BIOLOGICAL TECHNICAL REPORT

FOR

EL CAMINO SPECIFIC PLAN

LOCATED IN THE CITY OF SAN JUAN CAPISTRANO ORANGE COUNTY, CALIFORNIA

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October 6, 2024

INFORMATION SUMMARY

A. Report Date: October 6, 2024

B. Report Title: Biological Technical Report for the El Camino Specific Plan

C. Project Site Location: The Project site is located south of Ortega Highway, east of El Camino Real, and both west and north of Del Obispo in City of San Juan Capistrano, Orange County, CA. Specifically, Section 1 of Township 8 south, Range 8 west of the U.S. Geological Survey (USGS) 7.5" quadrangle maps Dana Point and San Juan Capistrano

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1.0 INTRODUCTION

1.1 Background and Scope of Work

This document provides the results of general biological surveys for the approximately 6.28-acre El Camino Specific Plan Project (the Project) located in the City of San Juan Capistrano, Orange County, California. This report identifies and evaluates impacts to biological resources associated with the proposed Project and includes 5.73 acres of on-site and 0.67-acre of off-site land, which combined comprise the Project in the context of 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 and also includes all methods employed regarding the general biological surveys and focused biological surveys, 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 surveys, 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.

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 and focused biological surveys; (3) habitat assessments for special-status plant species; (4) habitat assessments for special-status wildlife species, and (5) a protected tree survey. Observations of all plant and wildlife species were recorded during the general biological surveys and are included as Appendix A: Floral Compendium and Appendix B: Faunal Compendium. Results of the Tree Survey are included in Appendix C.

1.2 Project Location

The Project site is located within the City of San Juan Capistrano, Orange County, California [Exhibit 1 – Regional Map] and is within Section 1 of Township 8 south, Range 8 west of the U.S. Geological Survey (USGS) 7.5" quadrangle maps Dana Point and San Juan Capistrano (dated 1968 and photorevised in 1981) [Exhibit 2 – Vicinity Map]. The Project site is located south of Ortega Highway, east of El Camino Real, and both west and north of Del Obispo Street [Exhibit 3 – Project Site Map].

As previously stated, the Project site encompasses 5.73 acres of land on-site, plus 0.67-acre of land off-site in the downtown area of the City of San Juan Capistrano. The Forster & El Camino Mixed Use Project portion of the Project site is located at the southern portion of the Project site at 31878 Camino Capistrano on a 3.15-acre property (Assessor's Parcel Numbers: 124-160-37, -51, and -52). The northern and central portions of the Project site include the City owned Historic Town Center Park (HTC Park) and the Blas Aguilar Adobe Museum (Assessor's Parcel Numbers: 124-160-08, -09, -10, -11, -12, and -27). The Project site is located south of Old

Mission Road, east of El Camino Real, and both west and north of Del Obispo Street. Local access to the Project site would be provided by Forster Street and Camino Capistrano. Regional access to the site would be provided by Interstate 5 (I-5), which is located approximately 568 feet northwest of the Project site.

1.3 PROJECT DESCRIPTION:

The Project will require the following discretionary approvals from the City: General Plan Amendment, a Code Amendment, and a Rezone to allow for adoptions of the El Camino Specific Plan (Specific Plan). Additional discretionary approvals are required to approve two projects covered by the Specific Plan, described in further detail below.

Overview

The Project Applicant (Camino Capistrano OZ, LLC) is seeking to expand the previously approved El Camino Specific Plan. Approved in October 2022, the El Camino Specific Plan consisted of a development of 27,457 square feet (sf) of commercial uses and a four-level parking structure with 2,607 sf retail space on a 1.68-acre site. The proposed Specific Plan Amendment would expand the Specific Plan Area to a total of 7.3 acres for the development of mixed-use community and performing arts center [Exhibit 4 – Site Plan]. The Project consists of two proposed developments: 1) the Forster & El Camino Mixed-Use Project at the intersection of Forster Street and El Camino Real on the 3.15-acre vacant site; and 2) a performing arts center on a 1.5-acre site located at eastern portion of the HTC Park. No development will occur on the 1.0-acre Blas Aguilar Adobe Museum property. The Project would also include various street and utility improvements to complement the area and provide for future uses.

Forster & El Camino Mixed Use Project

This Project will be a mixed-use community, incorporating both commercial and residential uses, and will require the following discretionary approvals: Architectural Control (AC) 23-001, Grading Plan Modification (GPM) 23-013, Sign Program (SP) 23-006, Tentative Tract Map (TTM) 23-001, and Tree Removal Permit (TRP) 23-012. The development will be situated on nearly 3.15 acres of land at the intersection of Forster Street and El Camino Real.

The commercial element of the Project will include a free-standing 4,294 square foot restaurant and a 3,100 square foot (sf) fitness center attached to the residential building. The two commercial buildings will be located on opposite corners of the Project entrance. The buildings will each feature a prominent entry with tile accents and enhanced paving, which will help differentiate the commercial and residential elements of the Project. The restaurant building will have a spacious courtyard for outdoor seating, while the fitness center will feature high ceilings and state of the art design to accommodate a variety of training and fitness applications. Ample bicycle parking will also be provided.

The residential element of the Project will contain ninety-five (95) apartments with a gross area of 107,499 sf surrounding a resort-style pool and recreational facility. A 3,271 sf clubhouse building will be located at the entrance to the residences and will serve as a central focal point for the community. The clubhouse building will contain meeting and recreation space for the private use of the community's residents. A California room will open on to the pool deck and provide indoor/outdoor recreation space for those using the facilities. A total of 21,920 sf of

common open space would be provided at the Project site. The central residential buildings will be designed in the Spanish Revival Vernacular. The design includes architectural details, fenestrations, and offsets to accentuate the building's design. Similarly, a team of three independent design consultants have collaborated on the project's color palette, with the intent of complementing the City's mission and ranch heritage.

Performing Arts Center

The Camino Real Playhouse has provided the community with a venue to support local theater and events. The Performing Arts Center will consist of approximately 45,000 sf and include a total of 452 seats: 352 seats in the main theater and 100 seats in the studio theater.

The architectural style of the Performing Arts Center would be representative of contemporary California Mission. The building design features include a Spanish tile roof, board formed concrete with terracotta screen, exterior woold slat siding, and complimentary wood mullions as part of a glass partition wall. The front and lobby of the building would open out onto HTC Park to allow for outdoor performances, community events, and other experiences.

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 four main components:

Performance of a jurisdictional waters and wetlands determination;
Performance of vegetation/land-use land-cover mapping for the Project site;
Performance of habitat assessments, and site-specific biological surveys, to evaluate the presence/absence of special-status species in accordance with the requirements of CEQA; and
Performance of a survey for protected trees.

The focus of the biological surveys was determined through initial site reconnaissance, a review of the CNDDB [CDFW 2021 and 2023], CNPS 8th edition online inventory (CNPS 2021 and 2023), Natural Resource Conservation Service (NRCS) soil data, other pertinent literature, and knowledge of the region. Site-specific general surveys within the Project site were conducted on foot in the proposed development areas for each target plant or animal species identified below.

Vegetation was mapped directly onto a 200-scale (1"= 200') aerial photograph following the Manual of California Vegetation, Second Edition or MCVII, which is the California expression of the National Vegetation Classification. All flora and fauna identified on site during vegetation mapping were included in respective floral and faunal compendia prepared for the Project. Vegetation communities not listed under the above-mentioned vegetation classification systems were designated based on the dominant plant species present.

2.1 Summary of Surveys

GLA conducted biological studies in order 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 each of the above mentioned survey efforts [Appendix A: Floral Compendium and Appendix B: Faunal Compendium]. The studies conducted include the following:

- Performance of vegetation mapping;
- Performance of site-specific habitat assessments and biological surveys to evaluate the potential presence/absence of special-status species (or potentially suitable habitat) to the satisfaction of CEQA and federal and state regulations;
- Evaluation of aquatic resources (including wetlands and riparian habitat) potentially subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and CDFW; and
- Evaluation of protected trees.

Table 2-1 provides a summary list of survey dates, survey types and personnel. Note that surveys were initially conducted in 2021 and additional surveys were conducted in 2023 as provided in Table 2-1.

Table 2-1. Summary of Biological Surveys for the Project Site.

Survey Type	**2021 Survey Dates**	**Biologists**
General Biological Survey/Habitat Assessment/Jurisdictional Determination	8/4 & 12/8	JA
Monarch Butterfly Overwintering Survey	12/8	JA
Tree Survey	8/4 & 8/6	JS, JA
Survey Type	**2023 Survey Dates**	**Biologists**
Bat Surveys	10/4, 10/19, 11/9	JA, SC
General Biological Survey/Habitat Assessment/Jurisdictional Determination	10/25, 12/3, 12/5	JA, SC
Monarch Butterfly Overwintering Survey	12/3, 12/19, 12/20	DS, JA
Tree Survey	12/5	JA, SC

JA = Jeff Ahrens, JA = Jillian Stephens, SC= Stephanie Cashin, DS = David Smith

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);
- Consideration as a wetland/riparian habitat; and/or
- Occurrence in the CNDDB inventory.

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 surveys; (4) vegetation mapping according to the List of Vegetation Alliances and Associations; and (5) habitat assessments and focused surveys for special-status plants.

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:

- California Native Plant Society, Rare Plant Program, 2021 and 2023. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39) (CNPS 2021 and 2023); and

- CNDDB for the USGS 7.5' quadrangles: Dana Point and San Juan Capistrano and surrounding quadrangle maps including Canada Gobernadora, El Toro, Laguna Beach, San Clemente, Santiago Peak, and Tustin (CNDDB 2021 and 2023).

2.2.2 Vegetation Mapping

Vegetation communities within the Project site were mapped according to the List of Vegetation Alliances and Associations (or Natural Communities List). The list is based on A Manual of California Vegetation, Second Edition or MCVII, which is the California expression of the National Vegetation Classification. Where necessary, deviations were made when areas did not fit into exact habitat descriptions as set forth in the "Membership Rules" of the MVCII. Such vegetation communities of alliances were named based on the dominant plant species present. Plant communities were mapped in the field directly onto a 200-scale (1"=200') aerial photograph. A vegetation map is included as Exhibit 5. Representative site photographs are included as Exhibit 7.

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 (2021).

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.

2.2.5 Botanical Surveys

GLA biologists Jeff Ahrens and Jillian Stephens visited the site on August 4, 2021, to conduct a general plant assessment/survey. The survey was conducted in accordance with accepted botanical survey guidelines (CDFG 2009, CNPS 2001, USFWS 2000). Mr. Ahrens conducted a follow-up survey on October 25, 2023. As applicable, surveys were conducted at appropriate times based on precipitation and flowering periods. 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. Surveys were conducted by following meandering transects within target areas of suitable habitat. 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).

2.2.6 Tree Survey

Tree Survey Methodology

On August 4 and August 6, 2021, GLA ISA certified arborist Jillian Stephens (WE-13178A) and GLA biologist Jeff Ahrens mapped and collected tree attribute information for all "trees," as defined by the City of San Juan Capistrano Municipal Code, within and immediately adjacent to the Project site [Exhibit 6 – Tree Survey Area and Location Map]. On December 5, 2023, GLA biologist Jeff Ahrens and Stephanie Cashin mapped additional trees located offsite along Forster Lane, where additional offsite road improvements were proposed since the original tree survey was conducted in 2021. The survey methodology consisted of walking throughout the Project site to identify the species of each individual tree and measure the diameter at breast heigh (DBH). If the tree qualified for a removal permit under the City's code, then the location of that tree was mapped using the ArcGIS Collector Application for iOS on a mobile device with submeter accuracy and an aluminum tag with a unique identification number was affixed to the trunk. Tree attribute data were collected for the individual including species, DBH, overall height, structural conditions, canopy extent and health, tree health condition, and overall rating.

As specified in the City's Code, DBH was measured in inches at four and one-half feet above existing grade. As feasible, if a tree split into multiple trunks below four and one-half (4.5) feet, the trunk was measured at its most narrow point beneath the split. However, in some instances, trees had split into multiple trunks at the crown of the tree, just beneath the surface. For such trees, the combined DBH of each trunk was calculated to determine the aggregate DBH of the tree.

Pursuant to the *Guide for Plant Appraisal, 10th Edition, Revised* (ISA 2020), the health and structure of each tree was evaluated with respect to five distinct components: crown/roots, trunk(s), scaffold branches, small branches, and canopy foliage. Each component of the tree was assessed with regard to health factors such as broken, dead, or dying limbs; overall lean; sparse or dead foliage; insect, fungal, or pathogen damage; mechanical damage; and presence of decay. Health and structure components were graded separately as *excellent*, *good*, *average*, *poor*, or *very poor*. Components were then analyzed holistically to assign each tree an overall rating of *excellent*, *good*, *average*, *poor*, or *very poor*. The rating system is reproduced below in Table 2-2. This method of condition rating was comprehensive and resulted in ratings that were useful in determining the status of the trees based on common standards.

Table 2-2. Tree Rating System

Rating	Percentage Range	Description
Excellent	>95%	Healthy, vigorous tree characteristic of its species. Free of any visible sign of stress and lacking health/structural defects.
Good	75-95%	Tree with acceptable vigor and a lack of major health/structural defects.
Average	55-75%	Tree with few or minor health/structural defects and potentially declining vigor.
Poor	30-55%	Tree exhibiting stress with multiple health/structural defects and declining vigor.
Very Poor	10-30%	Tree with poor vigor, exhibiting considerable stress, and containing many health/structural defects

Upon completion of field data collection and mapping, raw data was post-processed and individual tree location data was compiled and updated utilizing Geographic Information System (GIS) technology. The digital tree locations were linked to the unique identification number affixed to each tree and associated tree attribute data. These data were then analyzed to evaluate the tree impacts and recommended mitigation measures presented in this report.

Scope of Work Limitations

The extent of individual tree assessments was limited to visual structural and health defects. No root crown excavations or investigations, aerial evaluations, or internal probing was performed during the tree assessments. Therefore, the presence or absence of internal decay or other hidden inferiorities in individual trees could not be confirmed.

