

BIOLOGICAL TECHNICAL REPORT

FOR

4665 LAMPSON AVENUE PROJECT

**LOCATED IN THE CITY OF LOS ALAMITOS
ORANGE COUNTY, CALIFORNIA**

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INFORMATION SUMMARY

- A. Report Date:** April 1, 2024
- B. Report Title:** Biological Technical Report for the 4665 Lampson Avenue Project
- C. Project Site Location:** 4665 Lampson Avenue, Los Alamitos, Orange County California 90720
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1.0 INTRODUCTION

1.1 Background and Scope of Work

This document provides the results of general biological surveys and focused biological surveys for the 12.37-acre Project (Project site) located in the City of Los Alamitos, Orange County, California. This report identifies and evaluates impacts to biological resources associated with the proposed 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), Porter-Cologne Water Quality Control Act, and the California Fish and Game Code.

The scope of this report includes a discussion of existing conditions for the 12.37-acre Project site, 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 and land-cover types. 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/land-cover mapping; (2) general biological surveys; (3) habitat assessments for special-status plant species; (4) habitat assessments for special-status wildlife species; and (5) focused surveys for special status species. 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.

1.2 Project Location

The Project site located at 4655 Lampson Avenue comprises approximately 12.37 acres in the City of Los Alamitos, Orange County, California [Exhibit 1 – Regional Map] and is located within Section 32, Township 4 South and Range 11 West, of the U.S. Geological Survey (USGS) 7.5” quadrangle map Los Alamitos (dated 1964) [Exhibit 2 – Vicinity Map]. The Project site is located north of Lampson Avenue and northwest of the intersection of Lampson Avenue and Rose Street and is bordered by Arbor Park, Arbor Dog Park to the north; Navy Golf Course to the east, Lampson Avenue and a residential area to the south and Los Alamitos Joint Forces Training Base (JFTB) to the west [Exhibit 3 – Aerial Map]. Under existing conditions, the Project site is developed with a two-story 88,000 square foot commercial office building and parking lot. The Project site consists of Accessor’s Parcel Number (APN) 130-012-35.

1.3 Project Description

For this report, the term *Project Site* is defined as that area proposed for direct impact by the proposed Project and equaling 12.37 acres [Exhibit 4A – Site Plan]. As shown, the Project Applicant proposes to redevelop the existing office building with a 246-unit residential development consisting of 55 single-family detached residential units (cluster homes), 114 townhomes, and 77 affordable multi-family apartment homes. The Project would provide approximately 16,160 square feet (sf) of common open space. Vehicle access to the Project site would be provided via one driveway on Lampson Avenue.

All off-site infrastructure and improvements would occur concurrently with the construction of the proposed Project. The Project would include replacement of the existing median curb/landscape on Lampson Avenue with new median and landscaping. In addition, the Project would include an 8-inch water line extension of approximately 1,200 feet along Lampson Avenue between the eastern driveway and the existing watermain at the intersection of Lunar and Lampson [Exhibit 4B – Disturbance Area].

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 three main components:

- Performance of a jurisdictional waters and wetlands determination;
- Performance of vegetation and land-cover mapping for the Project site; and
- 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.

The focus of the biological surveys was determined through initial site reconnaissance, a review of the CNDDDB [CDFW 2022], CNPS 8th edition online inventory (CNPS 2022), 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 alliance and land-cover types were mapped directly onto a 80-scale (1"= 80') 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 onsite 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; and
- 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.

Table 2-1 provides a summary list of survey dates, survey types and personnel.

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

Survey Type	2022 Survey Dates	Biologists
General Biological Survey/Habitat Assessment/Jurisdictional Determination	2/11, 3/31, 5/2, 5/20, 7/13, 9/19	JA, SC
Focused Bat Surveys	3/31, 5/2, 7/13, 9/6	JA, SC

JA = Jeff Ahrens, SC = Stephanie Cashin,

Individual plants and wildlife species are evaluated in this report based on their “special status.” For 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), California Fully Protected (CFP) species, or species included in the State of California “Watch List”.

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 assessment 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, 2022. Inventory of Rare and Endangered Plants of California (online edition, v9-01 1.5) (CNPS 2022); and
- CNDDDB for the USGS 7.5' quadrangles: Los Alamitos and surrounding quadrangle maps including Anaheim, La Habra, Long Beach, Newport Beach, Seal Beach, South Gate, and Whittier (CNDDDB 2022).

2.2.2 Vegetation Land-Cover Mapping

Vegetation communities and land-cover types within the Project site were reviewed in accordance with 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 alliances or land-cover types were named based on the dominant plant species or other land-cover components present. Plant communities were mapped in the field directly onto a 80-scale (1"=80') aerial photograph. A vegetation/land-cover map is included as Exhibit 5. Representative site photographs are included as Exhibit 6.

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 CNDDDB 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 (2022).

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 biologist Jeff Ahrens visited the site on February 11, March 31, May 2, May 20, and July 13, 2022, and conducted general plant surveys. Surveys were conducted in accordance with accepted botanical survey guidelines (CDFG 2009, CNPS 2001, USFWS 2000). 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 areas not already developed with buildings and paved parking lots. All plant species encountered during the field surveys were identified and recorded following the above-referenced guidelines adopted by CNPS (2010) and CDFW by Nelson (1984). A complete list of the plant species observed is provided in Appendix A. Scientific nomenclature and common names used in this report follow Baldwin et al (2012), and Munz (1974).

2.3 Wildlife Resources

Wildlife species were evaluated and detected during field surveys by direct observation, calls, 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 2016), Standard Common and Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodylians 6th Edition, Collins and Taggart (2016) 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 opportunistically by direct observation and/or by vocalizations, with identifications recorded in field notes. In addition, birds observed flying over the site or observed adjacent to the site were also recorded in the field notes and included in the faunal compendium.

Mammals

During general biological and reconnaissance survey within the Project site, mammals were identified and detected opportunistically 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 opportunistically 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 CNDDDB 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 February 11, 2022. 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

Bats

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.

Four focused bat surveys were conducted by GLA biologists Jeff Ahrens and Stephanie Cashin on March 31, May 2, July 13, and September 6, 2022. 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 2-2. Summary of Focused Bat Surveys

Survey Date	Biologists	Start/End Time	Start/End Temperature	Start/End Wind Speed (mph)	Cloud Cover
03/31/22	JA/SC	1740/2145	62/58	2-3/2-4	100/100
05/02/22	JA/SC	1825/2230	65/59	5-7/2-4	10/0
07/13/22	JA/SC	1930/2240	69/64	3-6/1-3	0/0
09/06/22	JA/SC	1830/2230	79/75	3-5/1-2	0/0

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 February 11, 2022, GLA biologist 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 and Section 13260 of the CWC [the Porter-Cologne Water Quality Control Act].

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 are afforded protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission.

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.

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.
- Section 2081 of the CESA authorizes CDFW to issue incidental take permits for the take of state endangered, threatened, or candidate species associated with project development. 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 CNDDDB project. Informally listed taxa are not protected by statute but warrant consideration in the preparation of biotic assessments. For some species, the CNDDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites.

For 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

CNDDDB Global/State Rankings

The CNDDDB 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 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

U.S. Army Corps of Engineers Jurisdiction

On January 18, 2023 the Corps issued new definitions for waters of the United States 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 new definitions became effective on March 20, 2023. Under the new definitions, the term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a) as set forth below. On May 25, 2023, the U.S. Supreme Court issued a decision in *Sackett et ux. V. Environmental Protection Agency et al.* that addressed the jurisdictional status of wetlands that are not directly connected to traditionally navigable waters or relatively permanent waters. Under the *Sackett* decision, the Supreme Court determined that wetlands not connected to traditionally navigable waters or relatively permanent waters are not subject to regulation under Section 404. On August 29, 2023, the Environmental Protection Agency (EPA) and the Corps issued a final rule to amend the final "Revised Definition of 'Waters of the United States' Rule," published in the Federal Register on January 18, 2023. This final rule conforms the definition of "waters of the United States" to the U.S. Supreme Court's decision in *Sackett*. The conforming rule was published in the Federal Register and became effective on September 8, 2023.

Pursuant to this new rule, the following are considered "waters of the United States":

- (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)(i) 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 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” is defined by 33 CFR 328.3(c)(2) as having a continuous surface connection.

The term “wetlands” (a subset of “waters of the United States”) is defined at 33 CFR 328.3(c)(1) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions.” In 1987 the Corps published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the 1987 Wetland Delineation Manual and the Arid West Supplement generally require that, to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual and Supplement provide detail in methodology and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

- more than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands¹);
- soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
- Whereas the 1987 Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criterion 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 States² and waters of the State. Waters of the United States are defined above in Section 3.3.1 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

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

² 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 of 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.

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.

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;³ and*
3. *Artificial wetlands⁴ 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,*

³ “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 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.

⁴ Artificial wetlands are wetlands that result from human activity.

- 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 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).

4.0 RESULTS

This section provides the results of general biological surveys, vegetation mapping, habitat assessments and focused surveys for special-status plants and animals, 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 is a 12.37 acre developed property that is bordered by Arbor Park and Arbor Dog Park to the north, the Navy Golf Course to the east, Lampson Avenue and residential areas to the south, and the JFTB to the west. Elevation on the site is approximately 20 feet above mean sea level (amsl). A review of historic aerial imagery (Historicaerials.com) depicts that as far back as 1952, the Project site and environs was historically used for agriculture purposes. The Project site and adjacent residential area to the south appear to have been developed in the mid 1960's to early 1970's.

The Project site is currently occupied with a single large two-story office building, parking lot and includes over one hundred ornamental trees, shrubs and ground cover. A majority of the ornamental trees onsite, especially American sweetgum (*Liquidambar styraciflua*) with some London plane trees (*Platanus x. acerifolia*) appear to be in declining health from possibly a variety of reasons including but not limited to an unknown disease and stress from drought.

Soils onsite are mapped⁵ as 100 percent Hueneme Fine Sandy Loam, Drained [Exhibit 7 – Soils Map]. The Hueneme series soils are in nearly level alluvial plains and basins in stratified alluvium derived from alkaline sedimentary sources. These soils are at elevations from near sea level to approximately 1,000 feet in a dry subhumid, mesothermal climate having a mean annual rainfall of about 15 inches with cool, rainless, foggy summers and cool, moist winters.

