proposed Constrained Linkage 7) shall avoid the use of invasive plant species in landscaping, including invasive, non-native plant species listed in *Volume I,* Table 6-2 of the MSHCP (refer to Section 6.5).

5.10.6 Barriers

Proposed land uses adjacent to the MSHCP Conservation Area (including MSHCP Proposed Constrained Linkage 7) shall incorporate barriers, where appropriate in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass or dumping in the MSHCP Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage and/or other appropriate mechanisms.

Given the location of the Project site and MSHCP Proposed Constrained Linkage 7, barriers would not be necessary.

5.10.7 Grading/Land Development

The MSHCP states that manufactured slopes associated with development shall not extend into the MSHCP Conservation Area.

The Project site is not directly adjacent to MSHCP Proposed Constrained Linkage 7.

5.11 Cumulative Impacts to Biological Resources

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered potentially significant. "Related projects" refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project.

Any Project anticipated cumulative impacts would be addressed by the MSHCP, which, as currently adopted, addresses 146 "Covered Species" that represent a broad range of habitats and geographical areas within western Riverside County, including threatened and endangered species and regionally- or locally-sensitive species that have specific habitat requirements and conservation and management needs. The MSHCP addresses biological impacts for take of Covered Species within the MSHCP area. Impacts to Covered Species and establishment and implementation of a regional conservation strategy and other measures included in the MSHCP are intended to address the federal, state, and local mitigation requirements for these species and their habitats. Specifically, Section 4.4 of the MSHCP states that:

The MSHCP was specifically designed to cover a large geographical area so that it would protect numerous endangered species and habitats throughout the region. It is the projected cumulative effect of future development that has required the preparation and implementation of the MSHCP to protect multiple habitats and multiple endangered species.

Of the limited biology present, implementation of the proposed Project would not cause potentially significant impacts to biological resources. The site is small, surrounded by major roadways, and has been severely mechanically manipulated in past years.

6.0 MITIGATION/AVOIDANCE MEASURES

The following discussion provides project-specific mitigation/avoidance measures for actual or potential impacts to special-status resources.

6.1 Burrowing Owl

The Project site occurs within the MSHCP survey area for burrowing owl. Although the site lacked potential burrows during the current field work, MSHCP Objective 6 for burrowing owls requires that pre-construction surveys prior to site grading. As such, the following measure is required to avoid direct impacts to burrowing owls and to ensure consistency with the MSHCP:

- A qualified biologist will conduct a pre-construction presence/absence survey for burrowing owls within 30 days prior to site disturbance. If burrowing owls are detected onsite, the owls will be relocated/excluded from the site outside of the breeding season

following accepted protocols, and subject to the approval of the RCA and wildlife agencies.

6.2 Nesting Birds

The Project site contains vegetation with the potential to support nesting birds. As discussed above, the MBTA and California Fish and Game Code prohibit impacts to nesting birds. The following measure is recommended to avoid impacts to nesting birds:

- As feasible, vegetation clearing should be conducted outside of the nesting season, which is generally identified as February 1 through September 15. If avoidance of the nesting season is not feasible, then a qualified biologist shall conduct a nesting bird survey within three days prior to any disturbance of the site, including disking, demolition activities, and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests.

6.3 Drainage

The Project's contractor will develop a Stormwater Pollution Prevention Plan (SWPPP) to address runoff and water quality during construction. Following the completion of construction of the Project, the Project site will not contain any developed or paved areas, that will in any way result in increased drainage to the MSHCP Proposed Constrained Linkage 7. As such, no measures will be required post-construction.

The Project will design a stormwater system as part of the Project design to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent MSHCP Proposed Constrained Linkage 7. Specifically, in accordance with federal, state, regional and local standards and regulations concerning water quality.

6.4 Lighting

Night lighting shall be directed away from MSHCP Constrained Linkage 7. Shielding shall be incorporated into project designs to ensure ambient lighting in the area of Constrained Linkage 7 does not increase from existing conditions.