2.3 Wildlife Resources

Wildlife species were evaluated and detected during field surveys 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 surveys, habitat assessments, and/or focused surveys 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 detected incidentally by direct observation and/or by vocalizations, with identifications recorded in field notes.

Mammals

During general biological and reconnaissance survey within the Project site, mammals were identified and detected incidentally by direct observations and/or 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. 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 Reviewed

A literature search was conducted in order 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: 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 Jeff Ahrens conducted habitat assessments for special-status animal species on August 4, 2021, and October 25, 2023. 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.

2.3.4 Focused Surveys for Special-Status Animals Species

Monarch Butterfly Overwintering Survey

Mr. Ahrens initially reviewed the CNDDB, iNaturalist, and westernmonarchcount.org (Xerces Society) for known Monarch overwintering locations within proximity to the Project site.

On December 8, 2021, and December 3, 19, and 20, 2023, GLA biologists Jeff Ahrens and David Smith performed focused surveys for Monarch butterflies (*Danaus plexippus*) potentially overwintering within the Project site. In California, during the winter, monarchs roost in wooded areas dominated by eucalyptus trees, Monterey pines, and Monterey cypresses. Mr. Ahrens inspected all trees on site with the use of binoculars for evidence overwintering Monarch butterfly individuals within the Project site. Mr. Ahrens inspected all trees after sunrise when ambient air temperatures were cool.

Focused Bat Surveys

Due to the number of onsite and adjacent offsite potential roost trees, GLA biologists conducted focused bat surveys within the Project site. Prior to the focused surveys, a diurnal roost assessment was conducted throughout the Project site to identify potential natural roosting habitat (e.g., trees with cavities, trees with loose bark, dead trees, palm trees, etc.) and man-made roosting structures (e.g., buildings, sheds, etc.) that could support roosting onsite, including diurnal, nocturnal, maternity roost and hibernacula. Inspection of potential roost areas included a search for evidence of occupation including urine staining, guano or culled insect concentrations, audible social bat vocalizations and odors often associated with occupied roosts. Those trees and/or structures identified as having the greatest potential of supporting roosting bats, received the focus during the emergence surveys.

Bat emergence surveys incorporated a combination of acoustic and emergence (out flight or exit) surveys. Biologists used a Seek Compact Pro Thermal imager attached to an iPhone or iPad to assist in detecting heat signatures of bats within and exiting potential roost areas. In addition, up to four ultrasonic acoustic recording devices were deployed throughout the Study. Recording devices utilized included two Pettersson M500-384 microphones attached to two Microsoft Surface Pros running Sonobat Live recording software, two Wildlife Acoustics EchoMeter 2 Pro microphones attached to an Apple iTouch and an Apple iPad. Microphones were attached to telescoping poles between six and 25 feet in height. Spotlights were used to aid in visual identification of bat species.

Three focused bat surveys were conducted by GLA biologists Jeff Ahrens and Stephanie Cashin on October 4, October 19, and November 9, 2023. All acoustic data was recorded in full spectrum and was processed and analyzed with Sonobat 4.2.2 bat call analysis software using the California Southwest classifier. All acoustic calls were manually reviewed and vetted using multiple Sonobat acoustic reference libraries and reference materials including Echolocation Call Characteristics of California Bats (Humboldt State University, 2018) and Echolocation Call Characteristics of Western U.S. Bats (Humboldt State University, 2018). Only the best quality calls that included the appropriate call characteristics for each species were used for species identification. Table 2-2 summarizes the focused bat survey visits. The results of the focused bat surveys are discussed in Section 4.6.2.

Table 2-3. Summary of Focused Bat Surveys

Survey Date	Biologists	Start/End Time	Start/End Temperature	Start/End Wind Speed (mph)	Cloud Cover
10/04/23	JA/SC	1830/2230	74/69	2-3/2-3	0/0
10/19/23	JA/SC	1815/2230	72/63	2-4/2-3	10/0
11/09/23	JA/SC	1625/2000	71/61	5-8/2-3	50/0

JA = Jeff Ahrens, SC = Stephanie Cashin

2.4 Jurisdictional Determination

A desktop review of recent aerial photographs of the Project site as well as historic aerial photography, was performed prior to the site visit. On August 4, 2021, GLA biologists Jeff Ahrens performed a Project site visit to evaluate the site for the presence of potential jurisdictional waters and wetlands regulated under the Corps pursuant to Section 404 of the CWA, the CDFW pursuant to Section 1602 of the Fish and Game Code, and the Regional Board pursuant to Section 401 of the CWA or Section 13260 of the CWC [the Porter-Cologne Water Quality Control Act]. Mr. Ahrens confirmed the previous 2021 results during a site visit on October 25, 2023.

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 Federal Endangered Species Act (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 as: "...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 instances where a property owner expects that its otherwise

lawful activities are likely to result in "take" of a federally-listed animal species in violation of FESA prohibitions in Section 9, the property owner may seek authorization for such "take" from the USFWS under Section 10(a) of the FESA. In cases where a property owner seeks authorization from a Federal agency for an action which may affect one or more individuals of a federally listed plant or animal species, the federal agency often is required to consult with USFWS, under Section 7(a) of the FESA. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants.

When a species is listed under the FESA, USFWS must designate critical habitat for the species in most cases, unless there are specific reasons for not designating critical habitat (e.g., such designation poses risks for the subject species). Critical habitat designations by USFWS are intended to guide federal agency action, and critical habitat is defined in Section 3 of the FESA as:

> (1) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the [FESA], on which [the USFWS believes] are found those physical or biological features
> (a) Essential to the conservation of the species and
> (b) Which may require special management considerations or protection; and
> (2) Specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination [by the USFWS] that such areas are essential for the conservation of the species.

The FESA is designed to provide a certain level of protection to USFWS designated critical habitat only in those instances in which a federal agency is considering whether to grant an authorization, fund or take any other federal agency action that may destroy or adversely modify the designated critical habitat. Section 7(a)(2) of FESA requires federal agencies to consult with USFWS (or NMFS, as applicable) on federal agency actions that have the potential to destroy or adversely modify critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. The designation does not place any restrictions on a non-federal agency landowner or on State or local agencies or governments; nor does the designation restrict a non-federal agency landowner from removing or otherwise adversely modifying land containing the critical habitat designation. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by private landowners. Where a landowner seeks or requests Federal agency funding or authorization for an activity likely to negatively impact one or more members of a listed species or critical habitat, the consultation requirements of ESA Section 7(a)(2) generally apply.

Critical habitat designations are the USFWS's method of identifying for federal agencies (to the extent known using information available at the time of such designation) those physical or biological features ("PBFs") believed essential to the conservation of the species (such as space, food, cover, and protected habitat), focusing on the principal biological or physical constituent elements (formerly designated as primary constituent elements) within an area considered essential to the conservation of the species (such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type). Primary constituent elements (PCE's), now referred to as

PBFs are the elements of physical or biological features which, when laid out in the appropriate quantity and spatial arrangement to provide for a species' life-history processes, the USFWS believes to be essential to the conservation of the species. Critical habitat designations are intended as a tool to be used by the USFWS in helping federal agencies comply with their obligations under Section 7 of the FESA.

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.

3.2 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 on the CNPS Lists 3 or 4.

3.2.2 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
- FC Federal Candidate Species (former C1 species)
- FSC Federal Species of Concern (former C2 species)

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 by statute 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
- W State Watch List

CNDDB Global/State Rankings

The CNDDB provides global and state rankings for species and communities based on a system developed by The Nature Conservancy to measure rarity of a species. The ranking provides a shorthand formula regarding the rarity of a species or community and is based on the best information available from multiple sources, including state and federal listings, and other groups that recognize species as sensitive (e.g., Bureau of Land Management, Audubon Society, etc.). State and global rankings are used to prioritize conservation and protection efforts so that the rarest species/communities receive immediate attention. In both cases, the lower ranking (i.e., G1 or S1) indicates extreme rarity. Rare species are given a ranking from 1 to 3. Species with a ranking of 4 or 5 has been determined to be common. If the exact global/state ranking is undetermined, a range is generally provided. For example, a global ranking of "G1G3" indicates that a species/community global rarity is between G1 and G3. A ranking with "?" such as S4? indicates that that the ranking is considered provisional and more information is required. If the animal being considered is a subspecies of a broader species, a "T" ranking is attached to the global ranking. The following are descriptions of global and state rankings:

Global Rankings

- G1 – Critically imperiled globally because of extreme rarity (5 or fewer occurrences), or because of some factor(s) making it especially vulnerable to extinction.
- G2 – Imperiled globally because of rarity (6-20 occurrences), or because of some other factor(s) making it very vulnerable to extinction throughout its range.
- G3 – Either very rare and local throughout its range (21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range (e.g., a physiographic region), or because of some other factor(s) making it vulnerable to extinction throughout its range.
- G4 – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- G5 – Common, widespread and abundant.

State Rankings

- S1 – Extremely rare; five or fewer viable occurrences in the state; or less than 1,000 individuals; or less than 1,280 acres; and may be especially vulnerable to extirpation.
- S2 – Very rare; between 6 and 20 viable occurrences; or less than 3,000 individuals, or between 1,280 and 6,400 acres and may be susceptible to becoming extirpated.
- S3 – Rare to uncommon; 21 to 100 viable occurrences; or 3,000 to 10,000 individuals, or between 6,400 and 32,000 acres; S3 ranked species are not yet susceptible to becoming extirpated in the state but may be if additional populations are destroyed.
- S4 - Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- S5 - Common, widespread, and abundant in the state.

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. These have been adopted by the State of California and designated by the State as the California Rare Plant Rank (CRPR).

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

CNPS/CRPR 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) Waters which are:

(i) 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;

(ii) The territorial seas; or

(iii) Interstate waters;

(2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;

(3) Tributaries of waters identified in paragraphs (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;

(4) Wetlands adjacent to the following waters:

(i) Waters identified in paragraph (a)(1) of this section; or

(ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;

(5) Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

Corps regulations at 33 CFR Part 328.3(b) exclude the following from being "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(2) through (5) above:

(1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;

(2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. 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 EPA;

(3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

(4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;

(5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;

(6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and

(8) Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

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(c)(4) 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.

"Adjacent" wetlands are defined by 33 CFR 328.3(c)(2) as having a "continuous surface connection" to other waters of the United States.

1. Wetland Definition Pursuant to Section 404 of the Clean Water Act

The term "wetlands" (a subset of "waters of the United States") is defined at 33 CFR 328.3(c)(1) as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In 1987 the Corps published the Wetland Manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the Wetland 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 Wetland Manual and Arid West 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 hydrophytic in nature as published in the most current national wetland plant list;

* 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 Wetland 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.

3.3.2 Regional Water Quality Control Board

The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States[1] and waters of the State. Waters of the United States are defined above in Section II.A and waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code 13050[e]).

Section 401 of the CWA requires certification for any federal permit or license authorizing impacts to waters of the U.S. (i.e., waters that are within federal jurisdiction), such as Section 404 of the CWA and Section 10 of the Safe Rivers and Harbors Act, to ensure that the impacts do not violate state water quality standards. When a project could impact waters outside of federal jurisdiction, the Regional Board has the authority under the Porter-Cologne Water Quality Control Act to issue Waste Discharge Requirements (WDRs) to ensure that impacts do not violate state water quality standards. Clean Water Act Section 401 Water Quality Certifications, WDRs, and waivers of WDRs are also referred to as orders or permits.

1. State Wetland Definition

The State Board Wetland Definition and Procedures define an area as wetland as follows: *An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.*

The following wetlands are waters of the State:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;*[2] *and*

[1] Therefore, wetlands that meet the current definition, or any historic definition, of waters of the U.S. are waters of the state. In 2000, the State Water Resources Control Board determined that all waters of the U.S. are also waters of the state by regulation, prior to any regulatory or judicial limitations on the federal definition of waters of the U.S. (California Code or Regulations title 23, section 3831(w)). This regulation has remained in effect despite subsequent changes to the federal definition. Therefore, waters of the state includes features that have been determined by the U.S. Environmental Protection Agency (U.S. EPA) or the U.S. Army Corps of Engineers (Corps) to be "waters of the U.S." in an approved jurisdictional determination; "waters of the U.S." identified in an aquatic resource report verified by the Corps upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of "waters of the U.S." or any current or historic federal regulation defining "waters of the U.S." under the federal Clean Water Act.

[2] "Created by modification of a surface water of the state" means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically, but had already

3. Artificial wetlands[3] that meet any of the following criteria:

a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
b. Specifically identified in a water quality control plan as a wetland or other water of the state;
c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):

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

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

3.3.3 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.

The Fish and Game Code 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

been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.
[3] Artificial wetlands are wetlands that result from human activity.

fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFW also defines a stream as "a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators."

It is important to note that the Fish and Game Code defines fish and wildlife to include: all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related ecological communities including the habitat upon which they depend for continued viability (FGC Division 5, Chapter 1, section 45 and Division 2, Chapter 1 section 711.2(a) respectively). Furthermore, Division 2, Chapter 5, Article 6, Section 1600 et seq. of the California Fish and Game Code does not limit jurisdiction to areas defined by specific flow events, seasonal changes in water flow, or presence/absence of vegetation types or communities.

3.4 Local Ordinances

The following section summarizes the relevant policies regulating tree impact and removal associated with the El Camino Specific Plan Project.

City of San Juan Capistrano Municipal Code

The City of San Juan Capistrano is the lead agency for the El Camino Specific Plan Project. As such, the following section summarizes portions of the City of San Juan Capistrano's Municipal Code[4] that are specifically pertinent to this Project in regard to the regulation of removing protected trees.

