11011 Torreyana Road Project

Biological Technical Report

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Acronyms and Abbreviations

BMP	Best Management Practice
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG Code	California Fish and Game Code
City	City of San Diego
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	San Diego County
CRPR	California Rare Plant Rank
CWA	Clean Water Act
ESL	Environmentally Sensitive Lands
ESHA	Environmentally Sensitive Habitat Area
FESA	Federal Endangered Species Act
HCP	Habitat Conservation Plan
HELIX	HELIX Environmental Planning, Inc.
LCP	Local Coastal Program
LUAG	Land Use Adjacency Guidelines
MBTA	Migratory Bird Treaty Act
MHPA	Multiple Habitat Planning Area
MMC	Mitigation Monitoring Coordination
MSCP	Multiple Species Conservation Plan
NPPA	Native Plant Protection Act
NWI	National Wetland Inventory
Porter-Cologne	Porter-Cologne Water Quality Control Act
project	11011 Torreyana Road
project proponent	Bridgewest Group
RWQCB	Regional Water Quality Control Board
SAP	Subarea Plan
SMRH	Sheppard, Mullin, Richter, & Hampton, LLP
State	State of California
SWRCB	State Waters Resources Control Board

Acronyms and Abbreviations (cont.)

USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VPHCP	Vernal Pool Habitat Conservation Plan

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

This report presents the results of a biological resources study conducted by HELIX Environmental Planning, Inc. (HELIX) for the Bridgewest Group's (project proponent) proposed 11011 Torreyana Road Project (project). The study was conducted to provide the City of San Diego (City), resource agencies, and the public with current biological data for review of the proposed project under the California Environmental Quality Act (CEQA), and to demonstrate compliance with federal, state, and local regulations. This report describes the project site's current biological conditions, vegetation communities, plant and wildlife species observed, and identifies sensitive resources. It also identifies special status species with the potential to occur within the project site. In addition, project impacts are assessed, and mitigation measures are proposed to offset the proposed project's unavoidable significant impacts to sensitive biological resources.

1.2 PROJECT LOCATION

The approximately 10-acre 11011 Torreyana Road project site is located in the community of University in the northern portion of the City of San Diego, San Diego County (County), California (Figure 1, *Regional Location*). It lies within an unsectioned portion of Township 14 and 15 South, Range 3 West of the Del Mar U.S. Geological Survey (USGS) 7.5-minute quadrangle map (Figure 2, *USGS Topography*). More specifically, the site is located at 11011 Torreyana Road (Accessor's Parcel Number 340-010-29-00) northeast of the intersection of Torreyana Road and Callan Road (Figure 3, *Aerial Photograph*). The eastern portion of the project site occurs within a biological open space easement that was quitclaimed by the City to the State of California (State), according to a Quitclaim Deed recorded in 1984. The approximate area of the easement is shown on Figure 3.

The site is within the boundary of the City's Multiple Species Conservation Program (MSCP) Subarea Plan (SAP; City 1997), and the easternmost portion lies within the Multi-Habitat Planning Area (MHPA; Figure 4, *Regional Context*). The site is located within the Coastal Zone (Figure 4). U.S. Fish and Wildlife Service (USFWS)-designated critical habitat does not occur within or adjacent to the project site.

1.3 PROJECT DESCRIPTION

The project consists of the redevelopment of the current property, which is comprised of an existing 76,694-square-foot research and development facility and associated appurtenances (parking, mechanical yard buildings, landscaping). The current building, parking structure, and auxiliary buildings would be demolished entirely, and a new 203,096-square-foot scientific research building would be constructed in its place. The project building would consist of two stories above grade, one basement level, and over four levels of subgrade parking (Figure 5, *Site Plan*). The project proposes a parking lot within the existing open space easement. The open space easement allows for parking use, as detailed in Section 4.1 below. The project is requesting a Coastal Development Permit, Site Development Permit, and Neighborhood Development Permit to construct the new building at the project site.

Brush management zone standards require a minimum of 35 feet for Zone One and 65 feet for Zone Two, for a total of 100 feet distance from the building or closest combustible structure to the nearest area of contiguous native vegetation (City 2021). The project deviates from the standards by extending

the most restrictive Zone One the entire way to the hardscaped areas within the site, so that vegetation planted within the parking lot would have the more restrictive measures required. Zone One maintains a minimum of 35 feet but increases up to 100 feet along the parking area. Zone Two is introduced past the hardscaped areas, and extends to the 100-foot limit set for a greater defensible area. Zone Two may not be shown on the site plan as Zone One may extend up to 100 feet in some areas.

2.0 SURVEY METHODS

2.1 LITERATURE REVIEW

Prior to conducting field surveys, HELIX conducted a thorough review of relevant maps, databases, and literature pertaining to biological resources known to occur within the project vicinity. Recent and historical aerial imagery, USGS topographic maps, soils maps (U.S. Department of Agriculture [USDA] 2021), and other maps of the project site and vicinity were acquired and reviewed to obtain updated information on the natural environmental setting.