4.2 Vegetation and Land Cover Types

The Project site supports the following vegetation and land-cover types: Developed/Ornamental and Disturbed/Ornamental. Table 4-1 provides a summary of the vegetation/land-use types. Descriptions of each vegetation/land-cover type follow the table. A Vegetation Map is attached as Exhibit 5. Photographs depicting the Project site are included in Exhibit 6. 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)	Total (Acres)
Developed/Ornamental	5.97	5.97
Disturbed/Ornamental	6.40	6.40
Total	12.37	12.37

Developed/Ornamental

The Project site includes 5.97 acres of lands best described as developed/ornamental. Developed/ornamental lands includes a single large office building, parking lot, storage containers, and ornamental trees and vegetation occurring within these developed areas [Exhibit 5 – Vegetation Map]. Ornamental vegetation within this area is largely comprised of London plane tree, American sweetgum, and natal plum (*Carissa macrocarpa*). Other common ornamental species include lily of the Nile (*Agapanthus* sp.), Italian cypress (*Cupressus sempervirens*), and Brazilian peppertree (*Schinus terebinthifolius*), and Aleppo pine (*Pinus halepensis*).

Disturbed/Ornamental

⁵ Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Soil Survey Geographic (SSURGO) Database. Available online at <https://sdmdataaccess.sc.egov.usda.gov>. Accessed [October 2022].

The Project site supports 6.40 acres of disturbed/ornamental lands. Disturbed/ornamental lands predominately includes turf grass with a mixture of weedy vegetation to the north and east; turf grass with a mixture of ornamental trees to the south; and numerous ornamental ground cover and trees west of the parking lot [Exhibit 5 – Vegetation Map]. Some of the ornamental vegetation and trees occurring within disturbed/ornamental areas includes crab grass (*Digitaria sanguinalis*), Bermuda grass (*Cynodon dactylon*), Russian thistle (*Salsola tragus*), cheeseweed (*Malva parviflora*), dwarf nettle (*Urtica urens*), African daisy (*Osteospermum* sp.), crystalline iceplant (*Mesembryanthemum crystallinum*), pale dewplant (*Drosanthemum floribundum*), Bermuda-buttercup (*Oxalis pes-caprae*), common sow-thistle (*Sonchus oleraceus*), New Zealand flax (*Phormium tenax*), English ivy (*Hedera helix*), carob tree (*Ceratonia siliqua*), carrotwood (*Cupaniopsis anacardioides*), camphor tree (*Cinnamomum camphora*), coast redwood (*Sequoia sempervirens*), Eastern redbud (*Cercis canadensis*), Peruvian pepper tree (*Schinus molle*), and Brazilian pepper tree (*Schinus terebinthifolus*).

A complete floral compendium is included in Appendix A.

4.3 Wildlife

A total of 29 animal species, including one invertebrate species, one reptile species, 23 bird species and four mammal species were recorded onsite during the general and focused biological surveys.

Common avian species detected included Anna's hummingbird (*Calypte anna*), Say's phoebe (*Sayornis saya*), Cassin's kingbird (*Tyrannus vociferans*), house finch (*Carpodacus mexicanus*), house sparrow (*Passer domesticus*), and mourning dove (*Zenaida macroura*). Common mammal species detected included Botta's pocket gopher (*Thomomys bottae*). A complete faunal compendium is included in Appendix B.

4.4 Special-Status Vegetation Communities (Habitats)

The CNDDDB identifies the following five special-status vegetation communities for the Los Alamitos and surrounding quadrangle maps including Anaheim, La Habra, Long Beach, Newport Beach, South Gate, and Whittier: California Walnut Woodland, Southern Coastal Salt Marsh, Southern Cottonwood Willow Riparian Forest, Southern Dune Scrub, and Southern Foredunes. The Project site does not contain any special-status vegetation types, including those identified by the CNDDDB.

4.5 Special-Status Plants

No special-status plants were detected at the Project site. Species with Table 4-2 provides a list of special-status plants evaluated for the Project site through general biological surveys, habitat assessments, and focused surveys. Species were evaluated based on the following factors: 1) species identified by the CNDDDB 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

<u>Status</u>	
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)	
<u>Occurrence</u>	
<ul style="list-style-type: none"> • Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species. • Absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys. • Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out. • Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed. • Present – The species was detected onsite incidentally or through focused surveys. 	

Species Name	Status	Habitat Requirements	Occurrence
Aphanisma <i>Aphanisma blitoides</i>	Federal: None State: None CNPS: Rank 1B.2	Sandy soils in coastal bluff scrub, coastal dunes, and coastal scrub.	Does not occur.
Brand's star phacelia <i>Phacelia stellaris</i>	Federal: None State: None CNPS: Rank 1B.1	Coastal dunes and coastal sage scrub.	Does not occur.
California Orcutt grass <i>Orcuttia californica</i>	Federal: FE State: SE CNPS: Rank 1B.1	Vernal pools	Does not occur.
Chaparral sand-verbena <i>Abronia villosa</i> var. <i>aurita</i>	Federal: None State: None CNPS: Rank 1B.1	Sandy soils in chaparral, coastal sage scrub.	Does not occur.

Species Name	Status	Habitat Requirements	Occurrence
Coast woolly-heads <i>Nemacaulis denudata</i> var. <i>denudata</i>	Federal: None State: None CNPS: Rank 1B.2	Coastal dunes	Does not occur.
Coulter's goldfields <i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Federal: None State: None CNPS: Rank 1B.1	Playas, vernal pools, marshes and swamps (coastal salt).	Does not occur.
Coulter's saltbush <i>Atriplex coulteri</i>	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 <i>Atriplex serenana</i> var. <i> davidsonii</i>	Federal: None State: None CNPS: Rank 1B.2	Alkaline soils in coastal sage scrub, coastal bluff scrub.	Does not occur.
Decumbent goldenbush <i>Isocoma menziesii</i> var. <i>decumbens</i>	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal scrub (sandy, often in disturbed areas)	Does not occur.
Estuary seablite <i>Suaeda esteroa</i>	Federal: None State: None CNPS: Rank 1B.2	Coastal salt marsh and swamps. Occurring in sandy soils	Does not occur.
Gambel's water cress <i>Nasturtium gambelii</i>	Federal: FE State: ST CNPS: Rank 1B.1	Marshes and swamps (freshwater or brackish).	Does not occur.
Horn's milk-vetch <i>Astragalus hornii</i> var. <i>hornii</i>	Federal: None State: None CNPS: Rank 1B.1	Lake margins with alkaline soils, meadows and seeps, and playas.	Does not occur.
Intermediate mariposa-lily <i>Calochortus weedii</i> var. <i>intermedius</i>	Federal: None State: None CNPS: Rank 1B.2	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Does not occur.
Los Angeles sunflower <i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Federal: None State: None CNPS: Rank 1A	Marshes and swamps (coastal salt and freshwater).	Does not occur.
Lucky morning-glory <i>Calystegia felix</i>	Federal: None State: None CNPS: Rank 3.1	Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline soils. Meadows and seeps (sometimes alkaline), riparian scrub (alluvial).	Does not occur.
Lyon's pentachaeta <i>lyonii</i>	Federal: FE State: SE CNPS: Rank 1B.1	Chaparral (openings), coastal sage scrub, valley and foothill grassland.	Does not occur.
Many-stemmed dudleya <i>Dudleya multicaulis</i>	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Does not occur.
Mud nama <i>Nama stenocarpum</i>	Federal: None State: None CNPS: Rank 2B.2	Marshes and swamps	Does not occur.

Species Name	Status	Habitat Requirements	Occurrence
Parish's brittle-scale <i>Atriplex parishii</i>	Federal: None State: None CNPS: Rank 1B.1	Chenopod scrub, playas, vernal pools.	Does not occur.
Plummer's mariposa lily <i>Calochortus plummerae</i>	Federal: None State: None CNPS: Rank 4.2	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Does not occur.
Prostrate vernal pool navarretia <i>Navarretia prostrata</i>	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.
Salt marsh bird's-beak <i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	Federal: FE State: SE CNPS: Rank 1B.2	Coastal dune, coastal salt marshes and swamps.	Does not occur.
Salt Spring checkerbloom <i>Sidalcea neomexicana</i>	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 <i>Symphotrichum defoliatum</i>	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 Diego button-celery <i>Eryngium aristulatum</i> var. <i>parishii</i>	Federal: FE State: SE CNPS: Rank 1B.1	Mesic soils in vernal pools, valley and foothill grasslands, coastal sage scrub.	Does not occur.
Sanford's arrowhead <i>Sagittaria sanfordii</i>	Federal: None State: None CNPS: Rank 1B.2	Marshes and swamps (assorted shallow freshwater).	Does not occur.
South coast saltscale <i>Atriplex pacifica</i>	Federal: None State: None CNPS: Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, playas.	Does not occur.
Southern tarplant <i>Centromadia parryi</i> ssp. <i>australis</i>	Federal: None State: None CNPS: Rank 1B.1	Disturbed habitats, margins of marshes and swamps, vernal mesic valley and foothill grassland, vernal pools.	Does not occur.
Ventura Marsh milk-vetch <i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	Federal: FE State: SE CNPS: Rank 1B.1	Coastal dunes, coastal scrub, marshes and swamps (edges, coastal salt or brackish)	Does not occur.

4.6 Special-Status Animals

No special-status animals were detected at the Project site. A pair of white-tailed kites (*Elanus leucurus*) were detected in February 2022 perched offsite on the JFTB, approximately 400 feet west of the Project site's western boundary. 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 CNDDDB 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		State	
FE – Federally Endangered		SE – State Endangered	
FT – Federally Threatened		ST – State Threatened	
FPT – Federally Proposed Threatened		SC – State Candidate	
FC – Federal Candidate		CFP – California Fully-Protected Species	
BGEPA – Bald and Golden Eagle Protection Act		SSC – Species of Special Concern	
		WL – Watch List	
Western Bat Working Group (WBWG)			
H – High Priority			
LM – Low-Medium Priority			
M – Medium Priority			
MH – Medium-High Priority			
Occurrence			
<ul style="list-style-type: none"> • Absent – The species is absent from the site, either because the site lacks suitable habitat for the species, the site is located outside of the known range of the species, or focused surveys has confirmed the absence of the species. • Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out. • Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed. • Present – The species was detected onsite incidentally or through focused surveys. 			
Species Name	Status	Habitat Requirements	Occurrence
Invertebrates			
Crotch bumble bee <i>Bombus crotchii</i>	Federal: None State: CE (candidate endangered)	Relatively warm and dry sites, including the inner Coast Range of California and margins of the Mojave Desert. Generally found in open grasslands and scrub habitats.	Not expected to occur. Not detected during all site visits.
Monarch butterfly (California overwintering population) <i>Danaus plexippus pop. 1</i>	Federal: FC State: None	Roosts in winter in wind-protected tree groves along the California coast from northern Mendocino to Baja California, Mexico.	Not expected to occur.
Quino checkerspot butterfly <i>Euphydryas editha quino</i>	Federal: FE State: None	Larval and adult phases each have distinct habitat requirements tied to host plant species and topography. Larval host plants include	Does not occur.