Applicable Definitions

- Tree: *A self-supporting woody plant growing upon the earth that usually provides one main trunk and produces a more or less distinct and elevated crown with many branches. For purposes of this Code, "tree" shall include only those trees with a trunk of six (6) inches or greater diameter at breast height (DBH) above existing grade. See also Diameter at breast height (DBH).*

- Diameter at breast height (dbh): *The diameter of a tree measured in inches at four and one-half (4.5) feet above existing grade. If a tree splits into multiple trunks below four and one-half (4.5) feet, the trunk is measured at its most narrow point beneath the split. The diameter may be calculated by use of the following formula: dbh equals the circumference at four and one-half (4.5) feet above grade divided by 3.14.*

- Heritage tree: *a tree shall be deemed a heritage tree and shall be protected from removal when such tree has a trunk diameter at breast height (dbh) of thirty-six (36) inches or greater, and is a specimen of the following species: Schinus molle (California pepper); Quercus spp. (oak); Cedar spp. (cedar); Eucalyptus globulus (blue gum eucalyptus); Juglans spp. (walnut); Olea europaea (olive); Platanus spp. (sycamore); Populus spp.*

[4] City of San Juan Capistrano. 2021. San Juan Capistrano Municipal Code. San Juan Capistrano, California. April 2021. http://www.qcode.us/codes/sanjuancapistrano/ [accessed August 2021].

(cottonwood); or as otherwise designated by the Planning Commission based on the tree's unique and intrinsic value to the community because of its size, age, historic association or ecological value.

- Tree dripline: *An imaginary vertical line extending from the outermost portion of the tree crown to the ground. In cases of asymmetrical tree crowns, the widest portion of the crown shall be used as the radius extending the full circumference of the tree trunk.*

- Qualified tree expert: *A California Registered Professional Forester or an arborist certified by the Western Chapter of the International Society of Arboriculture (ISA), the California Arborist Association (CAA), or other nationally recognized tree research, care and preservation organization as approved by the Planning Director.*

Tree Removal Permit (Sec. 9-2.349)

The City's code requires a tree removal permit for new development projects, common landscaped areas, nonresidential projects, and for the removal of any heritage tree [Sec. 9-2.349 (c)]. As prescribed by the Planning Director, an application for tree removal shall be filed with the Department of Planning Services, along with the required fee as established by resolution of the City Council. A report prepared by a qualified tree expert may be required to complete submittal of the application. The Planning Director or designee may approve a tree removal permit administratively, or refer to the Planning Commission, which is the required authority to review permits applying for removal of heritage trees. After approval, a tree removal permit is valid for six months, except as otherwise specified in the permit. The City may request verification that conditions have been complied with and that required tree replanting has occurred [Sec. 9-2.349 (d)].

One or more of the following criteria must be met for approval of a tree removal permit by the reviewing authority (i.e., the Planning Commission) [Sec. 9-2.349 (e)]:

(1) The tree proposed for removal is unsuitable to the planting area in that the area is too small to accommodate the height, diameter of trunk or canopy, or root zone of the tree, or excessive trees exist on the site requiring thinning to maintain tree health;
(2) The tree is an unsuitable variety for the site in that the species is not a native variety, is not in keeping with the community character of San Juan Capistrano, is of an invasive species, or otherwise conflicts with the intent of this section;
(3) Removal of the tree will not have an adverse impact on adjacent properties or the general welfare in that its removal will not adversely impact views, public streetscapes, or other aesthetic considerations;
(4) Where appropriate, replacement trees have been proposed to maintain the urban forest canopy and the replacement trees are more appropriate to the site and to the planting area.

As noted above, the Planning Commission shall review and approve heritage tree removal permits, adding conditions of approval where necessary, based on one or more of the following criteria being met [Sec. 9-2.349 (f)]:

(A) The heritage tree proposed for removal is unsuitable for the planting area in that the area is too small to accommodate the height, diameter of trunk or canopy, or root zone of the heritage tree, or excessive trees exist on the site requiring thinning to maintain tree health;
(B) The tree has been determined by a qualified tree expert to be unviable because it is dead or dying, diseased, infested, structurally unsound, unstable, overcrowded, or exhibits other characteristics which, in the opinion of the qualified tree expert, cause a need for tree removal.

4.0 RESULTS

This section provides the results of habitat assessments, vegetation mapping, general and focused biological surveys, and a jurisdictional determination 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 relatively flat land and is comprised primarily of developed and park areas supporting ornamental vegetation including trees and shrubs throughout. The Project site contains the Blas Aguilar Adobe Museum located in the northern portion of the Project site, HTC Park located in the central portion of the Project site, and a vacant, but previously developed parcel located in the southern half of the Project site. The HTC Park is used daily by people throughout the day. Offsite areas include portions of Camino Capistrano, Forster Street, and El Camino Real. Elevation on the site is ranges from approximately 100 feet to 125 feet above mean sea level (amsl).

Soils on site are mapped as supporting Sorrento Clay Loam [Exhibit 8 – Soils Map]. The Sorrento series consists of very deep, well drained soils that formed in alluvium mostly from sedimentary rocks. Sorrento soils are on alluvial fans and stabilized floodplains and have slopes of 0 to 15 percent. Sorrento soils are used for irrigated crops, citrus, and urban development.

4.2 Vegetation

The Project site supports the following two vegetation and land-use/land-cover types: Developed and Park (Ornamental and Turf). Table 4-1 provides a summary of the vegetation/land-use types. Descriptions of each vegetation/land use type follow the table. A Vegetation Map is attached as Exhibit 5. Photographs depicting the Project site are included in Exhibit 7. A floral compendium is included in Appendix A.

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

Vegetation/ Land Use Type	Onsite (Acres)	Offsite (Acres)	Total (Acres)
Developed	3.46	0.58	4.04
Park (Ornamental & Turf)	2.15	0.09	2.24
Total	**5.61**	**0.67**	**6.28**

Developed
The Project site supports 4.04 acres of Developed lands of which 3.46 acres occur onsite, and 0.58 acre is associated with offsite improvement areas. Developed areas include the Blas Aguilar Adobe Museum, an existing performance stage and a large vacant area to the south, associated with a former business park complex. The Blas Aguilar Adobe Museum maintains a native garden with species including (but not limited to) white sage (*Salvia apiana*), black sage (*Salvia mellifera*), coastal cholla (*Cylindropuntia prolifera*), coastal prickly pear (*Opuntia littoralis*), California juniper (*Juniperus californica*), California sagebrush (*Artemisia californica*), big sagebrush (*Artemisia tridentata*), common mugwort (*Artemisia vulgaris*), California brickellbush (*Brickellia californica*), coast live oak (*Quercus agrifolia*), walnut (*Juglans* sp.), California buckwheat (*Eriogonum fasciculatum*), California rose (*Rosa californica*), and California coffeeberry (*Rhamnus californica* subsp. *californica*).

Developed areas within the Project site also support pedestrian sidewalks, and portions of Camino Capistrano, El Camino Real, Forster Street, and Forster Lane [Exhibit 5 – Vegetation Map].

Park (Ornamental and Turf)
The Project site supports 2.24 acres of Park lands of which 2.15 acres occur onsite and 0.09 acre is associated with offsite improvement areas [Exhibit 5 – Vegetation Map]. Park vegetation is comprised of both turf and ornamental vegetation (predominantly non-native shrubs and trees) and is distributed throughout the Project site.

Common ornamental species include Peruvian pepper tree [California pepper in City's protected tree information] (*Schinus molle*), tree of heaven (*Ailanthus altissima*), bougainvillea (*Bougainvillea* sp.), candelabra aloe (*Aloe arborescens*), foxtail agave (*Agave attenuate*), American century plant (*Agave americana*), zonal geranium (*Pelargonium zonale*), false indigo (*Amorpha californica*), myoporum (*Myoporum laetum*), blue lily (*Agapanthus* sp.), dragon tree (*Dracaena* sp.), lantana (*Lantana* sp.), Indian fig (*Opuntia ficus-indica*) and European olive (*Olea europaea*). A complete floral compendium is included in Appendix A.

4.3 Wildlife

A total of 26 animal species, including 20 species of birds, five mammal species, and one species of reptile were recorded on site during the general biological surveys.

Common avian species detected included American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), house finch (*Carpodacus mexicanus*), and house sparrow (*Passer domesticus*). Common mammal species included the desert cottontail (*Sylvilagus audubonii*) and domestic dog (*Canis lupus familiaris*). One reptile species, the Great Basin fence lizard (*Sceloporus occidentalis*) was detected. A complete faunal compendium is included in Appendix B.

4.4 Special-Status Vegetation Communities (Habitats)

The CNDDB identifies the following 10 special-status vegetation communities for the Dana Point and San Juan Capistrano and surrounding quadrangle maps including Canada Gobernadora, El Toro, Laguna Beach, San Clemente, Santiago Peak, and Tustin: Canyon Live Oak Ravine Forest, Southern Coastal Live Oak Riparian Forest, Southern Coastal Salt Marsh, Southern Cottonwood Willow Riparian Forest, Southern Dune Scrub, Southern Foredunes, Southern Mixed Riparian Forest, Southern Riparian Scrub, Southern Sycamore Alder Riparian Woodland, and Valley Needlegrass Grassland. The Project site does not contain any special-status vegetation types, including those identified by the CNDDB.

4.5 Special-Status Plants

No special-status plants were detected within the Project site. Species with Table 4-2 provides a list of special-status plants evaluated for the Project site through habitat assessments and general biological surveys. 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 the vicinity of the Project site, and 2) 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
FC – Federal Candidate	

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).

CNPS 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)

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 .
- 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
Allen's pentachaeta *Pentachaeta aurea* ssp. *allenii*	Federal: None State: None CNPS: Rank 1B.1	Openings in coastal sage scrub, and valley and foothill grasslands.	Does not occur
Aphanisma *Aphanisma blitoides*	Federal: None State: None CNPS: Rank 1B.2	Sandy soils in coastal bluff scrub, coastal dunes, and coastal scrub.	Does not occur
Big-leaved crownbeard *Verbesina dissita*	Federal: FT State: ST CNPS: Rank 1B.1	Southern maritime chaparral, coastal sage scrub	Does not occur
Blochman's dudleya *Dudleya blochmaniae* ssp. *blochmaniae*	Federal: None State: None CNPS: Rank 1B.1	Coastal bluff scrub, chaparral, coastal sage scrub, valley and foothill grassland. Rocky soils, often of clay or serpentinite.	Does not occur
Braunton's milk-vetch *Astragalus brauntonii*	Federal: FE State: None CNPS: Rank 1B.1	Closed-cone coniferous forest, chaparral, coastal sage scrub, valley and foothill grassland. Usually carbonate soils. Recent burn or disturbed areas.	Does not occur
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
Chaparral nolina *Nolina cismontana*	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal sage scrub. Occurring on sandstone or gabbro substrates.	Does not occur
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
Cliff spurge *Euphorbia misera*	Federal: None State: None CNPS: Rank 2B.2	Coastal bluff scrub and coastal sage scrub. Occurring on rocky soils.	Does not occur
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	Federal: None State: None CNPS: Rank 1B.1	Playas, vernal pools, marshes and swamps (coastal salt).	Does not occur

Species Name	Status	Habitat Requirements	Occurrence
Coulter's saltbush *Atriplex coulteri*	Federal: None State: None CNPS: Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, valley and foothill grassland. Occurring on alkaline or clay soils.	Does not occur
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	Federal: None State: None CNPS: Rank 1B.2	Alkaline soils in coastal sage scrub, coastal bluff scrub.	Does not occur
Decumbent goldenbush *Isocoma menziesii* var. *decumbens*	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal scrub (sandy, often in disturbed areas)	Does not occur
Estuary seablite *Suaeda esteroa*	Federal: None State: None CNPS: Rank 1B.2	Coastal salt marsh and swamps. Occurring in sandy soils	Does not occur
Gambel's water cress *Nasturtium gambelii*	Federal: FE State: ST CNPS: Rank 1B.1	Marshes and swamps (freshwater or brackish).	Does not occur
Hall's monardella *Monardella macrantha* ssp. *hallii*	Federal: None State: None CNPS: Rank 1B.3	Occurs on dry slopes and ridges within openings in broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, and valley and foothill grassland.	Does not occur
Heart-leaved pitcher sage *Lepechinia cardiophylla*	Federal: None State: None CNPS: Rank 1B.2	Closed-cone coniferous forest, chaparral, and cismontane woodland.	Does not occur
Intermediate mariposa-lily *Calochortus weedii* var. *intermedius*	Federal: None State: None CNPS: Rank 1B.2	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Does not occur
Intermediate monardella *Monardella hypoleuca ssp.intermedia*	Federal: None State: None CNPS: Rank 1B.3	Usually in the understory of chaparral, cismontane woodland, and lower montane coniferous forest (sometimes)	Does not occur
Laguna Beach dudleya *Dudleya stolonifera*	Federal: FT State: ST CNPS: Rank 1B.1	Chaparral, cismontane woodland, coastal sage scrub, valley and foothill grassland. Occurring on rocky soils.	Does not occur
Little mousetail *Myosurus minimus* ssp. *apus*	Federal: None State: None CNPS: Rank 3.1	Valley and foothill grassland, vernal pools (alkaline soils).	Does not occur
Long-spined spineflower *Chorizanthe polygonoides* var. *longispina*	Federal: None State: None CNPS: Rank 1B.2	Clay soils in chaparral, coastal sage scrub, meadows and seeps, and valley and foothill grasslands	Does not occur
Los Angeles sunflower *Helianthus nuttallii* ssp. *parishii*	Federal: None State: None CNPS: Rank 1A	Marshes and swamps (coastal salt and freshwater).	Does not occur