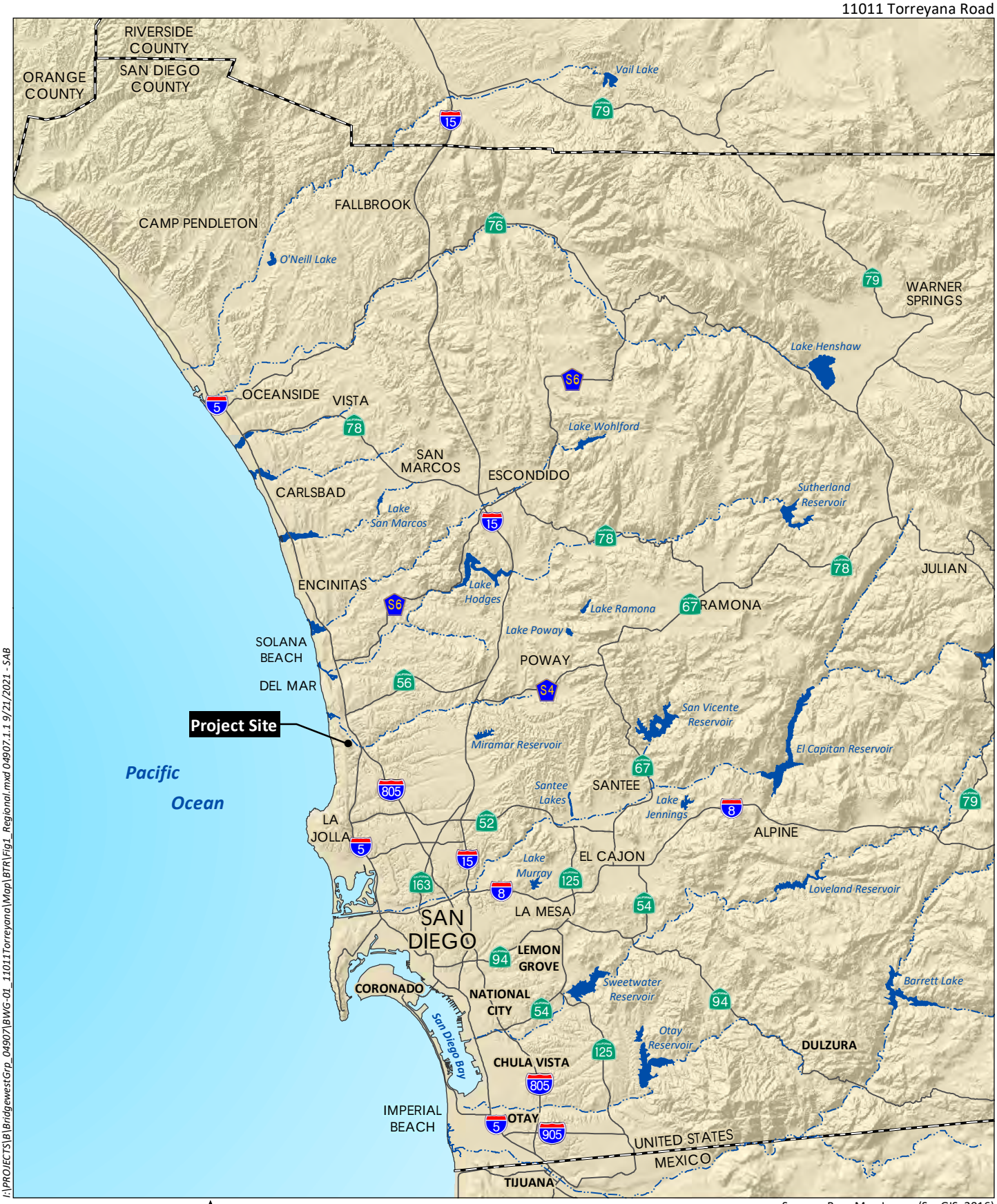
In addition, a query of special status species and habitats databases was conducted, including the USFWS species records (USFWS 2021a), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB; CDFW 2023a, CDFW 2023b), Calflora database (Calflora 2021), SanBIOS (County 2020), and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2021). The USFWS' National Wetlands Inventory (NWI) was also reviewed (USFWS 2021b). Any recorded locations of species, habitat types, wetlands, and other resources were mapped and overlaid onto aerial imagery using Geographic Information Systems.

2.2 GENERAL BIOLOGICAL SURVEY

HELIX biologists Karl Osmundson and Dane van Tamelen conducted an initial general biological survey of the project site on January 15, 2021 (Table 1, *Survey Information*). Vegetation was mapped on a 1"=150' scale aerial of the site. A minimum mapping unit size of 0.10 acre was used when mapping upland habitat; 0.01 acre was used when mapping wetland and riparian habitat. The project site was surveyed on foot and with the aid of binoculars.

Table 1
SURVEY INFORMATION

Date	Personnel	Survey Type
January 15, 2021	Karl Osmundson, Dane van Tamelen	General Biological Survey, Vegetation Mapping, Habitat Assessment
March 30, 2022	Dane van Tamelen	Potentially Jurisdictional Drainage Feature Mapping
September 29, 2022	Amy Mattson Dane van Tamelen	Scrub Oak Sample Collection and Identification
April 11, 2023	Alexander Walsh	Torrey Pine Tree Identification and Mapping
February 20, 2024	Karl Osmundson, Dane van Tamelen	Crotch's Bumble Bee Habitat Assessment