6.5 Invasive Species Landscaping

Project landscaping will avoid the use of invasive plant species in landscaping, including invasive, non-native plant species listed in Volume I, Table 6-2 of the MSHCP.

7.0 MSHCP CONSISTENCY ANALYSIS

The purpose of this section is to provide an analysis of the proposed Project with respect to compliance with biological aspects of the Western Riverside County MSHCP. Specifically, this analysis evaluates the proposed Project with respect to the Project's consistency with MSHCP Reserve assembly requirements, *Section 6.1.2* (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools), *Section 6.1.3* (Protection of Narrow Endemic Plant Species), *Section 6.1.4* (Guidelines Pertaining to the Urban/Wildlands Interface), and *Section 6.3.2* (Additional Survey Needs and Procedures).

7.1 Project Relationship to Reserve Assembly

The Project site is located within Criteria Cell 721 of Subunit 1 of the Sycamore Canyon/Box Springs Central Area Plan [Exhibit 3 – MSHCP Overlay Map]. Although the Project site was land within California Department of Transportation Right Of Way (ROW) the proposed Project is subject to the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process. The Project is also subject to Joint Project Review (JPR) by the RCA in order for the RCA to determine that the Project will be consistent with the MSHCP.

7.2 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

The Project site does not support MSHCP riparian/riverine resources.

7.3 Protection of Narrow Endemic Plants

Volume I, Section 6.1.3 of the MSHCP requires that within identified Narrow Endemic Plant Species Survey Areas (NEPSSA), site-specific focused surveys for Narrow Endemic Plants Species will be required for all public and private projects where appropriate soils and habitat are present.

The Project site does not occur within a NEPSSA survey area and does not support potential habitat for special-status plants.

7.4 Guidelines Pertaining to the Urban/Wildland Interface

The MSHCP Urban/Wildland Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area (including MSHCP Proposed Constrained Linkage 7). As the MSHCP Conservation Area is assembled, development is expected to occur adjacent to the Conservation Area. Future development in proximity to the MSHCP Conservation Area may result in edge effects with the potential to adversely affect biological resources within the Conservation Area. To minimize such edge effects, the guidelines shall be implemented in conjunction with review of individual public and private development projects in proximity to the MSHCP Conservation Area and address the following:

- Drainage;

- Toxics;
- Lighting;
- Noise;
- Invasive species;
- Barriers;
- Grading/Land Development.

As discussed in Section 5.0 of this report, the Project will implement applicable measures as it relates to temporary construction impacts to minimize adverse indirect impacts on special-status resources within Conserved Lands. The proposed Project will be consistent with *Section 6.1.4* of the MSHCP.

7.5 Additional Survey Needs and Procedures

The Project site occurs within the CAPSSA survey area for Nevin's barberry, smooth tarplant, and round-leaved filaree. The Project site is located within the MSHCP Burrowing Owl Survey Area, but is not located within the MSHCP Mammal or Amphibian Areas.

Based on the field work performed and site conditions, it was determined that the Project site does not support potential habitat for the three CAPSSA species and did not support any potential burrows for burrowing owl. As such the proposed Project would not impact these species and is consistent with the MSHCP.

7.6 Conclusion of MSHCP Consistency

As outlined above, the proposed Project will be consistent with the biological requirements of the MSHCP; specifically pertaining to the Project's relationship to reserve assembly, *Section 6.1.2* (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools), *Section 6.1.3* (Protection of Narrow Endemic Plant Species), *Section 6.1.4* (Guidelines Pertaining to the Urban/Wildlands Interface), and *Section 6.3.2* (Additional Survey Needs and Procedures).

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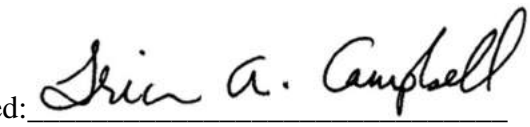
9.0 CERTIFICATION

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

Signed:  Date: _May 23, 2018_____

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APPENDICES

APPENDIX A

FLORAL COMPENDIUM

The floral compendium lists all species identified during floristic level/focused plant surveys conducted for the Project site. Taxonomy typically follows The Jepson Manual, 2nd Edition (2012). Common plant names are taken from Baldwin (2012), Munz (1974), and Roberts et al (2004) and Roberts (2008). An asterisk (*) denotes a non-native species.