Species Name	Status	Habitat Requirements	Occurrence
Many-stemmed dudleya *Dudleya multicaulis*	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Does not occur
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
Mud nama *Nama stenocarpum*	Federal: None State: None CNPS: Rank 2B.2	Marshes and swamps	Does not occur
Nuttall's scrub oak *Quercus dumosa*	Federal: None State: None CNPS: Rank 1B.1	Closed-cone coniferous forest, chaparral, and coastal sage scrub. Occurring on sandy, clay loam soils.	Does not occur
Orcutt's pincushion *Chaenactis glabriuscula var. orcuttiana*	Federal: None State: None CNPS: Rank 1B.1	Coastal bluff scrub (sandy soils) and coastal dunes.	Does not occur
Palmer's grapplinghook *Harpagonella palmeri*	Federal: None State: None CNPS: Rank 4.2	Chaparral, coastal sage scrub, valley and foothill grassland. Occurring in clay soils.	Does not occur
Parish's brittlescale *Atriplex parishii*	Federal: None State: None CNPS: Rank 1B.1	Chenopod scrub, playas, vernal pools.	Does not occur
Pendleton button-celery *Eryngium pendletonense*	Federal: None State: None CNPS: Rank 1B.1	In clay and vernally mesic soils in coastal bluff scrub, valley and foothill grassland, and vernal pools.	Does not occur
Prostrate vernal pool navarretia *Navarretia prostrata*	Federal: None State: None CNPS: Rank 1B.1	Coastal sage scrub, valley and foothill grassland (alkaline), vernal pools. Occurring in mesic soils.	Does not occur
Robinson's pepper grass *Lepidium virginicum* var. *robinsonii*	Federal: None State: None CNPS: Rank 4.3	Chaparral, coastal sage scrub	Does not occur
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
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
San Miguel savory *Clinopodium chandleri*	Federal: None State: None CNPS: Rank 1B.2	Rocky, gabbroic, or metavolcanic soils in chaparral, cismontane woodland, coastal sage scrub, riparian woodland, valley and foothill grassland.	Does not occur

Species Name	Status	Habitat Requirements	Occurrence
Santa Catalina Island desert-thorn *Lycium brevipes* var. *hassei*	Federal: None State: None CNPS: Rank 3.1	Coastal bluff scrub, coastal scrub.	Does not occur
Santiago Peak phacelia *Phacelia keckii*	Federal: None State: None CNPS: Rank 1B.3	Closed-cone coniferous forest, chaparral	Does not occur
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
Southern tarplant *Centromadia parryi* ssp. *australis*	Federal: None State: None CNPS: Rank 1B.1	Disturbed habitats, margins of marshes and swamps, vernally mesic valley and foothill grassland, vernal pools.	Does not occur
Sticky dudleya *Dudleya viscida*	Federal: None State: None CNPS: Rank 1B.2	Coastal bluff scrub, chaparral, coastal sage scrub. Occurring on rocky soils.	Does not occur
Summer holly *Comarostaphylis diversifolia* ssp. *diversifolia*	Federal: None State: None CNPS: Rank 1B.2	Chaparral.	Does not occur
Tecate cypress *Hesperocyparis forbesii*	Federal: None State: None CNPS: Rank 1B.1	Closed-cone coniferous forest, chaparral.	Does not occur
Thread-leaved brodiaea *Brodiaea filifolia*	Federal: FT State: SE CNPS: Rank 1B.1	Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.	Does not occur
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

4.6 Special-Status Animals

No special-status animals were detected within the Project site. Table 4-3 provides a list of special-status animals evaluated for the Project site through general biological surveys, habitat assessments, and focused surveys. 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, and 2) 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
FE – Federally Endangered
FT – Federally Threatened
FPT – Federally Proposed Threatened
FC – Federal Candidate
BGEPA– Bald and Golden Eagle Protection Act

State
SE – State Endangered
ST – State Threatened
SC– State Candidate
CFP – California Fully-Protected Species
SSC – Species of Special Concern

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.
- 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.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality.
- 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			
Crotch bumble bee *Bombus crotchii*	Federal: None State: CE (candidate endangered)	Relatively warm and dry sites, including the inner Coast Range of California and margins of the Mojave Desert.	Does not occur due to the absence of suitable foraging and nesting habitat.
Monarch butterfly (California overwintering population) *Danaus plexippus pop. 1*	Federal: Candidate State: None	Roosts in winter in wind-protected tree groves along the California coast from northern Mendocino to Baja California, Mexico.	Does not occur. Not detected during the focused overwintering Monarch surveys in 2021 and 2023.
Riverside fairy shrimp *Streptocephalus woottoni*	Federal: FE State: None	Restricted to deep seasonal vernal pools, vernal pool-like ephemeral ponds, and stock ponds.	Does not occur
San Diego fairy shrimp *Branchinecta sandiegonensis*	Federal: FE State: None	Seasonal vernal pools	Does not occur
Fish			
Arroyo chub *Gila orcutti*	Federal: None State: SSC	Slow-moving or backwater sections of warm to cool streams with substrates of sand or mud.	Does not occur

Species Name	Status	Habitat Requirements	Occurrence
Santa Ana speckled dace *Rhinichthys osculus* ssp. *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.	Does not occur
Southern steelhead - southern California DPS *Oncorhynchus mykiss irideus*	Federal: FE State: None	Clear, swift moving streams with gravel for spawning. Federal listing refers to populations from Santa Maria river south to southern extent of range (San Mateo Creek in San Diego county.)	Does not occur
Tidewater goby *Eucyclogobius newberryi*	Federal: FE State: SSC	Occurs in shallow lagoons and lower stream reaches along the California coast from Agua Hedionda Lagoon, San Diego Co. to the mouth of the Smith River.	Does not occur
Amphibians			
Arroyo toad *Anaxyrus californicus*	Federal: FE State: SSC	Breed, forage, and/or aestivate in aquatic habitats, riparian, coastal sage scrub, oak, and chaparral habitats. Breeding pools must be open and shallow with minimal current, and with a sand or pea gravel substrate overlain with sand or flocculent silt. Adjacent banks with sandy or gravely terraces and very little herbaceous cover for adult and juvenile foraging areas, within a moderate riparian canopy of cottonwood, willow, or oak.	Does not occur
Coast Range newt *Taricha torosa*	Federal: None State: SSC	Found in wet forests, oak forests, chaparral, and rolling grasslands. In southern California, drier chaparral, oak woodland, and grasslands are used.	Does not occur

Species Name	Status	Habitat Requirements	Occurrence
Western spadefoot *Spea hammondii*	Federal: None State: SSC	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Does not occur
Reptiles			
California glossy snake *Arizona elegans occidentalis*	Federal: None State: SSC	Inhabits arid scrub, rocky washes, grasslands, chaparral.	Does not occur
Coast horned lizard *Phrynosoma blainvillii*	Federal: None State: SSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	Does not occur
Coast patch-nosed snake *Salvadora hexalepis virgultea*	Federal: None State: SSC	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.	Does not occur
Coastal whiptail *Aspidoscelis tigris stejnegeri (multiscutatus)*	Federal: None State: SSC	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Does not occur
Red-diamond rattlesnake *Crotalus ruber*	Federal: None State: SSC	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Does not occur
Southern California legless lizard *Anniella stebbinsi*	Federal: None State: SSC	Broadleaved upland forest, chaparral, coastal dunes, coastal scrub; found in a broader range of habitats that any of the other species in the genus. Often locally abundant, specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans	Not expected to occur
Two-striped garter snake *Thamnophis hammondii*	Federal: None State: SSC	Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.	Does not occur
Western pond turtle *Emys marmorata*	Federal: None State: SSC	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,	Does not occur

Species Name	Status	Habitat Requirements	Occurrence
		submerged vegetation, and undercut banks.	
Birds			
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	Federal: None State: SE	Coastal Marshes	Does not occur
Burrowing owl (burrow sites & some wintering sites) *Athene cunicularia*	Federal: None State: SSC	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.	Does not occur
California black rail *Laterallus jamaicensis coturniculus*	Federal: None State: ST, FP	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.	Does not occur
California least tern (nesting colony) *Sterna antillarum browni*	Federal: FE State: SE, FP	Flat, vegetated substrates near the coast. Occurs near estuaries, bays, or harbors where fish is abundant.	Does not occur
Coastal cactus wren (San Diego & Orange County only) *Campylorhynchus brunneicapillus sandiegensis*	Federal: None State: SSC	Occurs almost exclusively in cactus (cholla and prickly pear) dominated coastal sage scrub.	Does not occur
Coastal California gnatcatcher *Polioptila californica*	Federal: FT State: SSC	Low elevation coastal sage scrub and coastal bluff scrub.	Does not occur
Golden eagle (nesting & wintering) *Aquila chrysaetos*	Federal: None State: WL, FP	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Does not occur
Grasshopper sparrow (nesting) *Ammodramus savannarum*	Federal: None State: SSC	Open grassland and prairies with patches of bare ground.	Does not occur
Least Bell's vireo (nesting) *Vireo bellii pusillus*	Federal: FE State: SE	Dense riparian habitats with a stratified canopy, including southern willow	Does not occur

Species Name	Status	Habitat Requirements	Occurrence
		scrub, mule fat scrub, and riparian forest.	
Light-footed Ridgway's rail *Rallus obsoletus levipes*	Federal: FE State: SE, FP	Marsh vegetation of coastal wetlands.	Does not occur
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.	Does not occur
Northern harrier (nesting) *Circus hudsonius*	Federal: None State: SSC	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	Does not occur
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	Federal: FE State: SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Does not occur
Tricolored blackbird (nesting colony) *Agelaius tricolor*	Federal: None State: CE, SSC	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Does not occur
Western yellow-billed cuckoo (nesting) *Coccyzus americanus occidentalis*	Federal: FT State: SE	Dense, wide riparian woodlands with well-developed understories.	Does not occur
White-tailed kite (nesting) *Elanus leucurus*	Federal: None State: FP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Does not occur
Yellow rail *Coturnicops noveboracensis*	Federal: None State: SSC	Shallow marshes, and wet meadows; in winter, drier freshwater and brackish marshes, as well as dense, deep grass, and rice fields.	Does not occur
Yellow warbler (nesting) *Setophaga petechia*	Federal: None State: SSC	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.	Not expected to occur. during the nesting season. May occur on site during migration.

Species Name	Status	Habitat Requirements	Occurrence
Yellow-breasted chat (nesting) *Icteria virens*	Federal: None State: SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Does not occur
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.	Does not occur
Big free-tailed bat *Nyctinomops macrotis*	Federal: None State: SSC WBWG: MH	Roost mainly in crevices and rocks in cliff situations; also utilize buildings, caves, and tree cavitites.	Does not occur. Not detected during focused bat surveys.
Dulzura pocket mouse *Chaetodipus californicus femoralis*	Federal: None State: SSC	Coastal scrub, grassland, and chaparral, especially at grass-chaparral edges	Does not occur
Mexican long-tongued bat *Choeronycteris mexicana*	Federal: None State: SSC WBWG: H	Variety of habitats ranging from desert, montane, riparian, to pinyon-juniper habitats. Found roosting in desert canyons, deep caves, mines, or rock crevicies. Can use abandoned buildings.	Does not occur. Not detected during focused bat surveys.
Northwestern San Diego pocket mouse *Chaetodipus fallax*	Federal: None State: SSC	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Does not occur
Pacific pocket mouse *Perognathus longimembris pacificus*	Federal: FE State: SSC	Fine, alluvial soils along the coastal plain. Scarcely in rocky soils of scrub habitats.	Does not occur
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.	Does not occur. Not detected during focused at surveys.
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.	Does not occur. Not detected during focused bat surveys.
San Diego desert woodrat *Neotoma lepida intermedia*	Federal: None State: SSC	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Does not occur

Species Name	Status	Habitat Requirements	Occurrence
Southern California saltmarsh shrew *Sorex ornatus salicoricus*	Federal: None State: SSC	Coastal marshes. Requires dense vegetation and woody debris for cover.	Does not occur
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.	Does not occur
Stephens' kangaroo rat *Dipodomys stephensi*	Federal: FE State: ST	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	Does not occur
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.	Does not occur. Not detected during focused bat surveys.
Western red bat *Lasiurus blossevillii*	Federal: None State: SSC WBWG: H	Prefers riparian areas dominated by walnuts, oaks, willows, cottonwoods, and sycamores where they roost in broad-leafed trees.	Does not occur. Not detected during focused bat surveys.

4.6.1 Critical Habitat

The Project site is not located within areas mapped by USFWS as critical habitat.

4.6.2 Special-Status Wildlife Species Observed within the Project Site

No sensitive wildlife species were detected within the Project site.

4.6.3 Special-Status Wildlife Species not Observed but with a Potential to Occur at the Project Site

Bats

During the focused bat surveys, no bat species including sensitive bat species were detected roosting onsite. Two common bat species, the Mexican free-tailed bat (*Tadarida brasiliensis*) and Yuma myotis (*Myotis yumanensis*) were confirmed flying over the site.

4.7 Raptor Use

The Project site provides limited foraging and breeding habitat for a number of raptor species.

As noted, the Project site is entirely developed; nevertheless, it does provide limited suitable foraging habitat for a number of common species. Southern California maintains 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. A few species, such as red-tailed hawk (*Buteo jamaicensis*), Cooper's hawk (*Accipiter cooperii*), and American Kestrel (*Falco sparverius*), are somewhat adaptable to low-level human disturbance and can be readily observed adjacent to neighborhoods and other types of development. These species still require appropriate foraging habitat and low levels of disturbance in vicinity of nesting sites.

The Project site is developed but does provide some suitable nesting trees for raptor species including the red-tailed hawk, Cooper's hawk, and American kestrel. One species, the red-tailed hawk was observed flying over the Project site on one occasion. Other raptor species were not detected during the general biological studies but are expected to forage and could potentially nest on site.

4.8 Nesting Birds

The Project site contains trees, shrubs, and ground cover that provide suitable habitat for nesting migratory birds. Impacts to nesting birds are prohibited under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code.[5]

4.9 Wildlife Linkages/ Corridors and Nursery Sites

Habitat linkages are areas which provide a communication between two or more other habitat areas which are often larger or superior in quality to the linkage. Such linkage sites can be quite small or constricted, but may can be vital to the long-term health of connected habitats. Linkage values are often addressed in terms of "gene flow" between populations, with movement taking potentially many generations. The Project site does not support a habitat linkage as it is surrounded by developed areas including major vehicular thoroughfares, and commercial buildings and does not support natural habitat communities on site.

Corridors are similar to linkages, but provide specific opportunities for individual animals to disperse or migrate between areas, generally extensive but otherwise partially or wholly separated regions. Adequate cover and tolerably low levels of disturbance are common requirements for corridors. Habitat in corridors may be quite different than that in the connected areas, but if used by the wildlife species of interest, the corridor will still function as desired.

[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.