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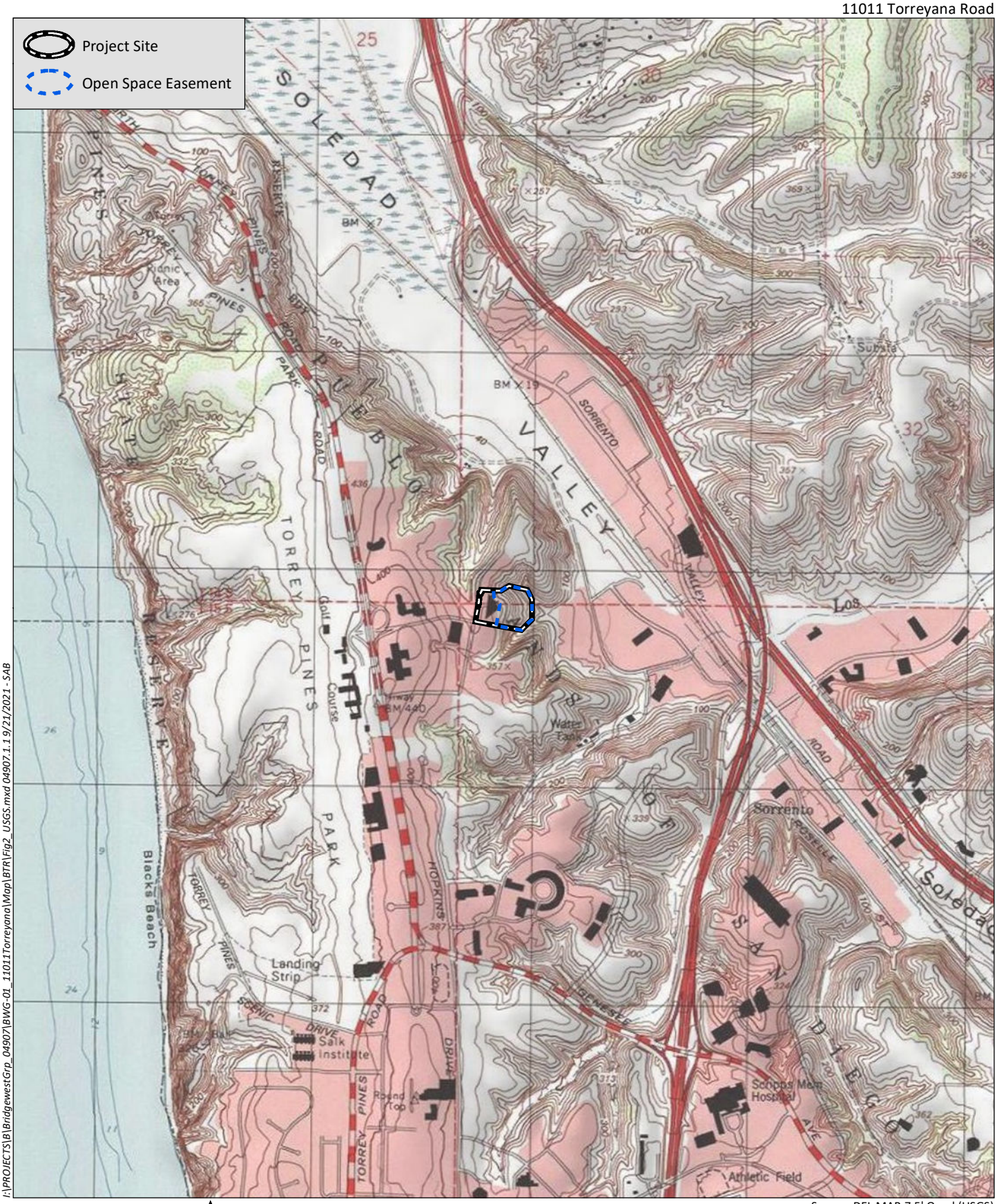
0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1



0 2,000 Feet

Source: DEL MAR 7.5' Quad (USGS)

HELIX Environmental Planning

USGS Topography

Figure 2

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Source: Aerial (NearMap, 2019)