SCIENTIFIC NAME	COMMON NAME
MAGNOLIOPHYTA	**FLOWERING PLANTS**
MONOCOTYLEDONES	**MONOCOTS**
ARECACEAE	**Palm Family**
* *Washingtonia robusta*	Mexican fan palm
POACEAE	**Grass Family**
* *Bromus madritensis* ssp. *rubens*	foxtail chess
* *Hordeum murinum*	foxtail barley
EUDICOTYLEDONES	**EUDICOTS**
ASTERACEAE	**Sunflower Family**
Baccharis salicifolia	mulefat
* *Centaurea melitensis*	tocalote
Encelia farinosa	brittlebush
Heterotheca grandiflora	telegraph weed
* *Lactuca serriola*	common groundsel
Matricaria discoidea	pineapple weed
* *Sonchus oleraceus*	common sow thistle
Stephanomeria sp.	stephanomeria
BRASSICACEAE	**Mustard Family**
* *Hirschfeldia incana*	short-podded mustard
CARYOPHYLLACEAE	**Carnation Family**
Spergularia sp.	sand spurry

CHENOPODIACEAE		**Goosefoot Family**
	Atriplex canescens	hoary saltbush
*	*Salsola tragus*	Russian thistle
FABACEAE		**Legume Family**
	Acmispon glaber	deerweed
*	*Melilotus indicus*	yellow sweetclover
GERANIACEAE		**Geranium Family**
*****	*Erodium cicutarium*	red-stemmed filaree
LAMIACEAE		**Mint Family**
	Salvia columbariae	chia sage
POLYGONACEA		**Knotweed family**
	Eriogonum fasciculatum	California buckwheat
RANUNCULACEAE		**Buttercup/Crowfoot Family**
	Myosurus sp.	mousetail
SOLANCEAE		**Nightshade Family**
	Datura wrightii	jimsonweed

APPENDIX B

FAUNAL COMPENDIUM

The faunal compendium lists species identified on the Project site. Scientific nomenclature and common names for vertebrate species referred to in this report follow Collins (2009) for amphibians and reptiles, Bradley, et al. (2014) for mammals, and AOU Checklist (1998) for birds. An (*) denotes non-native species.

AVES	**BIRDS**
FRINGILLIDAE	**Finches**
Spinus psaltria	lesser goldfinch
REPTILIA	**REPTILES**
TEIIDAE	**Whiptails**
Aspidoscelis tigris	western whiptail
MAMMALIA	**MAMMALS**
LEOPRIDAE	**Rabbits and Hares**
Sylvilagus audubonii	desert cottontail