Species Name	Status	Habitat Requirements	Occurrence
		<i>Plantago erecta</i> and <i>Castilleja exserta</i> . Adults occur on sparsely vegetated rounded hilltops and ridgelines, and are known to disperse through disturbed habitats to reach suitable nectar plants.	
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	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 <i>Branchinecta sandiegonensis</i>	Federal: FE State: None	Seasonal vernal pools	Does not occur.
Fish			
Southern steelhead - southern California DPS <i>Oncorhynchus mykiss irideus</i>	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.
Amphibians			
Western spadefoot <i>Spea hammondi</i>	Federal: None State: SSC	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Does not occur.
Reptiles			
Coast horned lizard <i>Phrynosoma blainvillii</i>	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.
Coastal whiptail <i>Aspidoscelis tigris stejnegeri (multiscutatus)</i>	Federal: None State: SSC	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Does not occur.
Green sea turtle <i>Chelonia mydas</i>	Federal: FT State: None	Inhabits the shallow waters of lagoons, bays, estuaries, mangroves, eelgrass and seaweed beds. Prefers areas with abundant aquatic vegetation, such as pastures of sea grasses and algae, in shallow, protected water.	Does not occur.
Southern California legless lizard <i>Anniella stebbinsi</i>	Federal: None State: SSC	Broadleaved upland forest, chaparral, coastal dunes, coastal scrub; found in a broader range of habitats than any of the other species in the genus. Often locally abundant, specimens are found in coastal sand dunes and a variety of	Not expected to occur.

Species Name	Status	Habitat Requirements	Occurrence
		interior habitats, including sandy washes and alluvial fans	
Western pond turtle <i>Emys marmorata</i>	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, submerged vegetation, and undercut banks.	Does not occur.
Birds			
American peregrine falcon (nesting) <i>Falco peregrinus anatum</i>	Federal: Delisted State: Delisted, FP	Breeding habitat consists of high cliffs, tall buildings, and bridges along the coast and inland. Foraging habitat primarily includes open areas near wetlands, marshes, and adjacent urban landscapes.	Potential to forage opportunistically onsite. Not expected to nest onsite due to lack of suitable habitat. Not detected onsite during all site visits.
Bank swallow (nesting) <i>Riparia</i>	Federal: None State: ST	Low areas along rivers, streams, ocean coasts or reservoirs. Often use human-made sites.	Does not occur.
Belding's savannah sparrow <i>Passerculus sandwichensis beldingi</i>	Federal: None State: SE	Coastal Marshes	Does not occur.
Black skimmer (nesting colony) <i>Rynchops niger</i>	Federal: None State: SSC	Open sandy beaches, gravel or shell bars with sparse vegetation, mats of sea wrack (tide-stranded debris) in saltmarsh.	Does not occur.
Burrowing owl (burrow sites & some wintering sites) <i>Athene cunicularia</i>	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.	Not expected to occur. The Project site does not support ground squirrel burrows onsite. No evidence of burrowing owl or sign during all site visits.
California black rail <i>Laterallus jamaicensis coturniculus</i>	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 brown pelican (nesting colony & communal roosts)	Federal: Delisted	Breed on dry, rocky offshore islands. Forage in estuaries and coastal marine habitats.	Does not occur.

Species Name	Status	Habitat Requirements	Occurrence
<i>Pelecanus occidentalis californicus</i>	State: Delisted, FP	Nests on islands free of land predators.	
California horned lark <i>Eremophila alpestris actia</i>	Federal: None State: WL	Occupies a variety of open habitats, usually where trees and large shrubs are absent.	Potential to forage onsite. Not expected to nest onsite due to proximity of large trees adjacent to the open field. Not detected onsite during all site visits.
California least tern (nesting colony) <i>Sterna antillarum browni</i>	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) <i>Campylorhynchus brunneicapillus sandiegensis</i>	Federal: None State: SSC	Occurs almost exclusively in cactus (cholla and prickly pear) dominated coastal sage scrub.	Does not occur.
Coastal California gnatcatcher <i>Poliophtila californica</i>	Federal: FT State: SSC	Low elevation coastal sage scrub and coastal bluff scrub.	Does not occur.
Cooper's hawk (nesting) <i>Accipiter cooperi</i>	Federal: None State: None CDFW: WL	Primarily occurs in riparian areas and oak woodlands, most commonly in montane canyons. Known to use urban areas, occupying trees among residential and commercial.	Observed flying over site; expected to forage.
Grasshopper sparrow (nesting) <i>Ammodramus savannarum</i>	Federal: None State: SSC	Open grassland and prairies with patches of bare ground.	Does not occur.
Least Bell's vireo (nesting) <i>Vireo bellii pusillus</i>	Federal: FE State: SE	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Does not occur.
Light-footed clapper rail <i>Rallus longirostris levipes</i>	Federal: FE State: SE, FP	Marsh vegetation of coastal wetlands.	Does not occur.
Merlin (wintering) <i>Falco columbarius</i>	Federal: None State: WL	Nest in forested openings, edges, and along rivers. Winter in open forests, grasslands, and especially coastal areas with flocks of small songbirds or shorebirds.	Present. One merlin was observed briefly in March 2022 flying over the southwest corner of the parking lot to the JFTB. Would be expected to forage opportunistically within and adjacent to the Project site from approximately between September to May. Does not breed in California.
Northern harrier (nesting) <i>Circus hudsonius</i>	Federal: None State: SSC	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	Potential to forage opportunistically onsite. Not expected to nest onsite. Not detected onsite during all site visits.

Species Name	Status	Habitat Requirements	Occurrence
Southwestern willow flycatcher (nesting) <i>Empidonax traillii extimus</i>	Federal: FE State: SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Does not occur.
Swainson's hawk (nesting) <i>Buteo swainsoni</i>	Federal: None State: ST	Summer in wide open spaces of the American West. Nest in grasslands, but can use sage flats and agricultural lands. Nests are placed in lone trees.	Potential to forage opportunistically onsite. Confirmed nesting in 2019 at the Seal Beach NWS. One Swainson's hawk reported perched onsite (by Lampson Avenue) in 2018 (eBird) and numerous reported observations reported at Arbor Park, JFTB and environs within Seal Beach (CNDDB, eBird & iNaturalist). Not expected to nest onsite as this species prefers to nest in solitary trees.
Tricolored blackbird (nesting colony) <i>Agelaius tricolor</i>	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.
Vermilion flycatcher (nesting) <i>Pyrocephalus rubinus</i>	Federal: None State: SSC	Scrub, desert, cultivated lands, and riparian woodlands.	Potential to forage and nest onsite. Known to occur at locations adjacent to Project site. Not detected onsite during all site visits.
Western snowy plover (nesting) <i>Charadrius alexandrinus nivosus</i>	Federal: FT State: SSC	Sandy or gravelly beaches along the coast, estuarine salt ponds, alkali lakes, and at the Salton Sea.	Does not occur.
Western yellow-billed cuckoo (nesting) <i>Coccyzus americanus occidentalis</i>	Federal: FT State: SE	Dense, wide riparian woodlands with well-developed understories.	Does not occur.
White-tailed kite (nesting) <i>Elanus leucurus</i>	Federal: None State: FP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Not expected to nest onsite. Potential to forage onsite opportunistically. One pair detected by GLA on several visits between 400 and 2,000 feet offsite, west of the Project site's western boundary. Numerous occurrences reported at JFTB, Arbor Park, and environs (eBird & iNaturalist).
Yellow rail <i>Coturnicops noveboracensis</i>	Federal: None State: SSC	Shallow marshes, and wet meadows; in winter, drier freshwater and brackish	Does not occur.

Species Name	Status	Habitat Requirements	Occurrence
		marshes, as well as dense, deep grass, and rice fields.	
Yellow warbler (nesting) <i>Setophaga petechia</i>	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.	Does not occur.
Yellow-breasted chat (nesting) <i>Icteria virens</i>	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 <i>Taxidea taxus</i>	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 <i>Nyctinomops macrotis</i>	Federal: None State: SSC WBWG: MH	Roost mainly in crevices and rocks in cliff situations; also utilize buildings, caves, and tree cavities.	Not detected during focused bat surveys. Suitable roosting habitat does not occur onsite.
Pacific pocket mouse <i>Perognathus longimembris pacificus</i>	Federal: FE State: SSC	Fine, alluvial soils along the coastal plain. Scarcely in rocky soils of scrub habitats.	Does not occur.
Pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	Federal: None State: SSC WBWG: M	Rocky areas with high cliffs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	Not detected during focused bat surveys. Suitable roosting habitat does not occur onsite.
South coast marsh vole <i>Microtus californicus stephensi</i>	Federal: None State: SSC	Tidal marshes in Los Angeles, Orange and southern Ventura Counties.	Does not occur.
Southern California saltmarsh shrew <i>Sorex ornatus salicoricus</i>	Federal: None State: SSC	Coastal marshes. Requires dense vegetation and woody debris for cover.	Does not occur.
Western mastiff bat <i>Eumops perotis californicus</i>	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.	Not detected during focused bat surveys. Suitable roosting habitat does not occur onsite.
Western red bat <i>Lasiurus blossevillii</i>	Federal: None State: SSC WBWG: H	Prefers riparian areas dominated by walnuts, oaks, willows, cottonwoods, and sycamores where they roost in broad-leaved trees.	Detected foraging offsite on one occasion during focused bat surveys. Not detected roosting onsite during focused bat surveys. Not expected to roost onsite due to low quality roosting habitat.

Species Name	Status	Habitat Requirements	Occurrence
Western yellow bat <i>Lasiurus xanthinus</i>	Federal: None State: SSC WBWG: H	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly in dead fronds of palms. Forages over water and among trees.	Detected foraging offsite during focused bat surveys. However, not detected roosting onsite during focused bat surveys. Potential roosting habitat occurs onsite.

4.6.1 Critical Habitat Designated by USFWS

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

4.6.2 Special-Status Wildlife Species Observed within the Project Site

Two sensitive wildlife species were detected within the Project site including sensitive (State watch list) Cooper’s hawk, and wintering merlin, both of which were detected onsite, were not nesting, and would not be subject to significant impacts as discussed below.

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 (including maternity roosting) onsite. Two common bat species, the Mexican free-tailed bat (*Tadarida brasiliensis*) and Yuma myotis (*Myotis yumanensis*) were confirmed flying over the site.