HELIX Environmental Planning

Aerial Photograph

Figure 3

11011 Torreyana Road

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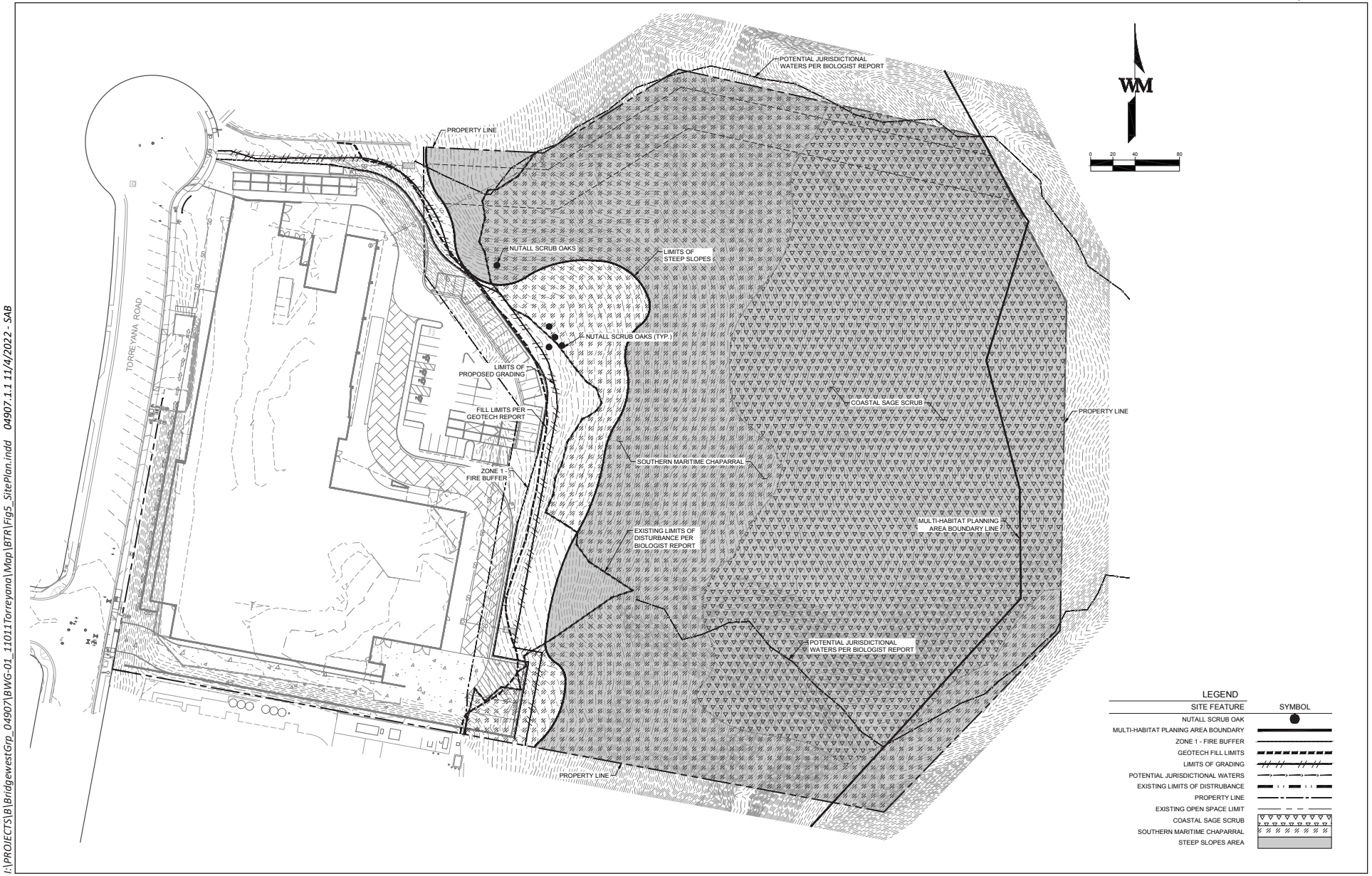
Source: Aerial (NearMap, 2019)

HELIX Environmental Planning

Regional Context

Figure 4



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Source: Ware Malcomb, 2022

HELIX Environmental Planning

Site Plan

Figure 5

Plant and animal species observed or otherwise detected were recorded in field notebooks. Animal identifications were made in the field by direct, visual observation or indirectly by detection of calls, burrows, tracks, or scat. Plant identifications were made in the field or in the lab through comparison with voucher specimens or photographs. The locations of special status plant and animal species incidentally observed or otherwise detected were mapped. The project site was examined for evidence of potential jurisdictional waters and wetlands, including vernal pools. Photographs of the site are included in Appendix A, *Representative Site Photographs*.

2.3 JURISDICTIONAL ASSESSMENT

Mr. Osmundson and Mr. van Tamelen conducted a preliminary assessment of potential water and wetland resources that may be regulated by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW during the general biological survey on January 15, 2021 (Table 1). Prior to conducting fieldwork, aerial photographs (1"=150' scale), topographic maps (1"=150' scale), and NWI maps were reviewed to assist in determining the presence or absence of potential jurisdictional areas within the project site. The purpose of the assessment was to identify and map water and wetland resources potentially subject to USACE jurisdiction pursuant to Section 404 of the Clean Water Act (CWA; 33 USC 1344), RWQCB jurisdiction pursuant to Section 401 of the CWA and State Porter-Cologne Water Quality Control Act, and streambed and riparian habitat potentially subject to CDFW jurisdiction pursuant to Sections 1600 et seq. of the California Fish and Game Code (CFG Code). The delineation was also conducted to determine the presence or absence of City Environmentally Sensitive Lands (ESL) wetlands and those meeting the single-parameter criteria for wetlands within the Coastal Overlay Zone. Areas generally characterized by depressions, drainage features, and riparian and wetland vegetation were evaluated.

2.4 CROTCH'S BUMBLE BEE HABITAT ASSESSMENT

Mr. Osmundson and Mr. van Tamelen conducted a directed habitat assessment survey for the California Endangered Species Act (CESA) candidate species, Crotch's bumble bee (*Bombus crotchii*), on February 20, 2024. The survey was conducted in accordance with the Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023c) and included 100 percent visual coverage of the project impact area and immediate vicinity. During the survey, the biologists systematically walked undeveloped portions of the survey area inspecting for potential nest sites, suitable nesting and overwintering habitat, and plant species with known foraging associations with Crotch's bumble bee. An inventory of flowering plants was also obtained. Portions of the project site that will be avoided by the proposed project and remain as undisturbed open space were surveyed by visual scans using binoculars. The majority of these avoided areas are inaccessible by foot due to dense vegetation and steep terrain. Habitat elements from HELIX's previous biological surveys conducted in January 2021, March and September 2022, and April 2023 were also referenced during the habitat assessment effort. A full survey was not warranted considering the habitat assessment of the impact area demonstrated a lack of suitable habitat.