The Project site does not contain a wildlife corridor for the same reasons mentioned above under Habitat Linkages, which include that the site is surrounded by developed areas including major vehicular thoroughfares, and commercial buildings and lacks natural habitat communities on site.

Wildlife nurseries are sites where wildlife concentrate for hatching and/or raising young, such as rookeries, spawning areas, and bat colonies. Nurseries can be important to both special-status species as well as commonly occurring species. As mentioned above, the Project site has the potential to support common species of nesting birds but does not support bird species that require nesting in rookeries.

4.10 Jurisdictional Waters

The Project site does not contain any jurisdictional waters subject to the jurisdiction of the Corps, Regional Board, or CDFW. The site lacks any channelized features that exhibit an ordinary high water mark (Corps/Regional Board jurisdiction) and a bed, bank and channel (CDFW jurisdiction), and the site does not support any wetlands as defined by the Clean Water Act or State of California and contains no riparian habitat.

4.11 Local Policies or Ordinances

Tree Results

A total of 38 trees were surveyed and inventoried within the Project site, including nine different tree species and 11 heritage trees. Table 4-4 below provides a summary of the species mapped and evaluated within the Project site. The Tree Survey Area and Location Map [Exhibit 6] presents the locations of the individual trees mapped and assessed within the Project site. Tree identification numbers annotated on Exhibit 6 correspond to the Tree Tag ID listed in the Tree Attribute Table [Appendix C].

Table 4-4. Summary of Trees at the Project Site

Scientific Name	Common Name	Number of Trees	Number of Heritage Trees
Ailanthus altissima	Tree of Heaven	7	0
Cedrus deodara	Deodor Cedar	1	0
Dracaena draco	Dragon Tree	4	0
Eucalyptus globulus	Blue Gum Eucalyptus	1	1
Olea europaea	Olive	2	1
Phoenix canariensis	Canary Island Date Palm	2	0
Platanus x acerifolia	London Plane	2	0
Sambucus nigra ssp. *caerulea*	Blue Elderberry	1	0
Schinus molle	Peruvian Pepper Tree	17	9
Washingtonia robusta	Mexican Fan Palm	1	0
TOTAL		**38**	**11**

Overall, the trees exhibited growth and structural conditions that are typical of their locations as ornamental trees in a public, landscaped setting. The trees appear to be routinely maintained and properly pruned as they exhibit a structure that is low risk and safe to the surrounding public areas. As presented in the Tree Attribute Table in Appendix C, the majority of the trees surveyed, a total of 76 percent (29 trees) were given a structural rating of *good* or *excellent*. In terms of health, the trees generally exhibited canopies with healthy foliage, acceptable vigor, and an overall lack of major defects [Appendix A]. The trees appeared to be properly irrigated and cared for. As such, and as presented in the Tree Attribute Table in Appendix C, the majority of the trees within the Project site (68 percent, 26 trees) were given an overall rating of *good* or *excellent*. A total of 21 percent of the trees (8 trees) were given an overall rating of *average*; 11 percent (4 trees) were rated as *poor*. Representative tree photographs are provided in Appendix C.

5.0 IMPACT ANALYSIS

The following discussion examines the potential impacts to plant and wildlife resources that would occur resulting from the proposed project. Impacts (or effects) can occur in two forms, direct and indirect. Direct impacts are considered 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.

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 offsite 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 invasive species, 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.

5.1.2a) 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.

Impacts to Special-Status Plants

The Project will not impact special-status plants.

Impacts to Special-Status Animals

The Project will not impact special-status animals. The legless lizard (*Anniella stebbinsi*) and yellow warbler (*Setophaga petchia*) are not expected to occur on site due to a general lack of suitable habitat. However, in the rare event that the legless lizard or a yellow warbler (nesting) was detected during project related impacts, potential impacts to either species would be less than significant.

Potential impacts to the yellow warbler would be less than significant because it would most likely occur on site as a migrant and impacts to habitat by this common species would not be significant. In the unlikely event a yellow warbler was nesting on site, potential impacts to a yellow warbler nest would be less than significant because the loss of an individual nest would

be avoided due to mitigation measures that would protect nesting birds. Therefore, there would be no impacts to yellow warbler.

The legless lizard would not be expected to occur on site due to the majority of the Project site being disturbed in nature including the presence of compacted soils, asphalt and concrete. On occasion, this species has been found in park settings. In the unlikely event, the legless lizard occurred within the Project site, potential impacts to the species would be less than significant because the Project site is completely surrounded by development and would be expected to support only a small, isolated population. Therefore, potential impacts would be less than significant.

Impacts to Critical Habitat

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

5.1.2b) 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.

The Project site contains no 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. Thus, the project would not result in significant impacts on any riparian or special-status vegetation alliances.

Impacts to Developed and Park

The Project site does not support native vegetation communities. Table 5-1 provides a summary of vegetation community land cover type impacts. The development of the proposed Project would remove 3.85 acres Developed lands (of which 3.27 acres are onsite and 0.58 acre is offsite) and 1.88 acres of Park vegetation (of which 1.79 acres are onsite and 0.09 acre is offsite). The Project will avoid 0.36 acre of Developed land and 0.19 acre of Park land. The Project will not result in a substantial adverse effect on any sensitive communities.

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

Vegetation/ Land Use Type	Permanent Impacts Onsite (Acres)	Permanent Impacts Offsite (Acres)	Avoided (Acres)	Total (Acres)
Developed	3.27	0.58	0.36	**4.21**
Park (Ornamental & Turf)	1.79	0.09	0.19	**2.07**
Total	**5.06**	**0.67**	**0.55**	**6.28**

Impacts to 5.73 acres of Developed and Park lands would not be significant.

5.1.2c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The Project would not impact any wetlands as defined under the federal CWA or by the State of California and thus, there would be no significant impacts on State or federally protected wetlands.

5.1.2d) 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.

The Project site is not located within or is part of a wildlife movement corridor. As depicted on Exhibit 3, the Project site is surrounded by development that do not contribute to Wildlife Movement. There would be no significant impacts to wildlife movement associated with the project.

The Project has no area designated or recognized as wildlife nurseries or rookeries. The Project has the potential to impact active bird nests if vegetation is removed during the nesting season (February 1 to August 31). Impacts to nesting birds are prohibited by the MBTA and California Fish and Game Code. A project-specific mitigation measure is identified in Section 6.0 of this report to avoid impacts to nesting birds.

5.1.2e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

As previously stated, the City of San Juan Capistrano has a tree preservation policy or list of protected trees. The City of San Juan Capistrano does not have any other policies or ordinances that address biological resources that would apply to the project site. Tree impacts are discussed below.

Tree Impacts

Tree impacts were determined using GIS technology and spatial locations of tree canopies relative to the Project impact areas. The Project was designed to avoid as many trees as possible and preserve trees throughout the site as feasible.

Of the 38 trees that occur within the Project site, a total of 17 are proposed to be removed by the Project [Exhibit 10 – Tree Impact Map]. In addition, five heritage trees (as defined by the City's Municipal Code), that occur within the development footprint, will be relocated on site. Tree identification numbers annotated on Exhibit 6 correspond to the Tree Tag ID listed in Tree Attribute Data [Appendix C]. Trees in which Project activities encroach into the tree dripline are also considered as "directly impacted" by the proposed Project. Direct impacts include tree removal, root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds.

Table 5-2 below provides a summary of proposed impacts to trees located within the Project site.

Table 5-2. Summary of Tree Impacts at the Project Site

Scientific Name	Common Name	Number of Tree Impacts	Number of Heritage Tree Impacts
Ailanthus altissima	Tree of Heaven	7	0
Cedrus deodara	Deodor Cedar	0	0
Dracaena draco	Dragon Tree	4	0
Eucalyptus globulus	Blue Gum Eucalyptus	0	0
Olea europaea	Olive	2	1
Phoenix canariensis	Canary Island Date Palm	2	0
Platanus x acerifolia	London Plane	0	0
Sambucus nigra ssp. *caerulea*	Blue Elderberry	1	0
Schinus molle	Peruvian Pepper Tree	6	4
Washingtonia robusta	Mexican Fan Palm	0	0
TOTAL		**18**	**5**

Of the 17 trees to be removed by the proposed Project, 17 percent (3 trees) were given an overall rating of *excellent*; 50 percent (9 trees) were rated as *good*; 22 percent (4 trees) were rated as *average*; and 11 percent (2 trees) were in *poor* condition. As noted above in Section 4.2, the trees within the Project site are primarily ornamental species, all of which are planted in a manufactured landscape setting. Of the 17 individual trees proposed to be removed, one is considered native to Southern California, including the blue elderberry. None of the trees within the Project site appeared to be remnant of a natural, native habitat. Furthermore, five heritage trees are proposed to be relocated on site by the Project, of which four are Peruvian pepper trees (one given an overall rating of *excellent* and three *average*) and one is an olive tree (rated as *good*). Neither of these species is considered native to Southern California.

It is also important to note that trees exhibit varying tolerance to construction impacts among tree species, age, and condition. The trees in the proposed Project footprint are of varying ages and conditions. Mature specimens are typically more sensitive to root disturbance and grade changes. In general, healthy trees will respond better to changes in their growing environment. Trees of poor health or stressed conditions may not be vigorous enough to cope with disturbance from construction related impacts.

As summarized above, the project would result in the removal of 17 non-heritage trees subject to the City's review under the tree removal permit requirements. Non-heritage trees would be replaced at a ratio of 1:1. As previously stated, no heritage trees would be removed. Five heritage trees will be relocated on site. With replacement of the trees through the tree removal permit requirements, potentially significant impacts to trees would be reduced to less-than significant.

5.1.2f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The Project site is not subject to any Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans.

5.2 Indirect Impacts to Biological Resources

In the context of biological resources, indirect effects are those effects associated with developing areas adjacent to adjacent 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 Project will not result in indirect effects to biological resources as the Project site is completely surrounded by commercial development. In addition, native open space does not occur adjacent to the Project site.

5.3 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.

As summarized above, the project would result in the removal of 17 non-heritage trees subject to the City's review under the tree removal permit requirements. Non-heritage trees would be replaced at a ratio of 1:1. With replacement of the trees through the tree removal permit requirements, potentially significant cumulative impacts to trees would be reduced to less-than significant.

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 Nesting Birds

Vegetation clearing should be conducted outside of the nesting season (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 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.

6.2 Protected Trees

Tree Replacement Recommendations

Based on tree information provided in Section 5.12e, a total of 17 trees are proposed to be impacted by the Project, of which five are considered heritage trees under the City's Municipal Code. The majority of the trees proposed to be removed (94 percent, 16 trees) are non-native to Southern California, and all of the 17 trees currently exist within the Project site (including one offsite) as part of a manufactured, landscape setting.

Adequate replacement would be achieved with a tree replacement ratio of 1:1 for all non-heritage trees impacted. As such, to mitigate for the direct impact of 17 trees, GLA recommends the replanting of a minimum of 17 trees within the Project site.

The Project's landscape plan incorporates the planting of a total of 149 trees within the following tree palette: dragon tree (*Dracena draco*), jacaranda (*Jacaranda mimosifolia*), olive (*Olea europaea*), date palm (*Phoenix dactylifera*), crape myrtle (*Lagerstroemia indica*), little gem magnolia (*Magnolia grandiflora*), coast live oak (*Quercus agrifolia*), Brisbane box (*Tristania conferta*), giant bird of paradise (*Strelitzia nicolai*). Landscaped areas will be sustained by irrigation subsidies and will be adequately pruned, maintained, and cared for by the landowner. As such, the Project's proposed landscape plan, including 149 planted trees, would more than compensate for the removal of 17 trees within the Project site.

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8.0 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: October 6, 2024

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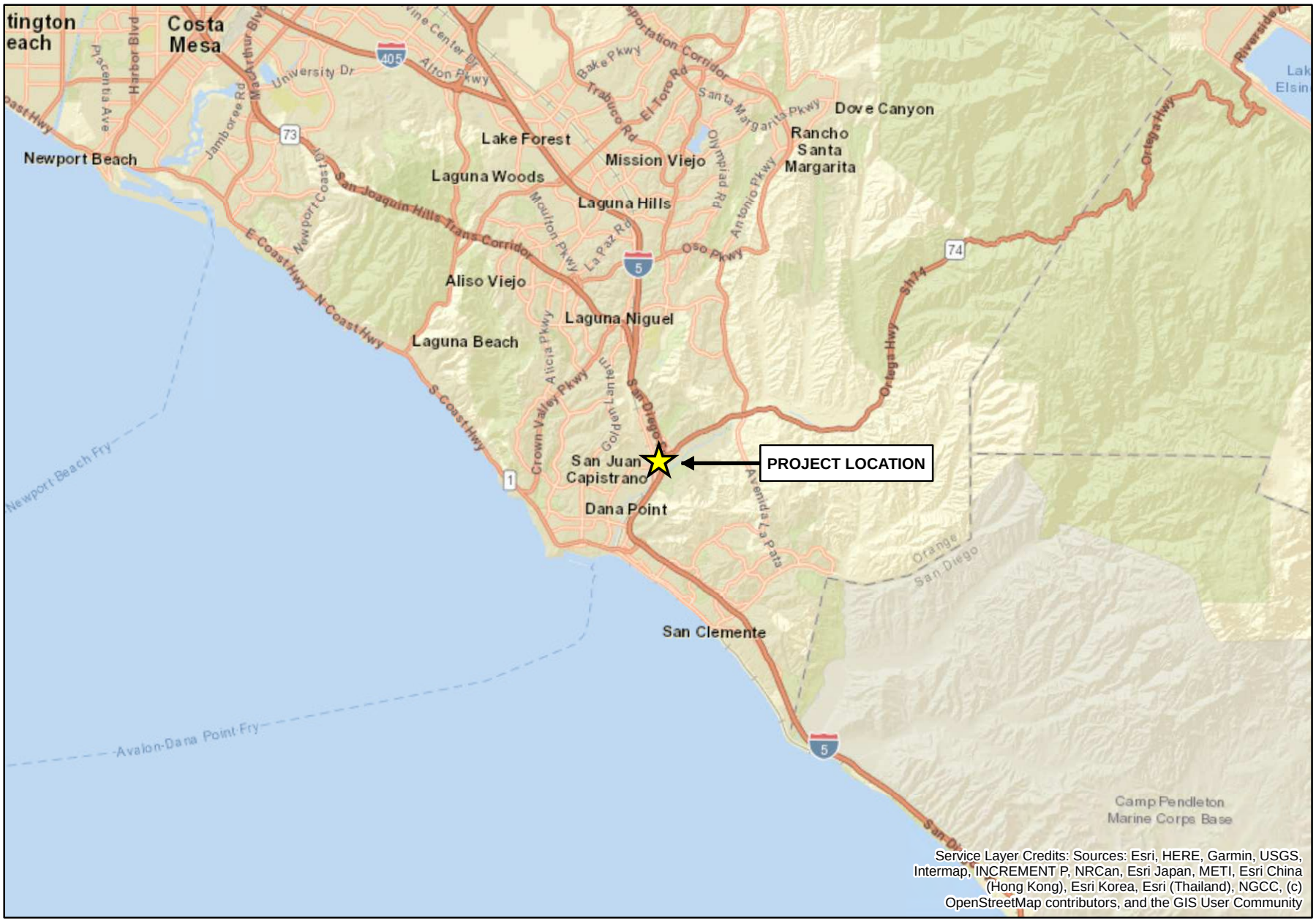