In addition, a number of bat species were detected acoustically offsite to the east within the adjacent Navy golf course, which contains hundreds of trees and numerous water features. The water features would be particularly attractive to bats due to insect populations associated with such features and the presence of water, which bats require. Bat species detected acoustically offsite include: big brown bat (*Eptesicus fuscus*), western red bat (*Lasiurus blossevillii*), western yellow bat (*Lasiurus xanthinus*), and the phonic group 50kHz Myotis which includes both the California myotis (*Myotis californicus*) and Yuma myotis (*Myotis yumanensis*). Bat species that are combined by frequency into a phonic group (e.g., 50 kHz myotis) may lack call characteristics and structure parameters that usually allow for confident species identification.

Two of the bat species detected offsite, the western red bat and western yellow bat are CDFW species of special concern and are both foliage roosting species. The western red bat was detected offsite acoustically during one of the four bat surveys and prefers to roost in riparian habitat and trees including (but not limited to) cottonwoods, sycamores, ash, willows, oaks and walnuts. The Project site does provide some suitable London plane trees onsite for roosting, but as previously stated, some of these trees and other broad-leaved trees onsite are in declining health and the roosting was not detected anywhere onsite during four focused bat surveys.

The western yellow bat was detected offsite during two of the four bat surveys. This species is strongly tied to palm trees (especially the dead fronds) for roosting habitat. Although the western yellow bat was not detected roosting onsite, the Project site does provide some suitable palm tree roosting habitat onsite.

Birds (Non Raptors)

Vermilion flycatcher (*Pyrocephalus obscurus*) - The vermilion flycatcher is designated as a CDFW Species of Special Concern (SSC) when nesting. The vermilion flycatcher generally occurs in more open areas, including arid scrublands, farmlands, deserts, parks, cemeteries, open woodland, and canyon mouths.

The vermilion flycatcher is well documented in Los Angeles, Orange, and San Diego Counties and is known to occur and breed adjacent to the Project site and environs including (but not limited to) Arbor dog park, Arbor Park, the Navy golf course, Old Ranch Country Club, Seal Beach Naval Weapons Station and El Dorado Park. The vermilion flycatcher was not detected onsite during any of the site visits, however, the Project site is estimated to provide up to four acres of potentially suitable foraging and nesting habitat.

The California horned lark *Eremophila alpestris actia* is designated as a Watch List species in California and is widespread in southern California in areas such as agricultural fields and areas of open ground. There is potential to forage onsite. Not expected to nest onsite due to proximity of large trees adjacent to the open field. Not detected onsite during all surveys.

4.7 Raptors and Raptor Use

Southern California exhibits 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 substantially declined in the region, affecting many species, but especially raptors. A few species, such as red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), Cooper's hawk (*Accipiter cooperii*), and American Kestrel (*Falco sparverius*), have shown the ability to adapt to various levels human presence and can be readily observed within and adjacent to urban neighborhoods and other types of development. These species still require appropriate foraging habitat and generally low levels of disturbance in vicinity of nesting sites.

Raptor nesting was not detected during the biological studies. The Project site may provide suitable nesting habitat for the American kestrel, and red-tailed hawk (neither of which have special status) and Cooper's hawk, a watch list species.

Approximately half of the Project site is developed and adjacent offsite lands to the west, north and east provide higher quality foraging and nesting habitat. Nonetheless, the Project site provides some foraging resources for raptors. Five raptor species, specifically, the American kestrel, barn owl (*Tyto alba*), Cooper's hawk, merlin (*Falco columbarius*), and red-tailed hawk⁶ were detected by GLA biologists flying over or in proximity to the Project site. These species

⁶ Common raptor species that are not special status species are not included in Table 4-3.

were not observed foraging onsite but would be expected to utilize the Project site for foraging on an occasional basis. The peregrine falcon (*Falco peregrinus anatum*) was not detected on the site and foraging potential is very limited and nesting sites are absent.

Sensitive raptor species including the burrowing owl (*Athene cunicularia*), northern harrier (*Circus hudsonius*), Swainson's hawk (*Buteo swainsoni*) and white-tailed kite (*Elanus leucurus*) were not detected onsite by GLA biologists, but these species are known to occur within the area, on the adjacent properties.

The burrowing owl is a CDFW Species of Special Concern that breeds in open grassland areas and historically has bred at the Seal Beach Naval Weapons Station (NWS). In 1995, one burrowing owl was reported on the JFTB approximately 3,500 feet west of the Project site (eBird). At the time of the site visits, the Project site did not support suitable burrows for this species and no owl or burrowing owl sign (e.g., whitewash, cast pellets, feathers) was detected during the general biological surveys. Although not currently suitable for breeding, the burrowing owl may opportunistically use the Project site and surrounding areas for foraging. One merlin was observed briefly in March 2022 flying over the southwest corner of the parking lot to the JFTB. Would be expected to forage opportunistically within and adjacent to the Project site from approximately between September to May. The merlin is an occasional migrant and winter visitor in southern California and not breed in California.

The northern harrier is a CDFW Species of Concern that utilizes a variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands. The northern harrier would be expected to forage opportunistically over the onsite open field area of the Project site and surrounding areas but would not be expected to nest on site. Northern harriers generally place nests near the ground in areas of dense grass or shrubby vegetation, and often in wet areas, to reduce the risk of predation. The Project site does not provide suitable habitat for nesting and associated avoidance from disturbance or predation.

The Swainson's hawk is State listed as Threatened and predominantly nests in solitary trees, but often forages in open agricultural lands for small mammals such as voles. In 2019, a Swainson's hawk pair successfully bred in a solitary pepper tree on the Seal Beach NWS and successful nesting was also confirmed locally in 2021 (Winkleman 2022). Other failed nesting attempts were believed to have occurred locally in 2019 and 2021 (Winkleman 2022). Since 2018, numerous sightings of Swainson's hawks have been reported yearly flying over and occasionally perched within the JFTB, Old Ranch Country Club, Arbor Park and environs of Los Alamitos and Seal Beach (CNDDDB, eBird, and iNaturalist).

In 2018, one Swainson's hawk was reported perched on a light pole and subsequently on the ground in the southeastern corner of the Project site (eBird). The Swainson's hawk would not be expected to nest onsite due to the lack of solitary trees and level of nearby human disturbance, including human use (e.g., dog park), development and associated vehicle traffic but would be expected to forage opportunistically onsite, but primarily over large open fields, including open areas within the JFTB, Seal Beach Naval Weapons Station, Old Ranch Country Club, and the Navy golf course.

The white-tailed kite is a State Fully Protected species and generally occurs in low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. White-tailed kites often use dense canopies for nesting.

GLA observed a pair of white-tailed kites perched offsite within the JFTB, approximately 400 feet west of the Project site. In September 2022, GLA biologists observed an individual kite foraging within the JFTB, approximately 2,000 feet northwest of the Project site. Numerous white-tailed kite eBird detections over the last few years have also been recorded for the same general areas of the JFTB. The white-tailed kite is not expected to nest onsite due primarily to the level of human disturbance onsite and adjacent Arbor dog park, which exhibits regular human and canine use but would be expected to forage opportunistically within the onsite open field.

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.⁷

4.9 Wildlife Linkages/ Corridors and Nursery Sites

Habitat linkages are areas which provide a connection between two or more habitat areas which are often larger or superior in quality to the linkage. Such linkages can be quite small or constricted but 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 occurring in single event or taking potentially many generations. The Project site does not support a habitat linkage, as historically, the Project site and surrounding lands were historically used for agricultural practices and the larger surrounding areas in Los Alamitos and adjoining Seal Beach are largely developed. The Project site also lacks natural habitat communities with approximately half of the property being developed. Finally, a chain linked fence surrounds the perimeter of the Project site to the north, east and west, with Lampson Avenue and residential areas adjacent to the south.

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. The Project site does not contain a wildlife corridor for the same reasons mentioned above under Habitat Linkages, which include that the site is entirely disturbed or developed, lacks natural habitat, its perimeter is mostly surrounded by chain linked fence and residential areas and a major vehicular thoroughfare. Finally, while the project site falls within the Pacific Flyway, the

⁷ 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.

constraints associated with both linkages and corridors discussed above, limits the suitability of the site for migration stopovers during annual migration. To the extent that such stopovers occur, implementation of the project would be of short duration by mostly common species.

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. 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.

The southern portion of the Project site includes an approximately three-foot-wide shallow concrete V-Ditch that begins offsite on the JFTB and extends onsite parallel to Lampson Avenue for approximately 840 feet before terminating onsite within the southeastern portion of the Project site.

The feature is not a jurisdictional water of the United States based on two specific factors. First, the concrete feature it is not a wetland as it has no soils or vegetation⁸ and, by Corps' definition is not a wetland. Second, the area is excluded from Corps jurisdiction by rule under 328.3(b)(3) as "*Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water*". In addition to the concrete feature having no wetland characteristics it also does not carry relatively permanent flow.

The concrete feature is not a wetland under the Regional Board's definition which states: *(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.* First the area lacks soil which is assumed in the term "saturation" since concrete cannot become saturated.

Under the "Procedures" the Regional Board also excludes areas excluded by the Corps such as artificial waters constructed and currently used and maintained primarily for the detention, retention, infiltration, or treatment of stormwater runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program (Procedures, Section II.3.d.iii).

⁸ At the southwest corner where a thin layer of sediment has accumulated there were two individuals of tall umbrella sedge (*Cyperus eragrostis*, FACW) and one individual of Canada horseweed (*Lessingia canadensis*, FACW) were noted growing in the sediment and leaf litter from the overhanging coast redwood growing on the lawn area. Because of the underlying concrete and lack of soil this area is not considered to be wetland under any definition of wetlands.

In addition to the feature lacking wetland characteristics, the feature is not a “stream” in accordance with the definitions of a stream in the California Fish and Game Code as the drainage feature does not exhibit a bed, bank, or channel as the feature is an approximately two-inch-deep linearly shaped concrete slab that also support no vegetation.

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 2022 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 state or federally protected wetlands (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 proposed Project will not impact special-status plants.

Impacts to Special-Status Animals

As previously noted, two special-status (State watch list) animals, Cooper's hawk and merlin were detected on the Project site during the general and focused biological studies. In addition, although the vermilion flycatcher was not detected onsite (foraging or nesting) during the biological studies, the Project site does provide some suitable habitat for nesting. Should vermilion flycatcher nest on the site during construction, construction activities could adversely impact nesting in the absence of measures to protect the nesting individuals. With the protection measures set forth below in the mitigation section, any potential impacts to the vermilion flycatcher would be mitigated to less than significant.