2.5 SURVEY LIMITATIONS

Inaccessible areas of the project site were visually assessed using binoculars. Noted animal species were identified by direct observation, vocalizations, or the observance of scat, tracks, or other signs. However, the list of species identified is not necessarily a comprehensive account of all species that utilize the project site, as species that are nocturnal, secretive, or seasonally restricted may not have been

observed. Those species that are of special status and have high potential to occur in the project site, however, are still addressed in this report.

2.6 NOMENCLATURE

Nomenclature used in this report generally comes from the City's MSCP Subarea Plan (City 1997), Holland (1986) and Oberbauer (2008) for vegetation; Jepson eFlora (2021) and Baldwin et al. (2012) for plants; Society for the Study of Amphibians and Reptiles (2021) for reptiles and amphibians; and American Ornithological Society (2021) for birds. Plant species status is from the CNPS' Rare Plant Inventory (CNPS 2021), CDFW (2023a), and City (2018). Animal species status is from the CDFW (2023b) and City (2018).

3.0 REGIONAL AND REGULATORY FRAMEWORK

Biological resources within the project site are subject to regulatory administration by the federal government, the State of California, and the City.

3.1 FEDERAL GOVERNMENT

3.1.1 Federal Endangered Species Act

Administered by the USFWS, the Federal Endangered Species Act (FESA) provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a "take" under the FESA. Section 9(a) of the FESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." "Harm" and "harass" are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species' behavioral patterns.

The USFWS designates critical habitat for endangered and threatened species. Critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitats so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the FESA, federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of the critical habitat. Critical habitat does not occur within or adjacent to the project site.

Sections 7 and 10(a) of the FESA regulate actions that could jeopardize endangered or threatened species. Section 7 generally describes a process of federal interagency consultation and issuance of a biological opinion and incidental take statement when federal actions may adversely affect listed species. In this case, take can be authorized via a letter of biological opinion issued by the USFWS for non-marine related listed species issues. A Section 7 consultation (formal or informal) is required when there is a nexus between endangered species' use of a site and there is an associated federal action for a proposed impact (e.g., the USACE would initiate a Section 7 consultation with the USFWS for impacts proposed to USACE jurisdictional areas that may also affect listed species or their critical habitat). Section 10(a) allows the issuance of permits for the incidental take of endangered or threatened species with preparation of a Habitat Conservation Plan (HCP) when there is no federal nexus. The term

"incidental" applies if the taking of a listed species is incidental to, and not the purpose of, an otherwise lawful activity. An HCP demonstrating how the taking would be minimized and how steps taken would ensure the species' survival must be submitted for issuance of Section 10(a) permits. Pursuant to Section 10(a), the City was issued a take permit for federally listed species covered by its adopted MSCP Subarea Plan.

3.1.2 Migratory Bird Treaty Act

All migratory bird species that are native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is used to place restrictions on the disturbance of active bird nests during the nesting season. In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests. As a regulatory requirement, the project must comply with the regulations and guidelines of the MBTA.

3.1.3 Clean Water Act Section 404

Federal wetland regulation (non-marine issues) is guided by the CWA. The purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all waters of the U.S. Permitting for projects filling waters of the U.S. is overseen by the USACE under Section 404 of the CWA. Most development projects are permitted, using Individual Permit or Nationwide Permit instruments.

Section 401 of the CWA requires that any applicant for a federal license or permit to conduct any activity that may result in a discharge into waters of the U.S. must obtain a Water Quality Certification, or a waiver thereof, from the state in which the discharge originates. In California, the RWQCB issues Water Quality Certifications.

3.2 STATE OF CALIFORNIA

3.2.1 California Environmental Quality Act

Primary environmental legislation in California is found in CEQA and its implementing guidelines (State CEQA Guidelines), which require that projects with potential adverse effects (or impacts) on the environment undergo environmental review. Adverse environmental impacts are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

3.2.2 California Endangered Species Act

The CESA established that it is state policy to conserve, protect, restore, and enhance state endangered species and their habitats. Under state law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the California Fish and Game Commission. The CESA authorizes that private entities may "take" plant or wildlife species listed as endangered or threatened under the FESA and CESA, pursuant to a federal Incidental Take Permit if the CDFW certifies that the incidental take is consistent with CESA (CFG Code Section 2080.1[a]). For state-only listed species, Section 2081 of the CFG Code authorizes the CDFW to issue an Incidental Take Permit for state-listed threatened and endangered species if specific criteria are met. The City was issued a take permit for certain state listed species covered by its adopted MSCP Subarea Plan pursuant to Section 2081. The

Crotch's bumble bee is currently a candidate for listing under the CESA and is not covered by the City's MSCP Subarea Plan.

3.2.3 California Coastal Act

The California Coastal Commission (CCC), through provisions of the California Coastal Act of 1976, is authorized to issue a Coastal Development Permit (CDP) for projects located within the Coastal Zone. In areas where a local entity has a certified Local Coastal Program (LCP), the local entity can issue a CDP only if it is consistent with the LCP. The CCC, however, has appeal authority for portions of LCPs and retains jurisdiction over certain public trust lands and areas without an LCP. The project site occurs in the Coastal Zone within the boundaries of the City's certified North City LCP (Figure 4). Specifically, the project site occurs within the University community plan area of the North City LCP.