Source: ESRI World Street Map

N

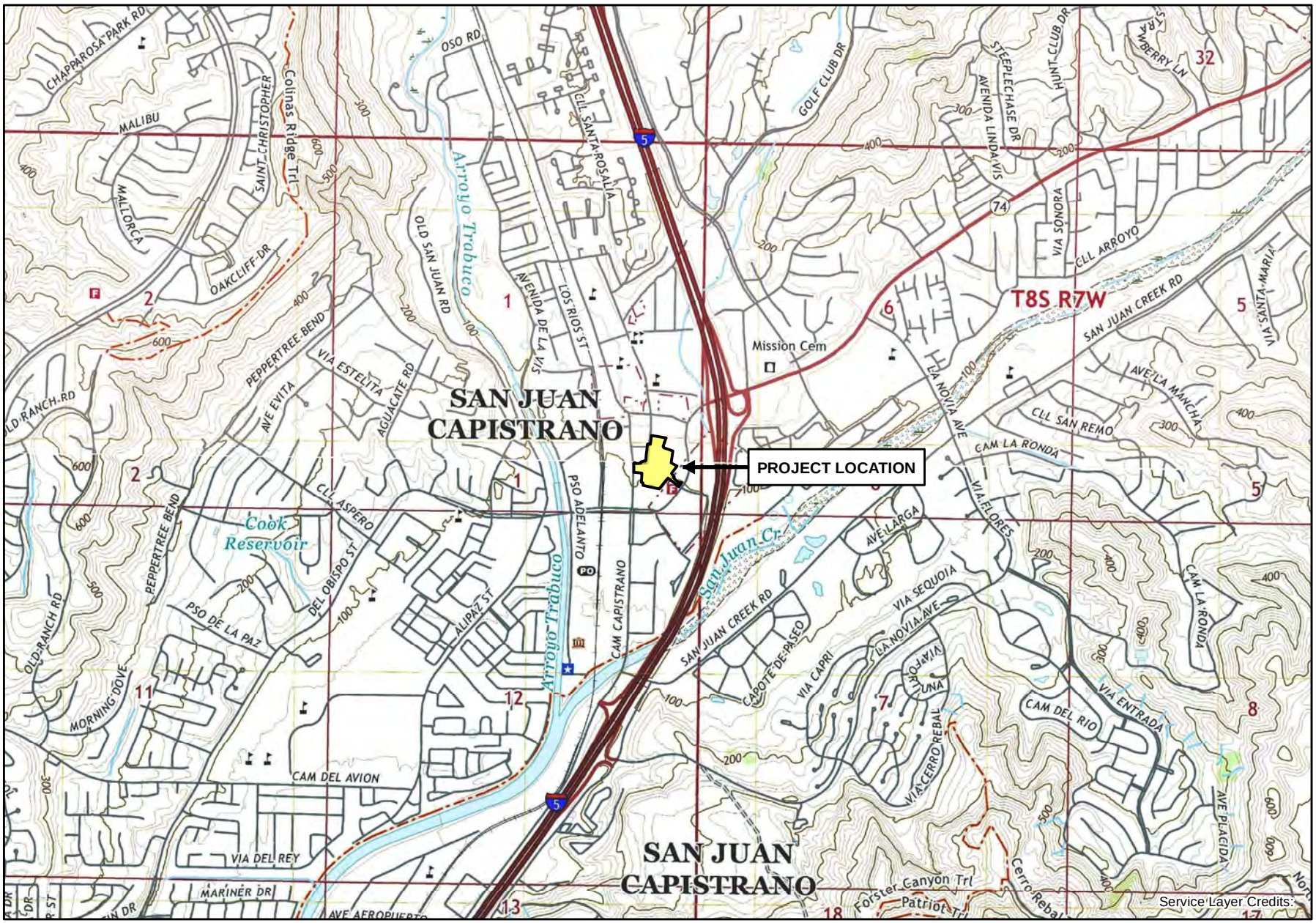
0 2 4 8 Miles

EL CAMINO SPECIFIC PLAN

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1



Adapted from USGS San Juan Capistrano and Dana Point, CA quadrangles

N

0 1,000 2,000 4,000 Feet

EL CAMINO SPECIFIC PLAN

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2

Project - Onsite

Project - Offsite

N

0 40 80 160

Feet

1 inch = 80 feet

EL CAMINO SPECIFIC PLAN

Project Site Map

GLENN LUKOS ASSOCIATES

Exhibit 3

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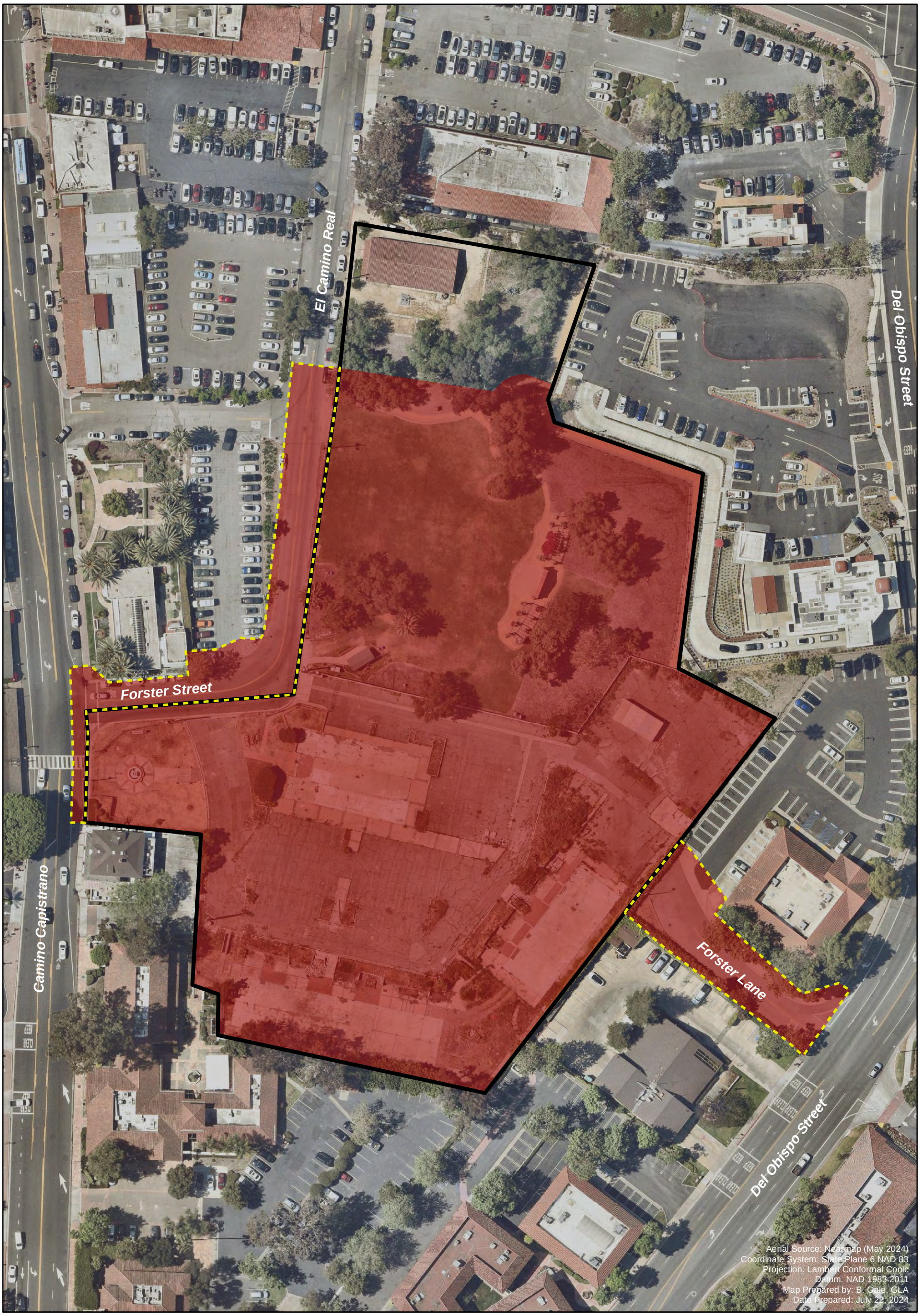

Project - Onsite

Project - Offsite

Impact Area

N

0 40 80 160

Feet

1 inch = 80 feet

EL CAMINO SPECIFIC PLAN

Site Plan Map

GLENN LUKOS ASSOCIATES

Exhibit 4

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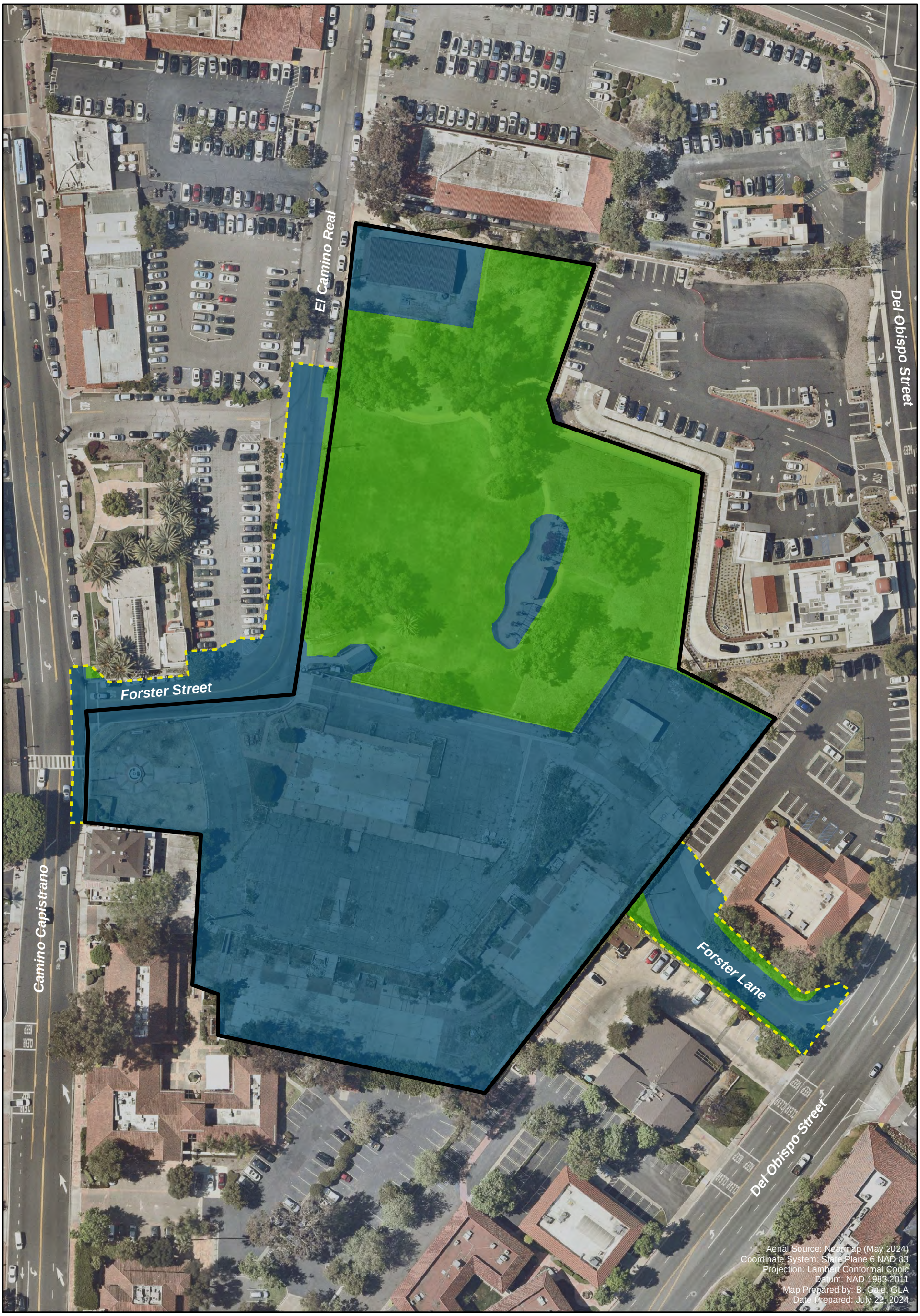

Project - Onsite

Project - Offsite

Park (Ornamental and Turf)

Developed

N

0 40 80 160

Feet

1 inch = 80 feet

EL CAMINO SPECIFIC PLAN

Vegetation Map

GLENN LUKOS ASSOCIATES

Exhibit 5

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Onsite Project Site
Offsite Project Site
Blue Elderberry
Blue Gum Eucalyptus
Canary Island Date Palm
Deodor Cedar
Dragon Tree
London Plane
Mexican Fan Palm
Olive
Peruvian Pepper Tree
Tree of Heaven

N

0 40 80 160
Feet

1 inch = 80 feet

EL CAMINO SPECIFIC PLAN

Tree Survey Area and Location Map

GLENN LUKOS ASSOCIATES

Exhibit 6

X:\0363-THE REST\0849-67ELCA\849-67_GIS\TreesGIS\849-67_TreeSurveyArea_Locations.mxd

Photograph 1: View looking west at the Blas Aguilar Adobe Museum and native garden, from the northern Project site boundary.