The Project site is estimated to provide approximately four acres of marginal foraging habitat for sensitive raptor species including the Cooper's hawk, northern harrier, wintering merlin, peregrine falcon, Swainson's hawk, and white-tailed kite as well as other common raptor species that are not identified as special status species. Raptor nesting was not documented during the biological surveys, but the Project site would be expected to support nesting by common raptor species. The Project is not expected to provide suitable nesting raptor habitat for the above-

mentioned special-status raptor species due to a combination of reasons including species specific nesting habitat requirements, and level of existing anthropogenic disturbance from vehicles and people within and immediately adjacent to the Project site.

Given the limited area (approximately four acres) of marginal foraging area, the Project would not result in significant impacts on raptor foraging, including for the special-status raptors noted above. The Project does not exhibit suitable nesting habitat for special-status raptors and there would be no significant impacts to nesting habitat for special-status raptors. While the Project has limited potential for nesting by common raptors, with the measures set forth below, there would be no significant impacts to common raptor species should they nest on the site.

Two sensitive bat species, the western red bat and the western yellow bat were detected foraging offsite within the adjacent Navy golf course. However, no evidence of roosting by any bat species was detected onsite during the four focused bat surveys. Nonetheless, because sensitive bat species were detected adjacent to the Project site and have the limited potential to establish a maternity roost onsite (specifically, the western yellow bat), a project-specific avoidance and minimization measure is identified in Section 6.0 of this report to avoid potential impacts to roosting bats has been included. Therefore, with the implementation of project-specific avoidance and minimization measures, there would be no significant impacts to special status bats.

Impacts to Critical Habitat

The proposed 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 Non-Native Vegetation

The Project site does not support native vegetation communities. Table 5-1 provides a summary of vegetation community impacts. The development of the proposed Project would remove 5.97 acres of Developed/Ornamental lands and 6.40 acres of Disturbed/Ornamental lands. 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	Onsite (Acres)	Total (Acres)
Developed/Ornamental	5.97	5.97

Vegetation/ Land Use Type	Onsite (Acres)	Total (Acres)
Disturbed/Ornamental	6.40	6.40
Total	12.37	12.37

Impacts to 12.37 acres of developed/ornamental and disturbed/ornamental 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. Furthermore, the ditch does not meet the definition of waters of the U.S. in accordance with the current definition of waters of the U.S., and the ditch does not meet the definition of waters of the State in accordance with the State Water Resources Control Board Procedures for Discharges of Dredged or Fill Material to Waters of the State. Finally, the V-Ditch does not meet the definition of a stream under Section 1602 of the Fish and Game Code.

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. The site is located within the Pacific flyway; however, given the small area of the site, lack of native habitats and levels of disturbance, there is no potential for significant impacts to the Pacific flyway. As depicted on Exhibits 2 and 3, the project site is developed and is adjacent to developed areas 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, rookeries, or maternal bat roosts. 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. Some trees on the site exhibit potential to support solitary roosting bats such as western red bat and western yellow bat. A project-specific mitigation measure is identified in Section 6.0 of this report to avoid impacts to solitary roosting bats.

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

On April 18, 2022, the City of Los Alamitos adopted a Parkway Tree Master Plan as part of their Urban Forest Program. This plan addresses City parkway trees. The Project is not expected to

impact City parkway trees. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

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 is not expected to result in indirect effects to biological resources as the Project site is currently predominantly developed with existing outdoor lighting in place and the proposed Project will incorporate measures to minimize indirect light spillover into the adjacent areas including Arbor Park, Navy golf course, and JFTB. The Project will comply with any applicable lighting plan requirements of the City Municipal Code to ensure that light spillage is reduced to the maximum extent possible. Additionally, the project landscaping plan excludes invasive exotic species as listed on the California Invasive Plant Council (Cal-IPC) website.⁹

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.

The Project site currently supports approximately just over four acres of open field, previously consisting of maintained turf, that are expected to be used occasionally by raptor species for foraging. Nevertheless, the site does not constitute regionally important foraging habitat for raptors, given the large range required by raptors and limited size of the potential foraging area. Thus, the loss of the approximate four acres of potential foraging raptor habitat would not be a significant impact. Additionally, the adjacent and surrounding areas to the Project site including Arbor Park, Navy golf course, Old Ranch Country Club, JFTB and the Seal Beach Naval

⁹ <https://www.cal-ipc.org/>

Weapons Station provide larger (approximately over 5,000 acres combined) and generally better-quality raptor foraging habitat.

The Project site is developed and is adjacent to residential and other urban developed areas. An approximately 100-acre solar farm is currently under construction within the JFTB. Although undeveloped land, the site for the solar farm on the JFTB is disturbed with limited habitat capacity or potential. Other future developments relevant to this analysis and within the area, include LA 1-4 in Los Alamitos, GG 1-4 in Garden Grove, and SB 1-7 in Seal Beach as depicted on Exhibit 4-3: Cumulative Development Impact Map prepared reeding by Urban Crossroads for the project's traffic study and included as Appendix C. These projects are already developed or are proposed for redevelopment and are part of the existing built environment.

Two sensitive (State watch list) animal species, Cooper's hawk and wintering merlin were detected onsite as flyovers but would not be subject to significant impacts. Specifically, there was no evidence of breeding by the Cooper's hawk while merlin do not breed in California, thus the determination that there would be no significant impact on these species given the watch list status and limited loss of potential foraging area. No sensitive plant species or sensitive habitats were detected onsite. Two CDFW special-status bat species, the western red bat and western yellow bat were detected acoustically offsite within the Navy golf course but did not roost onsite. The Project would not result in an impact to special-status bat species on and project-specific or cumulative level, because the Project site supports limited potential roosting habitat onsite for these two species, the Project will incorporate larger sized box tree species as a project design feature (including the western sycamore) that foliage specialist bats prefer, and will plant them on the fringes of the development adjacent to current open space areas.

One CDFW special-status bird species, the Vermilion flycatcher was not detected on site, but is known to breed adjacent to the Project site and environs. The Project will incorporate larger sized box tree species (including the western sycamore) as a project design feature and will plant these trees on the fringes of the development, adjacent to Arbor Park and the Navy golf course. Approximately 440 trees will be planted in total onsite. Therefore, with the above-mentioned project design features incorporated, no cumulative impacts to these species would occur.

Given the surrounding built environment, the fact that unbuilt nearby properties include better habitat for species located in the area, and the fact that the project would not result in any significant impacts to biological resources because it is a redevelopment of an already built site, the project would not result in a cumulative impact to biological resource, nor would any incremental effect of the project be cumulatively considerable.

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 to any disturbance of the site, including disking, demolition activities, vegetation removal and grading. If active nests are identified, the biologist shall establish appropriate avoidance buffers around the nest (based on the species detected), and the buffer areas shall be avoided until the nests are no longer occupied (through routine nest monitoring by the biologist) and the juvenile birds can survive independently from their nest(s). In addition, if portions of the Project site have not been disturbed within three days after the initial nesting bird survey, additional nesting bird surveys will be conducted (within the nesting bird season) until all portions of the Project site have been disturbed appropriately (as determined by a qualified biologist) as to not provide potential nesting habitat.

In addition, although active nesting by sensitive bird species was not detected onsite during the biological surveys, portions of the Project site do support suitable nesting habitat for the Vermilion flycatcher. This species is known to occur within the adjacent Arbor park, Arbor dog park, Navy golf course, nearby Old Ranch Country Club, and environs. Should the vermilion flycatcher nest on the site during construction, impacts would be reduced **to less than significant** through avoidance measures described above and with the additional benefit of tree plantings as described immediately below.

As specified in the Project's landscape plan, the Project will plant 441 trees onsite (excluding shrubs and ground cover), including the western sycamore (*Platanus racemosa*), paperbark mealeuca (*Meleleuca quinquenervia*), olive (*Olive* sp.), southern magnolia (*Magnolia grandiflora*), Crape myrtle (*Lagerstroemia indica*), Brisbane box (*Lophostemon confertus*), Australian willow (*Geijera parviflora*), Italian cypress (*Cupressus sempervirens*), yew pine (*Podocarpus macrophyllus*) and other species. When mature, these tree species are expected to provide nesting habitat for numerous nesting bird species, with some potential for the Vermilion flycatcher.

6.2 Nesting Raptors

As noted, nesting by raptors, including special-status and common species, was not detected on site and based on survey results there would be no significant impact on nesting raptors. Nevertheless, because potential for nesting cannot be ruled out completely, should tree removal or ground disturbance occur during the raptor nesting season (from approximately January 1 to July 31), pre-removal/disturbance surveys would be conducted by a qualified biologist to ensure that nesting raptors would be disturbed by such work on the project site. Also, because there is potential for indirect impacts to raptors that could nest offsite, the surveys would include areas of suitable nesting trees within 300-feet from the limits of disturbance (to the extent that access is available). The survey would be conducted no more than three days prior to disturbance. Should nesting raptors be detected either onsite or offsite, work would be delayed until fledglings have left the nest and area no longer dependent on the nest at which time, work could proceed.

6.3 Bats

A qualified biologist will conduct a pre-construction bat roost survey for roosting bats no more than 14 days prior to site disturbance. The pre-construction bat roost survey will consist of a minimum of two emergent bat surveys (conducted consecutively or as determined by the biologist). The emergent surveys would begin 30 minutes before dusk and extend to one hour after dark. If roosting bats are detected onsite outside of the bat maternity season, the roost tree will be removed in a manner to avoid and/or minimize injury to roosting bats. This may include using mechanical equipment to gently nudge the tree trunk multiple times prior to removal or for palm trees and other species, to de-frond or de-branch the tree using a mechanical lift and gently lower the cut fronds or branches to the ground. Regardless of the method, the fallen tree and/or material will be left undisturbed overnight until at least the next morning to give roosting bats time to exit before site disturbance.

If roosting bats are detected onsite during the maternity season, the Project will avoid the subject roost(s) and incorporate an avoidance buffer (as determined by a qualified biologist) until after the maternity season or until a qualified biologist determines no maternity roosting is occurring. Once the qualified biologist approves removal of the subject roost tree(s), the same tree removal procedures as outlined above will be implemented prior to tree removal.

In addition, although bat roosting was not detected onsite, per the Project's landscape plan, the Project will plant 441 trees onsite as a project design feature, including 11 western sycamores (*Platanus racemosa*), up to 107 Australian willows (*Geijera parviflora*), and up to 66 paperbark mealeucas (*Meleleuca quinquenervia*), of which the former two tree species have the potential to support foliage roosting bats and the latter tree species has the potential to support bark roosting bat species. No other measures are proposed such as incorporation of features such as bat boxes because the two sensitive bat species detected offsite, the western red bat and western yellow bat roost in foliage and would not utilize features such as bat boxes or other man-made structures.