The California Coastal Act provides a definition of "environmentally sensitive area" as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and development." There are three important elements to the definition of an environmentally sensitive habitat area (ESHA). First, a geographic area can be designated ESHA either because of the presence of an individual species of plants or animals, or the presence of a particular habitat. Second, in order for an area to be designated as ESHA, the species or habitat must be either rare or especially valuable. Finally, the area must be easily disturbed or degraded by human activities. ESHA shall include southern foredunes, Torrey Pine Forest, coastal bluff scrub, maritime succulent scrub, maritime chaparral, native grassland, oak woodlands, coastal sage scrub and coastal sage/communities, and any vegetation communities that support threatened or endangered species. Specific to ESHA, the University-La Jolla LCP Addendum (City 1981) notes the fragility of the Torrey Pines State Reserve and adjacent canyons and provides general references to protecting against habitat degradation and protecting against adverse impacts to the unique ecological and geologic nature of the park.

3.2.4 Native Plant Protection Act

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates the collection, transport, and commerce of listed plants. The CESA followed the NPPA and covers both plants and animals determined to be endangered or threatened with extinction. Plants listed as rare under NPPA were designated rare under the CESA.

3.2.5 California Fish and Game Code

The CFG Code provides specific protection and listing for several types of biological resources. Sections 1600 *et seq*. of CFG Code require notification and, if required, a Streambed Alteration Agreement for any activity that would alter the flow, change or use any material from the bed, channel, or bank of any perennial, intermittent, or ephemeral river, stream, and/or lake. Typical activities that require notification include excavation or fill placed within a channel, vegetation clearing, structures for diversion of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement.

The CFG Code provides specific protection and listing for several types of biological resources. Pursuant to CFG Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Raptors and

owls and their active nests are protected by CFG Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that construction activities (particularly vegetation removal or construction near nests) be reduced or eliminated during critical phases of the nesting cycle, unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds would not be disturbed, subject to approval by CDFW and/or USFWS. As a regulatory requirement, the project must comply with the regulations and guidelines of the CFG Code.

3.2.6 Clean Water Act Section 401 / Porter-Cologne Water Quality Control Act

The RWQCB, through the State Water Resources Control Board (SWRCB), asserts regulatory jurisdiction over activities affecting wetland and non-wetland waters of the State pursuant to Section 401 of the CWA and the State Porter-Cologne Water Quality Control Act. Potential RWQCB jurisdiction (i.e., waters of the State) need to be delineated on the project site and typically extend to the top of bank for streams and to the outer edge of wetlands, pursuant to the SWRCB's wetland definition that was adopted on April 2, 2019 (SWRCB 2019) and implemented as of May 28, 2020. HELIX biologists Karl Osmundson and Dane van Tamelen completed a preliminary assessment of the project site on January 15, 2021. A jurisdictional delineation is needed to determine waters of the State, which has not been completed for the project site.

Whenever a project requires a federal CWA Section 404 permit or a Rivers and Harbors Act Section 10 permit, it must first obtain a CWA Section 401 Water Quality Certification. The RWQCB administers the 401 Certification program. Federal CWA Section 401 requires that every applicant for a Section 404 permit must request a Water Quality Certification that the proposed activity would not violate state and federal water quality standards.

The SWRCB and RWQCB regulate the discharge of waste into waters of the state via the 1969 Porter-Cologne Water Quality Control Act (Porter-Cologne) as described in the California Water Code. The California Water Code is the state's version of the federal CWA. Waste, according to the California Water Code, includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

State waters that are not federal waters may be regulated under Porter-Cologne. A Report of Waste Discharge must be filed with the RWQCB for projects that result in the discharge of waste into waters of the state. The RWQCB would issue Waste Discharge Requirements or a waiver. The Waste Discharge Requirements are the Porter-Cologne version of a CWA Section 401 Water Quality Certification.

3.3 CITY OF SAN DIEGO

3.3.1 Environmentally Sensitive Lands

Impacts to biological resources in the City must comply with City ESL Regulations. The purpose of the regulations is to "protect, preserve, and, where damaged restore, the environmentally sensitive lands of San Diego and the viability of the species supported by those lands." Environmentally sensitive lands are

defined to include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, and 100-year floodplains.

The ESL regulations require that impacts to wetlands be avoided unless the activities meet specific exemption criteria established in the ordinance. Impacts to City-defined wetlands require approval of deviation findings as required by ESL regulations. Impacts to wetlands must be mitigated in accordance with Section III(B)(1)(a) of the Land Development Manual Biology Guidelines (City 2018). The ESL regulations also require that buffers be maintained around all wetlands (as appropriate) to protect their functions and values. Buffer widths may either be increased or decreased, as determined on a case-by-case basis, taking into consideration the size and type of project proposed, sensitivity of the wetland resource to detrimental edge effects, topography, specific functions and values of the wetland, as well as the need for transitional upland habitat.

In addition to restricting impacts to wetland habitats, the ESL regulations restrict development within the MHPA, including required impact avoidance areas around raptor nesting locations (specifically, Cooper's hawk, golden eagle [*Aquila chrysaetos*], burrowing owl [*Athene cunicularia*], and northern harrier [*Circus cyaneus*]), and known locations of coastal California gnatcatcher (*Polioptila californica californica*) and southwestern pond turtle (*Actinemys pallida*). The ESL regulations also impose seasonal restrictions on grading where development may impact the following bird species: coastal California gnatcatcher, least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), tricolored blackbird (*Agelaius tricolor*), coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), western snowy plover (*Charadrius nivosus nivosus*), and California least tern (*Sternula antillarum browni*).