Photograph 2: View looking north at the Blas Aguilar Adobe Museum (background) and a portion of Historic Town Central Park.

Photograph 3: View looking east at Historic Town Central Park from the western portion of the Project site.

Photograph 4: View looking northeast at Historic Town Central Park from the central portion of the Project site.

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EL CAMINO SPECIFIC PLAN

Site Photographs

Photograph 5: View looking southeast from the eastern portion of Historic Town Center Park.

Photograph 6: View looking south at the southern half of the Project site.

Photograph 7: View looking southwest at the southwestern portion of the Project site.

Photograph 8: View looking west from the southern terminus of the Project site.

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Exhibit 7 – Page 2

EL CAMINO SPECIFIC PLAN

Site Photographs

Photograph 9: View looking north along El Camino Real within an offsite portion of the Project site.

Photograph 10: View looking west along Forster Street within an offsite portion of the Project site.

Photograph 11: View looking south along Camino Capistrano within an offsite portion of the Project site.

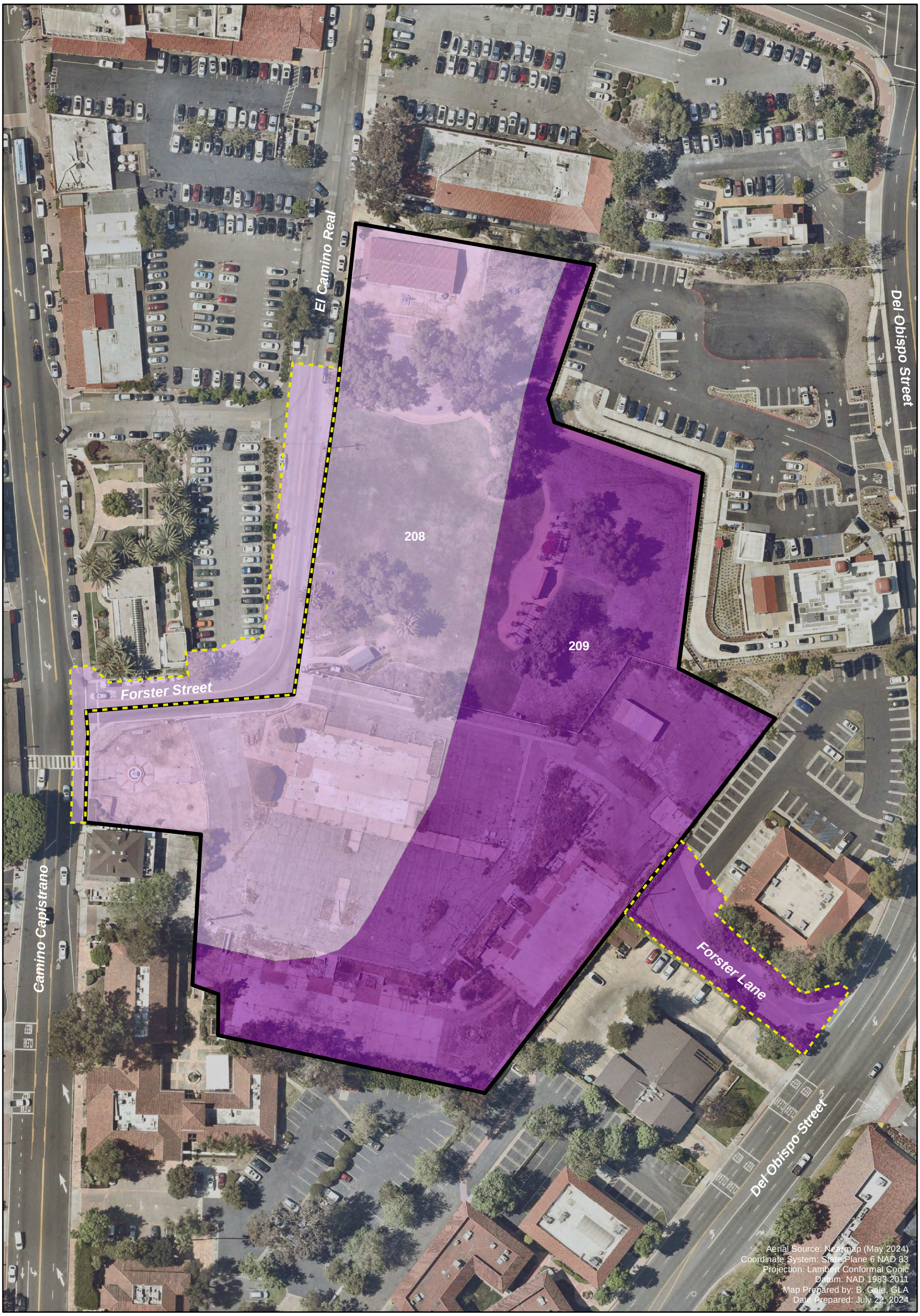
Photograph 12: View looking west along Forster Lane within an offsite portion of the Project site.

GLENN LUKOS ASSOCIATES

Exhibit 7 – Page 3

EL CAMINO SPECIFIC PLAN

Site Photographs



Project - Onsite

Project - Offsite

208 Sorrento Clay Loam, 0 to 2 Percent Slopes

209 Sorrento Clay Loam, 2 to 9 Percent Slopes

N

0 40 80 160

Feet

1 inch = 80 feet

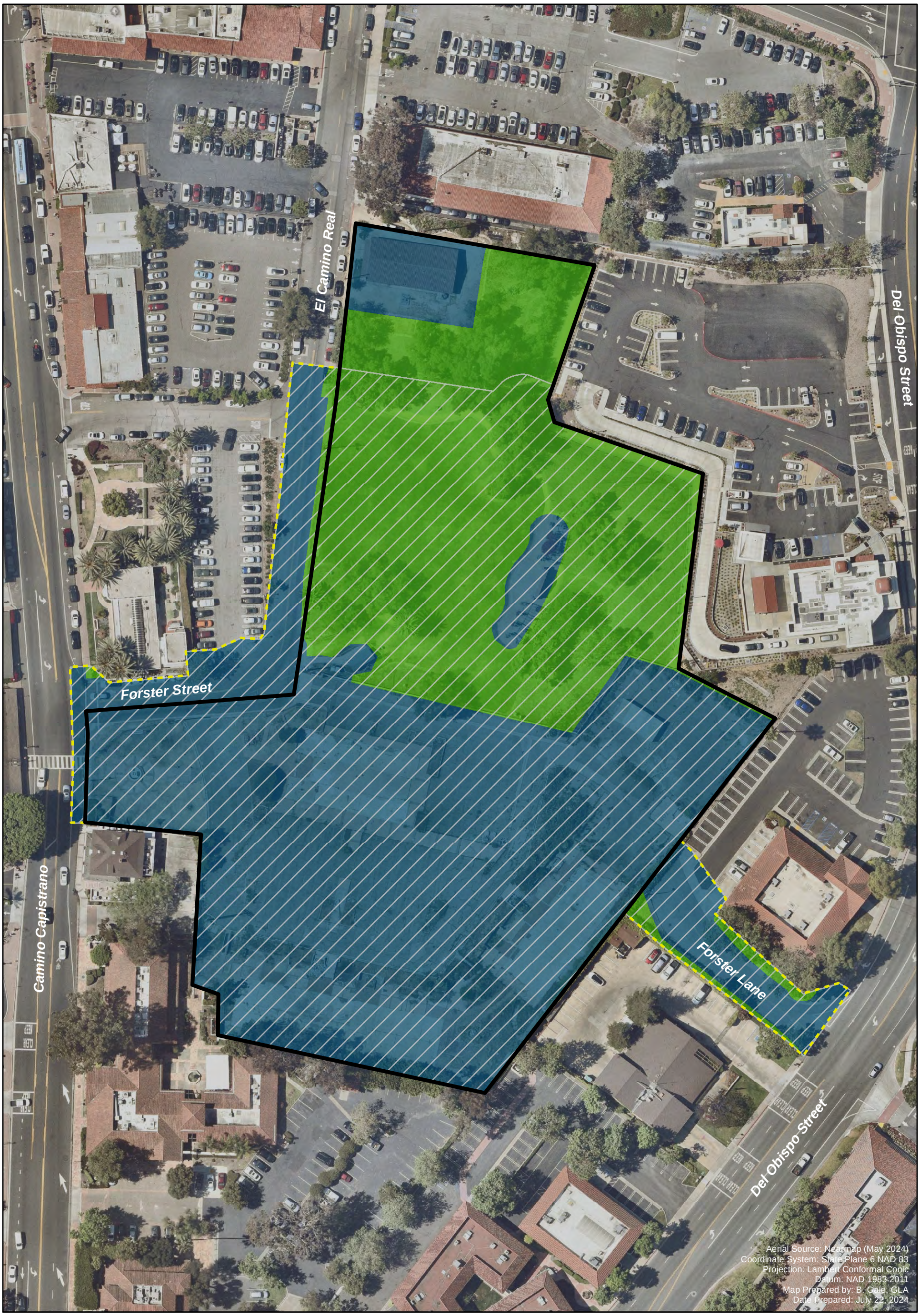
EL CAMINO SPECIFIC PLAN

Soils Map

GLENN LUKOS ASSOCIATES

Exhibit 8

X:\0363-THE REST\0849-67ELCA\849-67_GIS\SoilsGIS\849-67_Soils.mxd



Project - Onsite

Project - Offsite

Impact Area

Park (Ornamental and Turf)

Developed

N

0 40 80 160

Feet

1 inch = 80 feet

EL CAMINO SPECIFIC PLAN

Vegetation Impact Map

GLENN LUKOS ASSOCIATES

Exhibit 9

X:\0363-THE REST\0849-67ELCA\849-67_GIS\ImpactsGIS\REV1\0849-67_Vegetation_ImpactsREV1.mxd

Onsite Project Site

Offsite Project Site

Tree to be Preserved

Heritage Tree to be Preserved

Tree to be Removed

Heritage Tree to be Relocated Onsite

N

0 40 80 160

Feet

1 inch = 80 feet

EL CAMINO SPECIFIC PLAN

Tree Impact Map

GLENN LUKOS ASSOCIATES

Exhibit 10

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FLORAL COMPENDIUM

The floral compendium lists all species identified during floristic level/focused plant surveys conducted for the Project site. Taxonomy typically follows the Angiosperm Phylogeny Group (APG), which in some cases differs from The Jepson Manual (2002). Common plant names are taken from Hickman (1993), Munz (1974), and Roberts et al (2004) and Roberts (2008). An asterisk (*) denotes a non-native species.

GYMNOSPERMS

CONIFEROPHYTA	**CONE-BEARING PLANTS**
PINACEAE	**Pine Family**
* *Cedrus deodara*	deodor cedar

MAGNOLIOPHYTA — FLOWERING PLANTS

MONOCOTYLEDONS — MONOCOTS

AGAVACEAE	**Agave Family**
* *Agave americana*	American century plant
* *Agave attenuate*	foxtail agave
ARECACEAE	**Palm Family**
* *Phoenix canariensis*	Canary Island date palm
* *Washingtonia robusta*	Mexican fan palm
ASPARAGACEAE	**Asparagus Family**
Hesperoyucca whipplei	Our Lord's Candle
BIGNONIACEAE	**Bignonia Family**
* *Tecoma capensis*	cape honeysuckle
JUNCACEAE	**Rushes**
Juncus mexicanus	Mexican rush
LILIACEAE	**Lily Family**
* *Agapanthus* sp.	blue lily
ONAGRACEAE	**Evening Primrose Family**
Epilobium canum	California fuchsia

POACEAE		**Grass Family**
*	*Bromus diandrus*	ripgut grass
*	*Cynodon dactylon*	Bermuda grass
	Muhlenbergia rigens	deergrass
*	*Pennisetum setaceum*	African fountain grass

EUDICOTYLEDONS

EUDICOTS

ADOXACEAE		**Elderberry Family**
	Sambucus nigra subsp. *caerulea*	blue elderberry
ANACARDIACEAE		**Sumac Family**
*	*Schinus molle*	Peruvian pepper tree
*	*Searsia lancea*	African sumac
ASPARAGACEAE		**Asparagus Family**
*	*Dracaena* sp.	Dragon tree
ASPHODELACEAE		**Asparagales**
*	*Aloe arborescens*	candelabra aloe
ASTERACEAE		**Sunflower Family**
	Artemisia californica	California sagebrush
	Artemisia tridentata	big sagebrush
	Artemisia vulgaris	common mugwort
	Brickellia californica	California brickellbush
*	*Picris echioides*	bristly ox-tongue
CACTACEAE		**Cactus Family**
	Cylindropuntia prolifera	coastal cholla
*	*Opuntia ficus-indica*	Indian fig
	Opuntia littoralis	coastal prickly pear
CUPRESSACEAE		**Cypress Family**
	Juniperus californica	California juniper
FABACEAE		**Legume Family**
	Amorpha californica	false indigo
FAGACEAE		**Beech Family**
	Quercus agrifolia	coast live oak
GERANIACEAE		**Geranium Family**
*	*Pelargonium zonale*	zonal geranium