EXHIBITS

Source: ESRI World Street Map

N

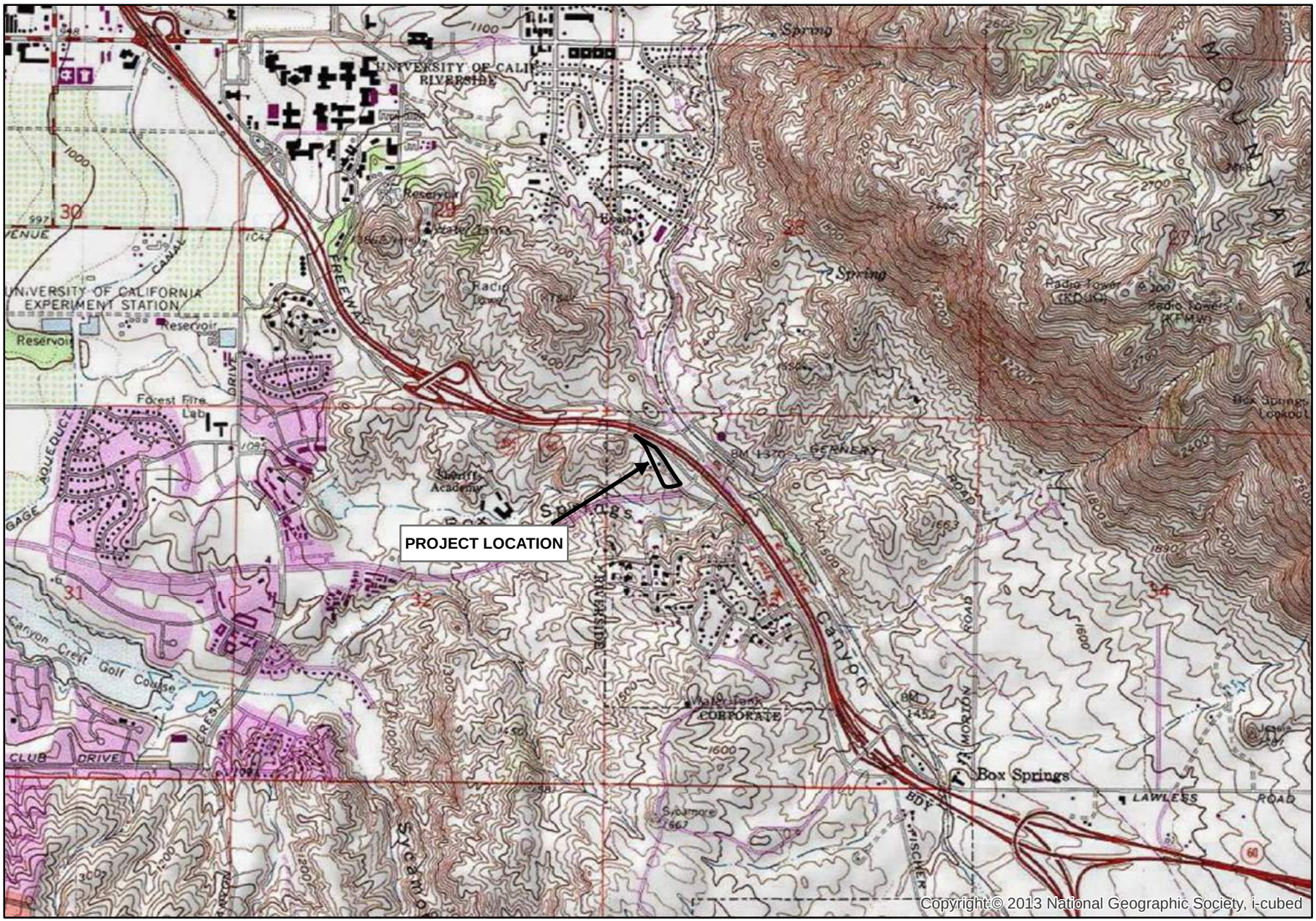
0 2 4 8 Miles

CENTRAL AND SYCAMORE PROJECT

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1



Adapted from USGS Riverside East, CA quadrangle

N

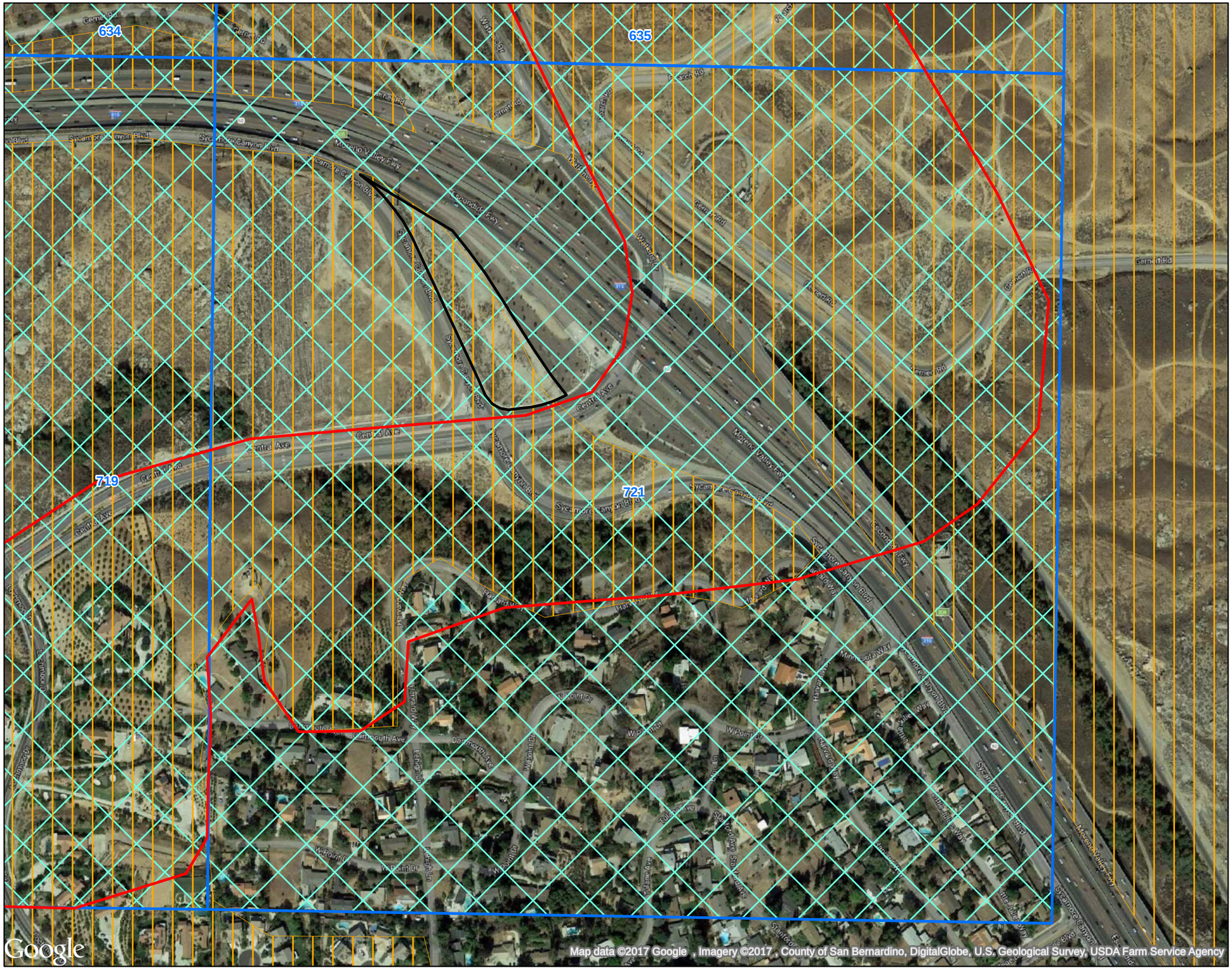
0 1,000 2,000 4,000 Feet

CENTRAL AND SYCAMORE PROJECT

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2



CENTRAL AND SYCAMORE PROJECT

MSHCP Overlay Map

GLENN LUKOS ASSOCIATES

Exhibit 3