3.3.2 Multiple Species Conservation Program

In July 1997, the USFWS, CDFW, and City adopted the Implementing Agreement for the MSCP. This program allows the incidental take of threatened and endangered species as well as regionally-sensitive species that are adequately conserved by the agreement (covered species). The MSCP designates regional preserves that are intended to be mostly void of development activities, while allowing the development of other areas subject to the requirements of the program. Impacts to biological resources are regulated by City ESL regulations.

The City's MSCP Subarea Plan (City 1997) has been prepared to meet the requirements of the California Natural Communities Conservation Planning Act of 1992. This Subarea Plan describes how the City's portion of the MSCP Preserve, the MHPA, would be implemented. The project site is located adjacent to the MHPA, and the easternmost portion of the project site occurs within the MHPA.

3.3.3 Local Coastal Program

In March 1981, the San Diego City Council adopted the North City LCP, revised in May 1985 and revised again in March 1987, which has been prepared to meet the requirement of the California Coastal Act of 1976. Development within the Coastal Zone boundaries is subject to the City's LCP, Section 126.0702 City's Municipal Code, and the California Coastal Act, and would be subject to a CDP. The City acts as the local permitting authority for the issuance of CDPs for projects within its Coastal Zone, with a few exceptions. There are areas of "deferred certification" where the state retains its permitting authority. All projects in the Coastal Zone would require review for consistency with the LCP and California Coastal Act prior to the issuance of a CDP. This would ensure that infrastructure projects would be consistent

with the LCP; individual components would require this review on a project-by-project basis to ensure that there would not be adverse impacts.

The project site is located within the Coastal Zone (Figure 4) within the boundaries of the University Community Plan (City 2019a). The project site does not occur within a floodplain area or along the coast and does not contain wetland resources (including estuarine habitats) that would be subject to additional development policies under the City's LCP.

4.0 RESULTS

4.1 PHYSICAL CHARACTERISTICS/SETTING

The project site is generally located within the Central Coast ecological region of the City of San Diego (San Diego Natural History Museum 2014). Mean annual precipitation is approximately 13 inches, and the mean annual temperature is approximately 62 degrees Fahrenheit. The frost-free season is 330 to 350 days. The site is situated in the community of University, in an area that has been heavily developed since the 1950s. The site is largely characterized by developed lands associated with commercial development.

An approximately seven-acre open space easement occurs within the eastern portion of the site (Figure 3). The easement was recorded in 1976 against a portion of the property with the subdivision of the Torrey Pines Science Park Unit 2 (City 1976). Based on a review of a Quitclaim Deed recorded in 1984, the open space easement was previously recorded over the hillside in the eastern portion of the property but was quitclaimed to the State of California in 1984. The current topography and vegetation within the open space easement appear to have remained mostly undisturbed throughout the site's original commercial development, with the exception of the extreme western portion of the easement. This area was disturbed during the development of the property in the early 1980s and is currently characterized by ornamental landscaping. The easement, while intended to preserve open space, does allow the area to be used for, among other things, "open parking areas" and "sidewalks, paths, and steps."

Specifically, the Easement states: "We hereby dedicate to the public use Science Park Road, Torreyana Road, Callan Road, North Torrey Pines Place, a portion of North Torrey Pines Road and a path, together with [other appurtenances and easements] "Dedicated Hereon", reserving, however, to the owner of the fee underlying any easement herein dedicated the continued use of the surface of said real property; and subject to the following conditions: the erecting of buildings, masonry walls, masonry fences and other structures; or the planting or growing of trees or shrubs; or changing the surface grade or the installation of privately owned pipelines shall be prohibited unless an encroachment permit is first obtained from the City Engineer pursuant to the Municipal Code, together with open space easements over, under, upon and across portions of Lots 5, 6, 7 and 8 as shown on this map within this subdivision. Conditions shall be that no part of said of open space easements shall be used except for the purpose of installing, erecting, constructing, maintaining, planting and growing thereon the following: (1) grass, flowers, shrubs, trees and irrigation and other landscaping appurtenances; (2) fences and retaining walls; (3) recreation facilities provided the same shall not include and building; (4) utility distribution facilities provided they are installed underground, except that transformer boxes and similar equipment may be installed above ground but not on poles, derricks or similar support; (5) open space parking area; (6) sidewalks, paths and steps; (7) directional signs; and (8) outdoor lighting facilities and community

television antenna, provided, however, that each and every facility and appurtenance, installed, erected, constructed or maintained pursuant to any of clause (1) through (3) must be heretofore and hereafter by the City of San Diego."

A subsequent quitclaim deed was recorded as Document No. 85-037108 on February 4, 1985, in the San Diego County Recorder's Office that provided the State of California the right to enforce the Easement; however, this quitclaim deed did not eliminate any of the permitted exceptions to the Easement. Moreover, there is no other encumbrance identified in the recent Title Report prepared for the Property that further reduces the ability to use the Easement for the identified exemptions (SMRH 2022).

Surrounding land uses include commercial development to the north, south, and west, and undeveloped land and open space areas to the east. Recreational development, such as the Torrey Pines Golf Course, is located west of the site, and Interstate 5 is located east of the site.