HAMAMELIDACEAE		**Witch-Hazel Family**
*	*Liquidambar styraciflue*	American sweetgum
JUGLANDACEAE		**Walnut Family**
	Juglans sp.	walnut
LAMIACEAE		**Mint Family**
	Salvia apiana	white sage
	Salvia mellifera	black sage
*	*Salvia rosmarinus*	rosemary
*	*Stachys* sp.	Lamb's ear
MALVACEAE		**Mallow Family**
*	*Malva parviflora*	cheeseweed
MYRTACEAE		**Myrtle Family**
*	*Eucalyptus camaldulensis*	river red gum
*	*Eucalyptus globulus*	Tasmanian blue gum
NYCTAGINACEAE		**Four O'Clock Family**
*	*Bougainvillea* sp.	bougainvillea
OLEACEAE		**Olive Family**
*	*Olea europaea*	European olive
PAPAVERACEAE		**Poppy Family**
	Romneya sp.	Matilija poppy
PLATANACEAE		**Sycamore Family**
	Platanus × *acerifolia*	London plane
POLYGONACEAE		**Buckwheat Family**
	Eriogonum fasciculatum	California buckwheat
RHAMNACEAE		**Buckthorn Family**
	Rhamnus californica subsp. *californica*	California coffeeberry
ROSACEAE		**Rose Family**
	Rosa californica	California rose
SALICACEAE		**Willow Family**
*	*Xylosma congestum*	shiny xylosma
SCROPHULARIACEAE		**Figwort Family**
*****	*Myoporum laetum*	myoporum

SIMAROUBACEAE	**Simarouba Family**
* *Ailanthus altissima*	tree of heaven
VERBENACEAE	**Vervain Family**
* *Lantana* sp.	lantana

APPENDIX B
FAUNAL COMPENDIUM

* = non-native species

REPTILIA

PHRYNOSOMATIDAE
Sceloporus occidentalis

REPTILES

Phrynosomatid Lizards
Great Basin fence lizard

AVES

ACCIPITRIDAE
Buteo jamaicensis

AEGITHALIDAE
Psaltriparus minimus

COLUMBIDAE
Zenaida macroura

CORVIDAE
Aphelocoma californica
Corvus brachyrhynchos

EMBERIZIDAE
Junco hyemalis

FRINGILLIDAE

Carpodacus mexicanus

LARIDAE
Larus californicus

MIMIDAE
Mimus polyglottos

PARULIDAE
Setophaga coronata

PASSERIDAE
* ***Passer domesticus***

BIRDS

Hawks and Eagles
red-tailed hawk

Long-tailed Tits
bushtit

Pigeons and Doves
mourning dove

Jays, Magpies and Crows
California scrub-jay
American crow

Sparrows
dark-eyed junco

Fringilline And Cardueline Finches and Allies
house finch

Gulls
California gull

Mockingbird Family
northern mockingbird

Wood Warblers and Relatives
yellow-rumped warbler

Old World Sparrows
house sparrow

PICIDAE	**Woodpeckers And Allies**
Picoides nuttallii	Nuttall's woodpecker
STURNIDAE	**Starlings**
* ***Sturnus vulgaris***	European starling
TROCHILIDAE	**Hummingbirds**
Calypte anna	Anna's hummingbird
Selasphorus sasin	Allen's hummingbird
TYRANNIDAE	**Tyrant Flycatchers**
Sayornis nigricans	black phoebe
Tyrannus vociferans	Cassin's kingbird
TURDIDAE	**Thrushes**
Sialia mexicana	western bluebird
Turdus migratorius	American robin
VIDUIDAE	**Indigobirds And Whydahs**
***** ***Vidua macroura***	pin-tailed whydah

MAMMALIA

MAMMALS

CANIDAE	**Canid Family**
***** ***Canis lupus familiaris***	domestic dog
LEPORIDAE	**Rabbits and Hares**
Sylvilagus audubonii	desert cottontail
MOLOSSIDAE	**Free-tailed Bats**
Tadarida brasiliensis	Mexican free-tailed bat
SCIURIDAE	**Squirrel Family**
* ***Sciurus niger***	eastern fox squirrel
VESPERILIONIDAE	**Vesper Bats**
Myotis yumanensis	Yuma myotis

APPENDIX C
El Camino Specific Plan Tree Survey Matrix

Tree ID	Common Name	Scientific Name	DBH	DBH Total	Trunk	Height (ft)	Canopy Extent (ft)	Canopy Health %	Health Rating	Defects	Structure Rating	Tree Rating	Heritage	Location	Impact	Comment	Initials
1	Peruvian Pepper Tree	Schinus molle	35+12+24+26+26	123	Multi	35	50 x 50	70	Average (55-75%)		Good (75-95%)	Good (75-95%)	Yes	Onsite	Avoided	Very old heritage tree	JS
2	Peruvian Pepper Tree	Schinus molle	27	27	Single	23	15 x 15	90	Excellent (>95%)	Slight lean	Excellent (>95%)	Good (75-95%)	No	Offsite	Avoided		JA
3	Peruvian Pepper Tree	Schinus molle	26+10	36	Multi	30	40 x 40	90	Good (75-95%)	Main trunk pruned	Good (75-95%)	Good (75-95%)	Yes	Onsite	Avoided		JS
4	Peruvian Pepper Tree	Schinus molle	14	14	Single	18	20 x 5	90	Good (75-95%)	Heavy lean	Average (55-75%)	Average (55-75%)	No	Onsite	Avoided		JS
5	Peruvian Pepper Tree	Schinus molle	24+18	42	Multi	35	50 x 30	90	Excellent (>95%)	Lean	Good (75-95%)	Good (75-95%)	Yes	Onsite	Avoided		JS
6	Peruvian Pepper Tree	Schinus molle	30	30	Single	25	20 x 30	90	Good (75-95%)	Slight lean	Good (75-95%)	Good (75-95%)	No	Onsite	Avoided		JA
7	Peruvian Pepper Tree	Schinus molle	28	28	Single	30	40 x 30	90	Excellent (>95%)		Excellent (>95%)	Excellent (>95%)	No	Onsite	Avoided		JS
8	Peruvian Pepper Tree	Schinus molle	22+16	38	Multi	30	40 x 30	90	Good (75-95%)		Excellent (>95%)	Good (75-95%)	Yes	Onsite	Avoided		JS
9	Blue Gum Eucalyptus	Eucalyptus globulus	22+20+18	60	Multi	50	40 x 30	85	Excellent (>95%)		Excellent (>95%)	Excellent (>95%)	Yes	Onsite	Avoided		JS
10	Peruvian Pepper Tree	Schinus molle	12+8	20	Multi	30	30 x 20	90	Excellent (>95%)		Excellent (>95%)	Excellent (>95%)	No	Onsite	Avoided		JS
11	Peruvian Pepper Tree	Schinus molle	48	48	Single	50	50 x 40	90	Excellent (>95%)		Excellent (>95%)	Excellent (>95%)	Yes	Onsite	Impacted		JS
12	Peruvian Pepper Tree	Schinus molle	13	13	Single	22	20 x 20	95	Good (75-95%)	Pronounced lean, former codominant trunk removed	Good (75-95%)	Good (75-95%)	No	Onsite	Impacted		JA
13	Deodor Cedar	TBD	16	16	Single	45	15 x 15	90	Good (75-95%)		Excellent (>95%)	Good (75-95%)	No	Onsite	Avoided		JS
14	London Plane	Platanus x acerifolia	16	16	Single	40	30 x 20	90	Good (75-95%)		Good (75-95%)	Good (75-95%)	No	Offsite	Avoided		JS
15	Canary Island Date Palm	Phoenix canariensis	34	34	Single	17	20 x 18	95	Excellent (>95%)		Excellent (>95%)	Excellent (>95%)	No	Offsite	Impacted		JA
16	Peruvian Pepper Tree	Schinus molle	28	28	Single	30	25 x 30	85	Poor (30-55%)	Heavy lean	Average (55-75%)	Poor (30-55%)	No	Onsite	Avoided		JS
17	Peruvian Pepper Tree	Schinus molle	30+30	60	Multi	35	50 x 35	90	Excellent (>95%)	Codominant branching	Good (75-95%)	Good (75-95%)	Yes	Onsite	Avoided		JS
18	Canary Island Date Palm	Phoenix canariensis	30	30	Single	33	20 x 20	95	Excellent (>95%)		Excellent (>95%)	Excellent (>95%)	No	Onsite	Impacted		JA
19	Peruvian Pepper Tree	Schinus molle	36	36	Single	35	30 x 25	80	Average (55-75%)	Lean	Good (75-95%)	Average (55-75%)	Yes	Onsite	Impacted		JS
20	Peruvian Pepper Tree	Schinus molle	44	44	Single	22	30 x 30	75	Average (55-75%)	Codominant trunks	Average (55-75%)	Average (55-75%)	Yes	Onsite	Impacted		JA
21	Peruvian Pepper Tree	Schinus molle	48	48	Single	30	35 x 20	85	Average (55-75%)		Good (75-95%)	Average (55-75%)	Yes	Onsite	Impacted		JS
22	Peruvian Pepper Tree	Schinus molle	24	24	Single	25	25 x 20	60	Poor (30-55%)	Heavy lean	Poor (30-55%)	Poor (30-55%)	No	Onsite	Impacted		JS
23	Olive	Olea europaea	14+12+12+8+6	52	Multi	22	30 x 30	90	Good (75-95%)		Good (75-95%)	Good (75-95%)	Yes	Onsite	Impacted		JS
24	Tree of Heaven	Ailanthus altissima	6	6	Single	28	10 x 15	90	Good (75-95%)	Lean	Good (75-95%)	Good (75-95%)	No	Onsite	Impacted		JS
25	Tree of Heaven	Ailanthus altissima	7	7	Single	30	12 x 12	95	Good (75-95%)	Slight lean	Good (75-95%)	Good (75-95%)	No	Onsite	Impacted		JA
26	Tree of Heaven	Ailanthus altissima	8	8	Single	30	10 x 10	90	Good (75-95%)	Slight lean	Good (75-95%)	Good (75-95%)	No	Onsite	Impacted		JS
27	Tree of Heaven	Ailanthus altissima	10	10	Single	30	20 x 15	90	Good (75-95%)	Lean	Good (75-95%)	Good (75-95%)	No	Onsite	Impacted		JS
28	Olive	Olea europaea	14+12	26	Multi	30	30 x 20	90	Good (75-95%)	Codominant branching	Good (75-95%)	Good (75-95%)	No	Onsite	Impacted		JS
29	Tree of Heaven	Ailanthus altissima	6	6	Single	30	20 x 20	80	Average (55-75%)	Lean	Good (75-95%)	Average (55-75%)	No	Onsite	Impacted		JS
30	Blue Elderberry	Sambucus cerulea	12+12	24	Multi	15	10 x 15	25	Poor (30-55%)	Lean		Average (55-75%)	No	Onsite	Impacted		JS
31	Tree of Heaven	Ailanthus altissima	7	7	Single	20	10 x 15	95	Good (75-95%)		Good (75-95%)	Good (75-95%)	No	Onsite	Impacted		JA
32	Tree of Heaven	Ailanthus altissima	6	6	Single	25	15 x 10	90	Good (75-95%)	Crowded environment	Good (75-95%)	Good (75-95%)	No	Onsite	Impacted		JS
33	London Plane	Platanus x acerifolia	18	18	Single	35	35 x 25	75	Average (55-75%)	Larger sucker near root crown. Leaning over	Average (55-75%)	Average (55-75%)	No	Offsite	Avoided		JA
34	Mexican Fan Palm	Washingtonia robusta	20	20	Single	25	10 x 10	90	Good (75-95%)	None	Good (75-95%)	Good (75-95%)	No	Offsite	Avoided		JA
35	Dragon Tree	Dracaena draco	13 + 15	28	Multi	11	12 x 12	85	Poor (30-55%)	Co dominant trunk, slight lean	Poor (30-55%)	Poor (30-55%)	No	Onsite	Impacted		JA
36	Dragon Tree	Dracaena draco	21	21	Single	14	17 x 17	85	Average (55-75%)		Average (55-75%)	Average (55-75%)	No	Onsite	Impacted	Cavities in trunk, possible borer infections	JA
37	Dragon Tree	Dracaena draco	23	23	Single	14	18 x 18	85	Average (55-75%)		Average (55-75%)	Average (55-75%)	No	Onsite	Impacted		JA
38	Dragon Tree	Dracaena draco	22	22	Single	14	17 x 17	85	Average (55-75%)	2-3" cavities in trunk	Good (75-95%)	Good (75-95%)	No	Onsite	Impacted	Slight lean, several sm cavaties in trunk. Possible borer wounds	JA

Photograph 1: Tree #1 Peruvian pepper tree

Photograph 2: Tree #2 Peruvian pepper tree

Photograph 3: Tree #3 Peruvian pepper tree

Photograph 4: Tree #4 Peruvian pepper tree

Photograph 5: Tree #5 Peruvian pepper tree

Photograph 6: Tree #6 Peruvian pepper tree

Photograph 7: Tree # 7 Peruvian pepper tree

Photograph 8: Tree #8 Peruvian pepper tree

Photograph 9: Tree #9 Peruvian pepper tree

Photograph 10: Tree #10 Peruvian pepper tree

Photograph 11: Tree #11 Peruvian pepper tree

Photograph 12: Tree #12 Peruvian pepper tree

Photograph 13: Tree #13 Deodor cedar

Photograph 14: Tree #14 London plane

Photograph 15: Tree #15 Canary Island Date Palm

Photograph 16: Tree #16 Peruvian pepper tree

Photograph 17: Tree #17 Peruvian pepper tree

Photograph 18: Tree #18 Canary Island Date Palm

Photograph 19: Tree #19 Peruvian pepper tree

Photograph 20: Tree #20 Peruvian pepper tree

Photograph 21: Tree #21 Peruvian pepper tree

Photograph 22: Tree #22 Peruvian pepper tree

Photograph 23: Tree #23 Olive

Photograph 24: Tree #24 Tree of Heaven

Photograph 25: Tree #25 Tree of Heaven

Photograph 26: Tree #26 Tree of Heaven

Photograph 27: Tree #27 Tree of Heaven

Photograph 28: Tree #28 Olive

Photograph 29: Tree #29 Tree of Heaven

Photograph 30: Tree #30 Elderberry

Photograph 31: Tree #31 Tree of Heaven

Photograph 32: Tree #32 Tree of Heaven

Photograph 33: Tree #33 London plane

Photograph 34: Tree #34 Mexican fan palm

Photograph 35: Tree #35 Dragon tree

Photograph 36: Tree #36 Dragon tree

Photograph 37: Tree #37 Dragon tree

Photograph 38: Tree #38 Dragon tree