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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.

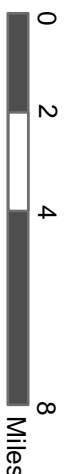
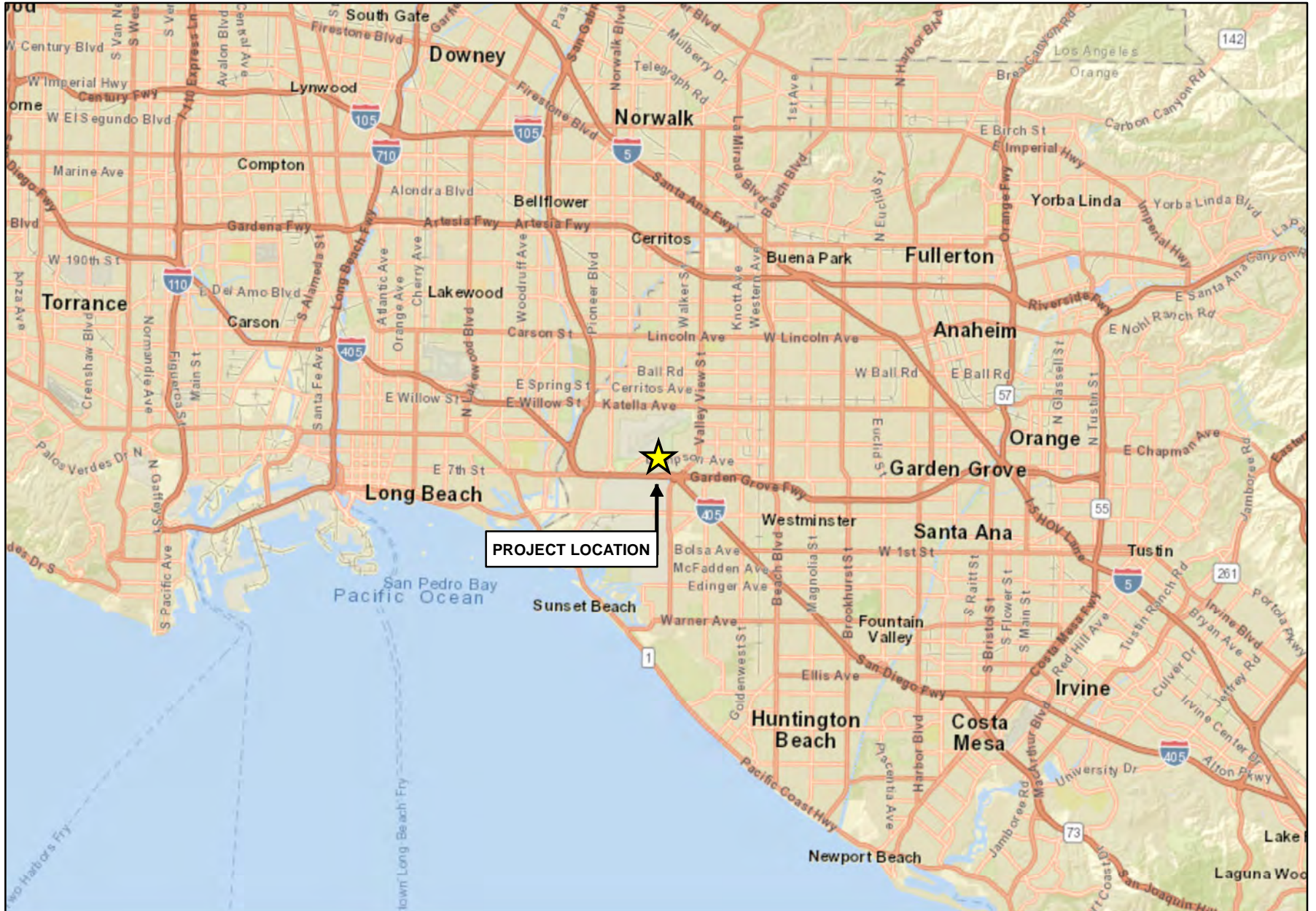


Signed: _____

Date: April 1, 2024

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Source: ESRI World Street Map



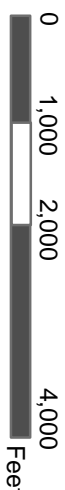
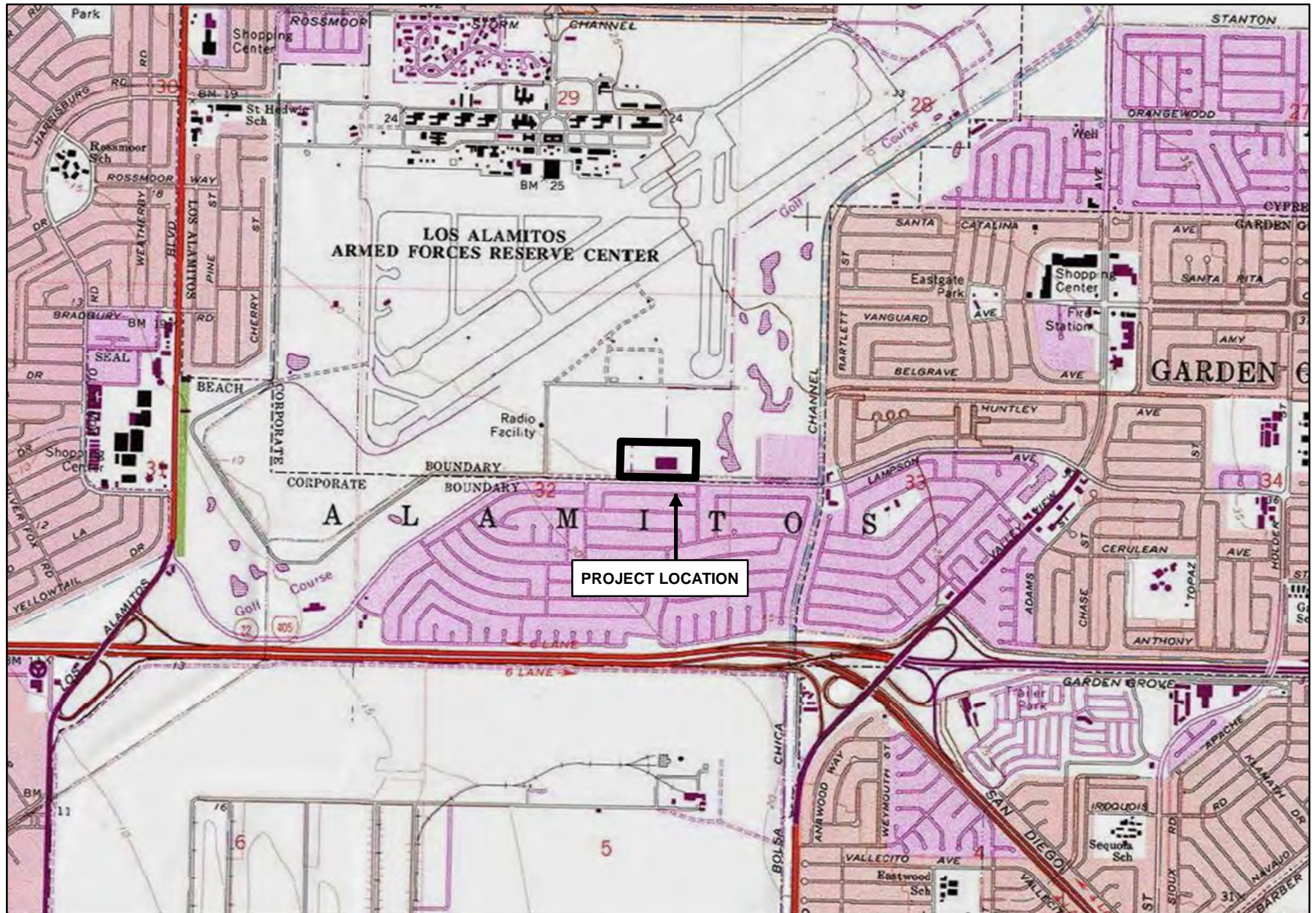
4665 LAMPSON AVENUE PROJECT
Regional Map