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Project Site

ChF2 - Cieneba sandy loam, 15 to 50 percent slopes, eroded

CkF2 - Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded

N

0 50 100 200

Feet

1 inch = 100 feet

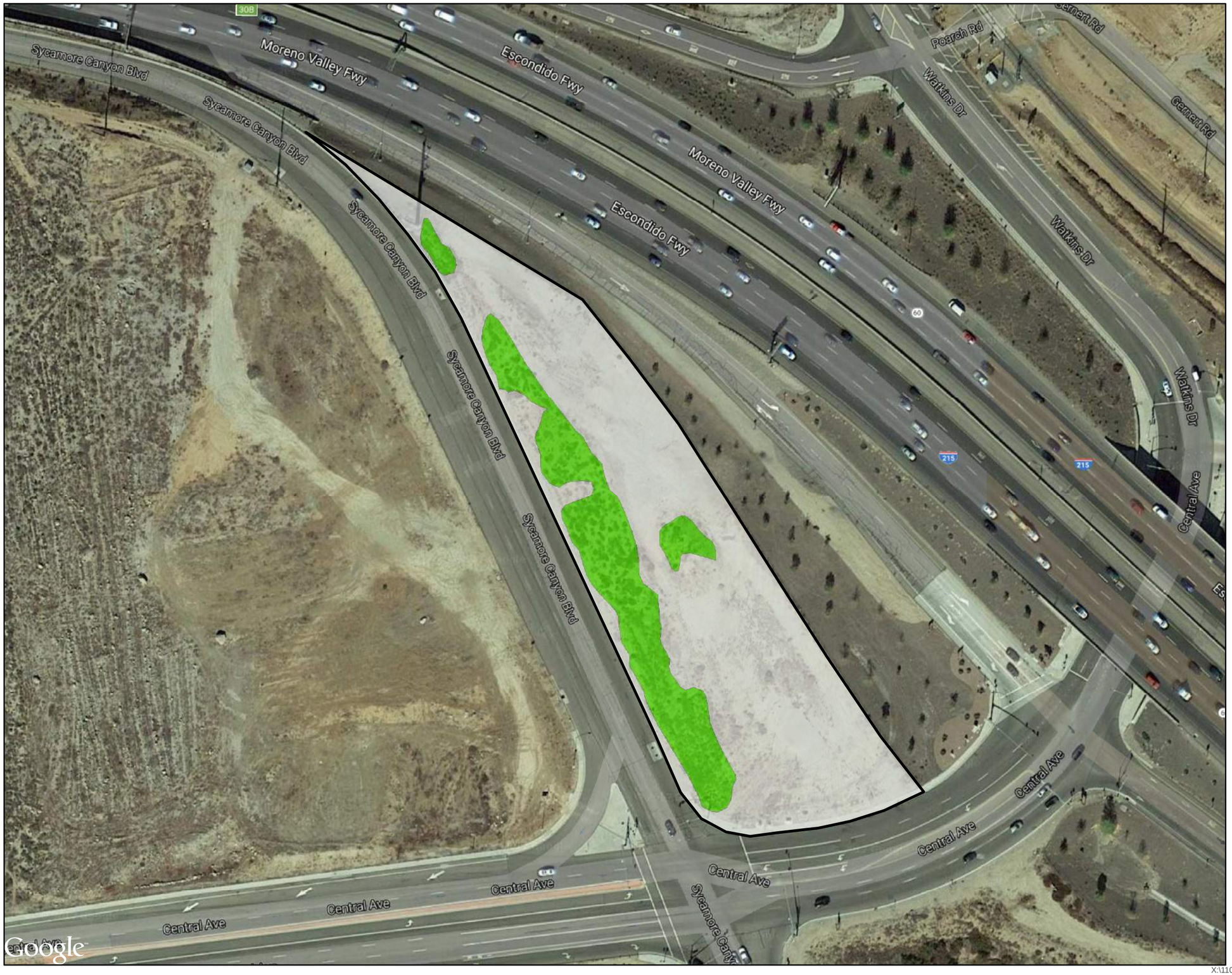
CENTRAL AND SYCAMORE PROJECT

Soils Map

GLENN LUKOS ASSOCIATES

Exhibit 4

X:\1100 AFTER THE REST\1288-01SCCA\1288-1GIS\SoilsGIS\1288-1Soils.mxd



Project Site

Disturbed/Developed Lands

Riversidean Sage Scrub

N

0 50 100 200

Feet

1 inch = 100 feet

CENTRAL AND SYCAMORE PROJECT

Vegetation Map

GLENN LUKOS ASSOCIATES

Exhibit 5

X:\1100 AFTER THE REST\1288-01SCCA\1288-1GIS\VegetationGIS\1288-1Vegetation.mxd

Photograph 1: View of Riversidean Sage Scrub adjacent to Sycamore Canyon Boulevard

Photograph 2: View of developed/disturbed lands on site and Proposed Constrained Linkage 7 in the distance.

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Exhibit 6

Site Photographs