GLENN LUKOS ASSOCIATES



Exhibit 1

Adapted from USGS Los Alamitos, CA quadrangle



4665 LAMPSON AVENUE PROJECT

Vicinity Map

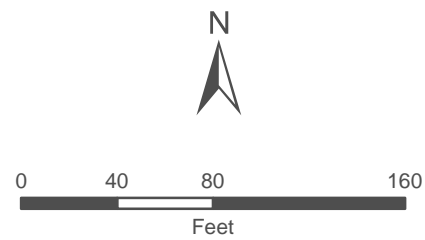
GLENN LUKOS ASSOCIATES



Exhibit 2



 Property Boundary



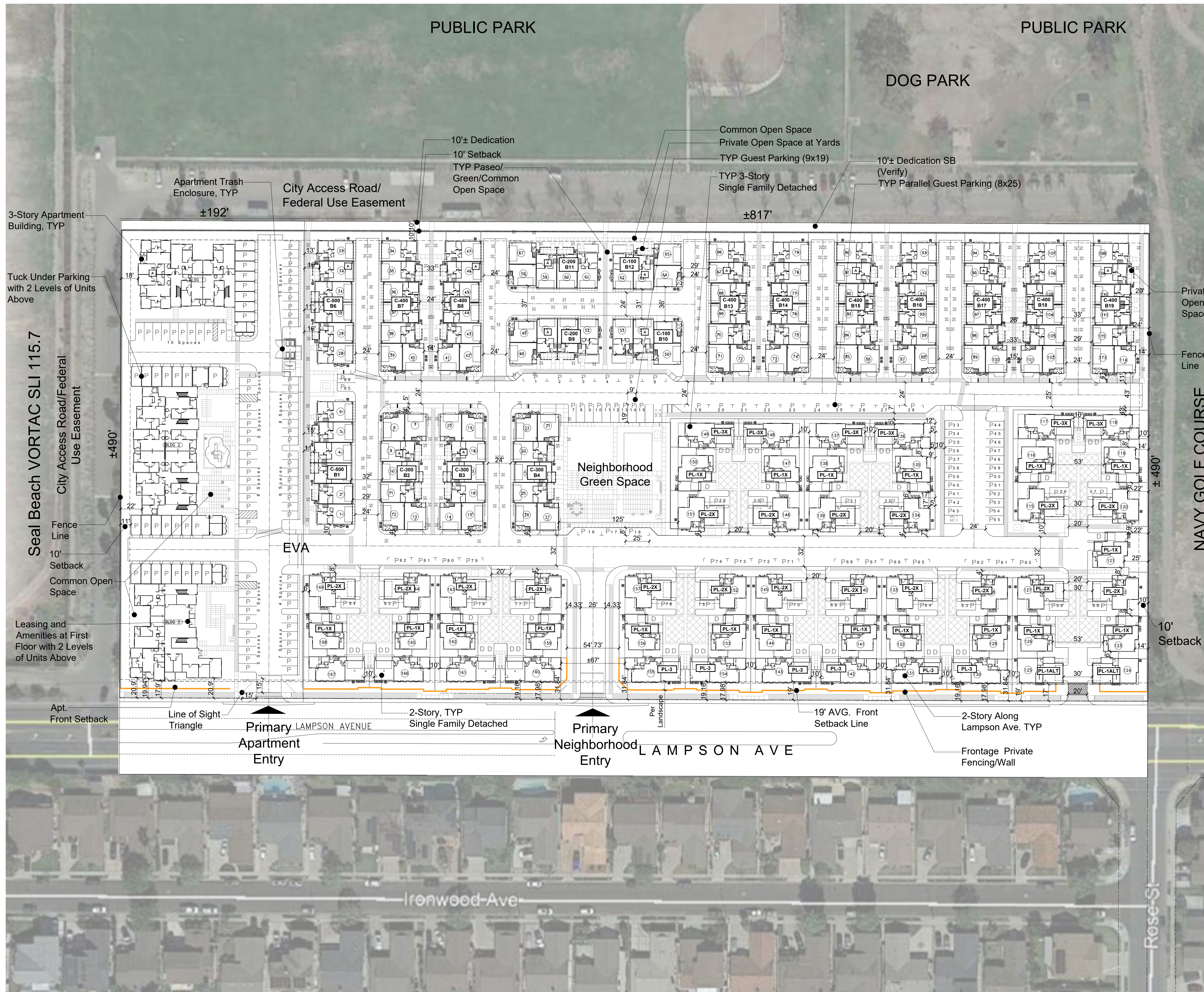
1 inch = 80 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: K. Kartunen, GLA
Date Prepared: October 25, 2022

4665 LAMPSON AVENUE PROJECT
Aerial Map



Exhibit 3



SITE INFORMATION
 Address: 4665 Lampson Ave. #C
 City: Los Alamitos
 County: Orange County
 APN: 130-012-35
 Gross Site Area: ±12.3 Acres

PROJECT DATA
 Total Units for SITE: 246
 Density: 20.0 DUA
 Provided Parking: 577 Spaces

RESIDENTIAL PRODUCT TYPES
 Single Family Detached SFD: 55
 Townhome Units: 114
 Affordable Apartment Homes: 77

Exhibit 4A Site Plan



Architecture + Planning
 17911 Von Karman Ave,
 Suite 200
 Irvine, CA 92614
 949.851.2133
 ktgy.com

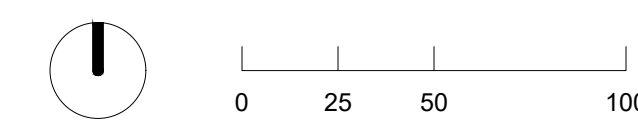


MJW INVESTMENTS, LLC
 27702 Crown Valley Parkway
 Suite D-4-197
 Ladera Ranch, CA 92694

LAMPSON - LOS ALAMITOS
 LOS ALAMITOS, CA # 2021-0812

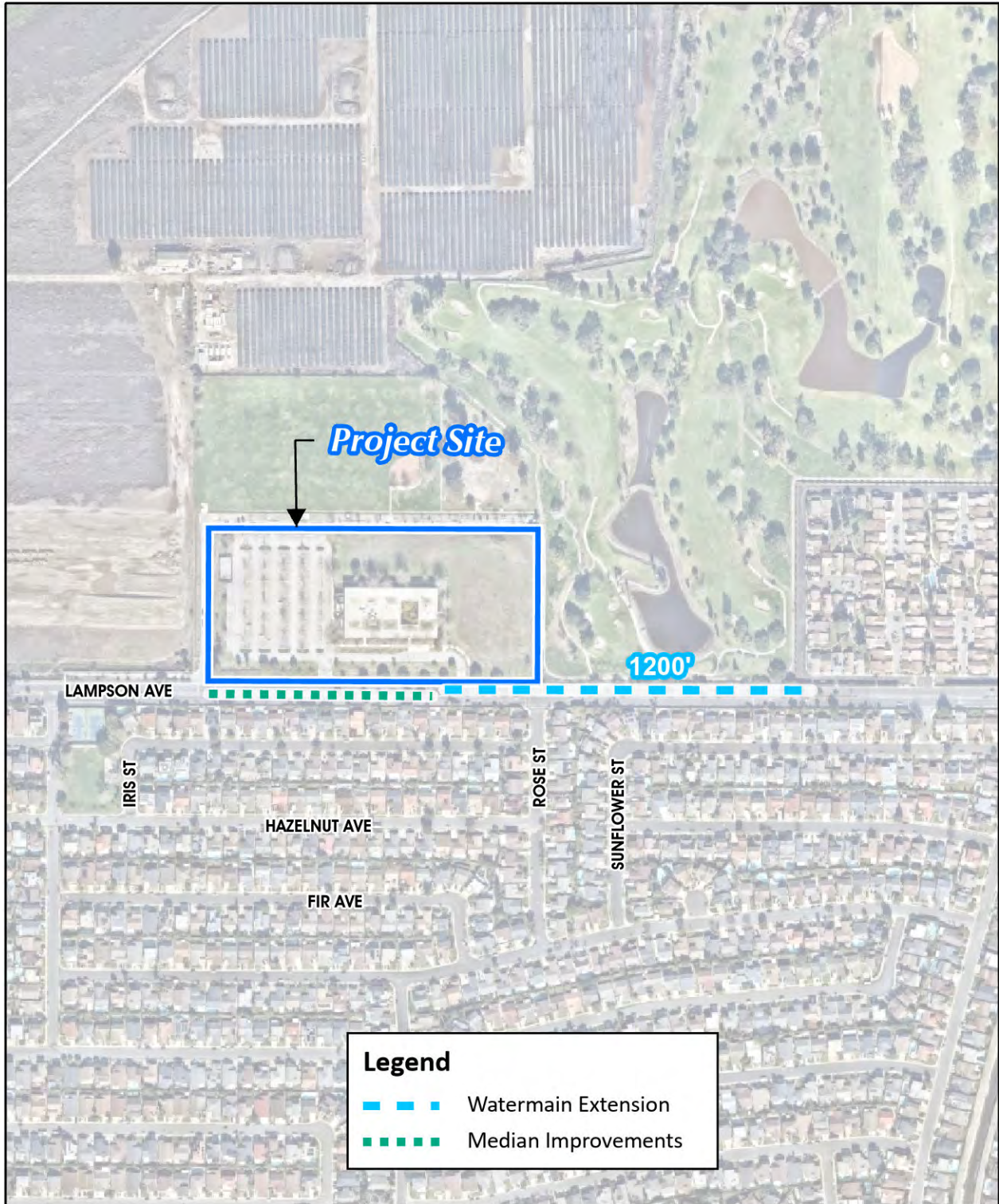
SCHEMATIC DESIGN

Plot Date: 04.04.2023
 Pre-App Submittal: 01.28.2022
 1st Planning Submittal: 06.30.2022
 2nd Planning Submittal: 10.10.2022
 3rd Planning Submittal: 02.17.2023



EIR - CONCEPTUAL
 ARCHITECTURAL SITE PLAN

EIR -1



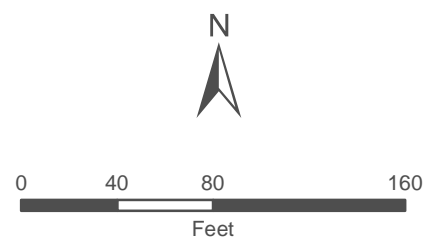
Source(s): ESRI, NearMap (2023)



**Exhibit 4B
Disturbance Area**



- Property Boundary
- Developed/Ornamental
- Disturbed/Ornamental



Coordinate System: State Plane 6 NAD 83
 Projection: Lambert Conformal Conic
 Datum: NAD 1983 2011
 Map Prepared by: K. Kartunen, GLA
 Date Prepared: October 31, 2022

4665 LAMPSON AVENUE PROJECT
 Vegetation and Land Cover Types

GLENN LUKOS ASSOCIATES 

Exhibit 5



Photograph 1: View looking north from the southwestern portion of the Project site.



Photograph 2: View looking east near Lampson Avenue from the southwestern portion of the Project site.



Photograph 3: View looking north from the southeastern portion of the Project site.



Photograph 4: View looking northwest from the southeastern portion of the Project site.





Photograph 5: View looking west from the northeastern portion of the Project site.



Photograph 6: View looking east from the western portion of the Project site.



Photograph 7: View looking west from the southwestern portion of the Project site.



Photograph 8: View looking east from the southeastern portion of the project site.





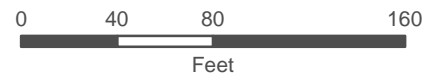
bing

Lampson Avenue

Rose Street

 Property Boundary

 158 - Hueneme Fine Sandy Loam, Drained



1 inch = 80 feet

Coordinate System: State Plane 6 NAD 83
 Projection: Lambert Conformal Conic
 Datum: NAD 1983 2011
 Map Prepared by: K. Kartunen, GLA
 Date Prepared: October 25, 2022

4665 LAMPSON AVENUE PROJECT

Soils Map

GLENN LUKOS ASSOCIATES



Exhibit 7

APPENDIX A

FLORAL COMPENDIUM

SCIENTIFIC NAME

COMMON NAME

MAGNOLIOPHYTA

FLOWERING PLANTS

MAGNOLIIDS

MAGNOLIID CLADE

LAURACEAE

- * *Cinnamomum camphora*

Laurel Family

camphor tree

MAGNOLIACEAE

- * *Magnolia grandiflora*

Magnolia Family

Southern magnolia

MONOCOTYLEDONS

MONOCOTS

AGAVACEAE

- * *Phormium tenax*

Agave Family

New Zealand flax

ARECACEAE

- * *Washingtonia robusta*

Palm Family

Mexican fan palm

LILIACEAE

- * *Agapanthus* sp.

Lily Family

lily of the Nile

POACEAE

- * *Cynodon dactylon*
- * *Digitaria sanguinalis*
- * *Pennisetum setaceum*

Grass Family

Bermuda grass
crabgrass
African fountain grass

EUDICOTYLEDONS

EUDICOTS

AIZOACEAE

- * *Drosanthemum floribundum*
- * *Mesembryanthemum crystallinum*

Fig-Marigold Family

pale dewplant
crystalline iceplant

ALTINGIACEAE

- * *Liquidambar styraciflua*

Sweetgum Family

American sweetgum

AMARANTHACEAE

- * *Salsola tragus*

Amaranth Family

Russian-thistle

ANACARDIACEAE

- * *Schinus molle*
- * *Schinus terebinthifolius*

APOCYNACEAE

- * *Carissa macrocarpa*

ARALIACEAE

- * *Hedera helix*

ASTERACEAE

- * *Osteospermum* sp.
- * *Sonchus oleraceus*
- * *Taraxacum officinale*

BRASSICACEAE

- * *Lepidium didymum*

CAPRIFOLIACEAE

Sambucus cerulea

FABACEAE

- * *Ceratonia siliqua*
- * *Cercis canadensis*
- * *Jacaranda mimosifolia*

LAMIACEAE

- * *Lamium amplexicaule*
- * *Lavandula* sp.

MALVACEAE

- * *Malva parviflora*

MORACEAE

- * *Ficus* sp.

OLEACEAE

- * *Olea europaea*

OXALIDACEAE

- * *Oxalis pes-caprae*

PLATANACEAE

- * *Platanus x acerifolia*

Sumac Family

Peruvian pepper tree
Brazilian pepper tree

Dogbane Family

natal plum

Ginseng Family

English ivy

Sunflower Family

African daisy
common sow-thistle
dandelion

Mustard Family

lesser swinecress

Honeysuckle Family

blue elderberry

Legume/Pea Family

carob tree
Eastern redbud
jacaranda

Mint Family

henbit deadnettle
lavender

Mallow Family

cheeseweed

Mulberry Family

figus

Olive Family

European olive

Oxalis Family

Bermuda-buttercup

Plane-tree Family

London plane tree

RHAMNACEAE

Ceanothus sp.

ROSACEAE

* *Prunus cerasifera*

* *Rosa* sp.

SAPINDACEAE

* *Cupaniopsis anacardioides*

URTICACEAE

* *Urtica urens*

VERBENACEAE

Lantana sp.

CONIFEROPHYTA

CUPRESSACEAE

* *Cupressus sempervirens*

Sequoia sempervirens

PINACEAE

* *Pinus halepensis*

Buckthorn Family

ceanothus

Rose Family

cherry plum tree

rose

Soapberry Family

carrotwood

Nettle Family

dwarf nettle

Verbena Family

lantana

CONIFERS

Cypress Family

Italian cypress

coast redwood

Pine Family

Aleppo pine

APPENDIX B

APPENDIX B

FAUNAL COMPENDIUM

ARTHROPODA

APIDAE

* *Apis mellifera*

CHORDATA

REPTILIA

PHRYNOSOMATIDAE

Uta stansburiana

AVES

ACCIPITRIDAE

Accipiter cooperii
Buteo jamaicensis

ANATIDAE

Anas platyrhynchos

CARDINALIDAE

Pheucticus melanocephalus

CHARADRIIDAE

Charadrius vociferus

COLUMBIDAE

* *Streptopelia decaocto*
Zenaida macroura

CORVIDAE

Corvus brachyrhynchos

FALCONIDAE

Falco columbarius
Falco sparverius

Invertebrates

Bees

European honey bee

Vertebrates

REPTILES

Phrynosomatid Lizards

common side-blotched lizard

BIRDS

Hawks and Old World Vultures

Cooper's hawk
red-tailed hawk

Swans, Geese and Ducks

mallard

Cardinals and Allies

black-headed grosbeak

Plovers and Lapwings

killdeer

Pigeons and Doves

Eurasian-collared dove
mourning dove

Crows and Jays

American crow

Caracaras and Falcons

merlin
American kestrel

FRINGILLIDAE

Carpodacus mexicanus
Spinus psaltria

ICTERIDAE

Icterus cucullatus

MIMIDAE

Mimus polyglottos

PASSERIDAE

* *Passer domesticus*
Melospiza melodia

STURNIDAE

* *Sturnus vulgaris*

TROCHILIDAE

Calypte anna

TROGLODYTIDAE

Troglodytes aedon

TURDIDAE

Sialia mexicana

TYRANNIDAE

Sayornis saya
Tyrannus vociferans

TYTONIDAE

Tyto alba

MAMMALIA

GEOMYIDAE

Thomomys bottae

LEPORIDAE

Sylvilagus audubonii

MOLOSSIDAE

Tadarida brasiliensis

Fringilline, Cardueline Finches and Allies

house finch
lesser goldfinch

Troupials and Allies

hooded oriole

Mockingbirds and Thrashers

northern mockingbird

Old World Sparrows

house sparrow
song sparrow

Starlings

European starling

Hummingbirds

Anna's hummingbird

Wrens

house wren

Thrushes and Allies

western bluebird

Tyrant Flycatchers

Say's phoebe
Cassin's kingbird

Barn Owls

barn owl

MAMMALS

Pocket Gophers

Botta's pocket gopher

Rabbits and Hares

desert cottontail

Free-tailed Bats

Mexican free-tailed bat

APPENDIX C

EXHIBIT 4-3: CUMULATIVE DEVELOPMENT LOCATION MAP

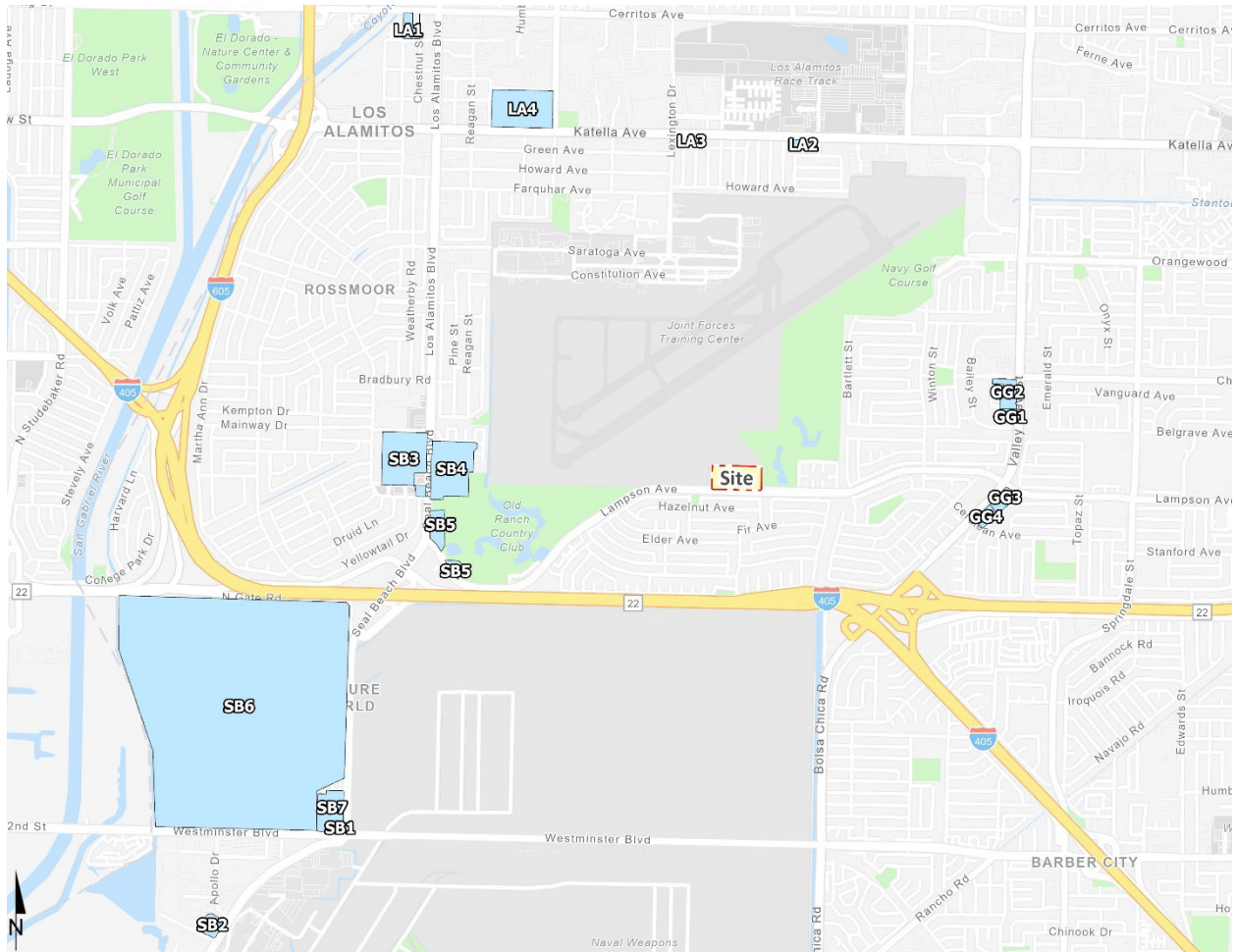


TABLE 4-3: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

ID	Project	Land Use	Quantity Unit ¹
Los Alamitos			
LA1	Los Alamitos Luxury Apartments	Multifamily (Low-Rise) Housing	107 DU
LA2	Chevron Gas Station	Gas Station w/ Convenience Store	2.724 TSF
LA3	4562 Katella Avenue	Medical Office Building	5.200 TSF
LA4	Los Alamitos Medical Center (Phase 2 & 3)	Hospital Building I	92 Beds
		Hospital Building II	126 Beds
Seal Beach			
SB1	13980 Seal Beach Boulevard Project/Hydrogen Fueling Station	Hydrogen Fueling Facility	1.010 TSF
SB2	Accurate Storage	Multifamily (Mid-Rise) Housing	59 DU
SB3	Shops at Rossmoor	Multifamily (Mid-Rise) Housing	400 DU
SB4	Old Ranch Town Center	Multifamily (Mid-Rise) Housing	200 DU
SB5	Old Ranch Country Club	Multifamily (Low-Rise) Housing	120 DU
SB6	Leisure World	Multifamily (Mid-Rise) Housing	150 DU
SB7	Seal Beach Plaza	Multifamily (Mid-Rise) Housing	75 DU
Garden Grove			
GG1	Valley View Lanes (CUP-211-2021)	Bowling Alley	13.740 TSF
GG2	12141 Valley View Street	Restaurant	7.214 TSF
		Drive-Thru Restaurant	2.000 TSF
GG3	Marley's Preschool (CUP-212-2021)	Preschool/Day Care	84 STU
GG4	Pro Athletics (CUP-216-2022)	Athletic & Health Club/Gym	7.100 TSF

¹ DU = Dwelling Units; TSF = Thousand Square Feet; STU = Students