4.2 DISTURBANCE

The project site is generally confined to the existing developed areas east of Torreyana Road that were originally developed as part of the Torrey Pines Science Park Unit 2 and is identified as Lot 7 on Map No. 8434 recorded with the City of San Diego. Historical aerials of the site indicate that the site remained undisturbed until commercial grading of the area occurred sometime between 1966 and 1978 (HistoricalAerials.com 2021). Commercial development of the site originally occurred sometime between 1978 and 1980 and appears to have been completed by 1982. Disturbance from the existing development includes evidence of regular human activity and brush management and landscaping at the open space interface, which is regularly irrigated and maintained.

4.3 TOPOGRAPHY AND SOILS

Elevations range from approximately 120 to 365 feet above mean sea level, sloping from west to east on the eastern portion of the property and generally flat within the western portion. Two soil types have been mapped within the study area (USDA 2021; Figure 6, *Soils*): Loamy alluvial land-Huerhuero complex, 9 to 50 percent slopes, severely eroded, and terrace escarpments.

4.4 VEGETATION COMMUNITIES/LAND COVER TYPES

A total of three vegetation communities/land cover types were mapped within the project site (Figure 7, *Vegetation Communities and Sensitive Resources*): southern maritime chaparral, Diegan coastal sage scrub, and urban/developed land (Table 2, *Existing Vegetation Communities/Land Cover Types*). The numeric codes in parentheses following each vegetation community/land cover type name are from the City Land Development Code Biology Guidelines (City 2018), with further guidance from the Holland classification system (Holland 1986) and as expanded by Oberbauer (2008). The communities/habitat types are presented in Table 2 by MSCP Tier.

Table 2
EXISTING VEGETATION COMMUNITIES/LAND COVER TYPES

Vegetation Community/ Land Cover Type[1]	Habitat Tier[2]	Acres[3]		
		Outside Open Space Easement	Within Open Space Easement	Total
Uplands				
Southern Maritime Chaparral (37C00)	I	0	3.0	3.0
Diegan Coastal Sage Scrub (32500)	II	0	3.3	3.3
Developed (12000)	IV	3.4	0.7	4.1
	TOTAL	**3.4**	**7.0**	**10.4**

[1] Vegetation categories and numerical codes are from Holland (1986) and Oberbauer (2008).
[2] Tiers refer to the City's Biology Guidelines (2018) habitat classification system.
[3] Acreages rounded to the nearest 0.1 acre for uplands; total reflects rounding.

Southern Maritime Chaparral

Southern maritime chaparral is restricted to the weathered sands within the coastal fog belt in San Diego County from La Jolla to Carlsbad. This low, fairly open, chaparral is typically dominated by wart-stemmed ceanothus (*Ceanothus verrucosus*) and thick-leaved Eastwood's manzanita (*Arctostaphylos glandulosa*).

A total of 3.0 acres of southern maritime chaparral was mapped within the central and southern portions of the site, occurring entirely within the open space easement (Figure 7). The western portions of this habitat, where it interfaces with the existing development, occur within the existing brush management zone that is maintained by the owner. Dominant species include sugarbush (*Rhus ovata*), mission manzanita (*Xylococcus bicolor*), lemonadeberry (*Rhus integrifolia*), and laurel sumac (*Malosma laurina*).

Diegan Coastal Sage Scrub

Coastal sage scrub is one of the two major shrub types that occur in southern California, occupying xeric sites characterized by shallow soils (the other is chaparral). Four distinct coastal sage scrub geographical associations (northern, central, Venturan, and Diegan) are recognized along the California coast. Diegan coastal sage scrub may be dominated by a variety of species depending on soil type, slope, and aspect. Typical species found within Diegan coastal sage scrub include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum* ssp. *fasciculatum*), laurel sumac, lemonadeberry, and black sage (*Salvia mellifera*).

A total of 3.3 acres of Diegan coastal sage scrub was mapped within the eastern portion of the site, occurring entirely within the open space easement (Figure 7). Dominant species include California buckwheat, California sagebrush, and laurel sumac.

Developed

Developed land occurs where permanent structures and/or pavement have been placed, which prevents the growth of vegetation, or where landscaping is clearly tended and maintained. Developed land occurs within the western portion of the site and consists of commercial development, landscaping, existing

brush management, and parking lots (Figure 7). A total of 4.1 acres was mapped within the site, including 0.7 acre of which occurs within the open space easement.

4.5 FLORA

A total of 33 plant species were observed within the project site, of which 20 (61 percent) were native species and 13 (39 percent) were non-native species (Appendix B, Plant Species Observed).

4.6 FAUNA

A total of 11 animal species were observed or detected within the project site, including two reptiles and nine bird species (Appendix C, *Animal Species Observed or Detected*).

5.0 SENSITIVE BIOLOGICAL RESOURCES

5.1 SENSITIVE VEGETATION COMMUNITIES/HABITAT TYPES

Sensitive vegetation communities/habitat types are defined as land that supports unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants as defined by Section 15380 of the State CEQA Guidelines. The City defines sensitive habitat as ESL in their Land Development Code Biology Guidelines. In the context of the City's MSCP Subarea Plan, wetlands and Tier I through IIIB uplands are considered sensitive habitat types.

Sensitive vegetation communities/habitat types mapped within the project site include southern maritime chaparral and Diegan coastal sage scrub. Impacts on sensitive habitats typically require mitigation.

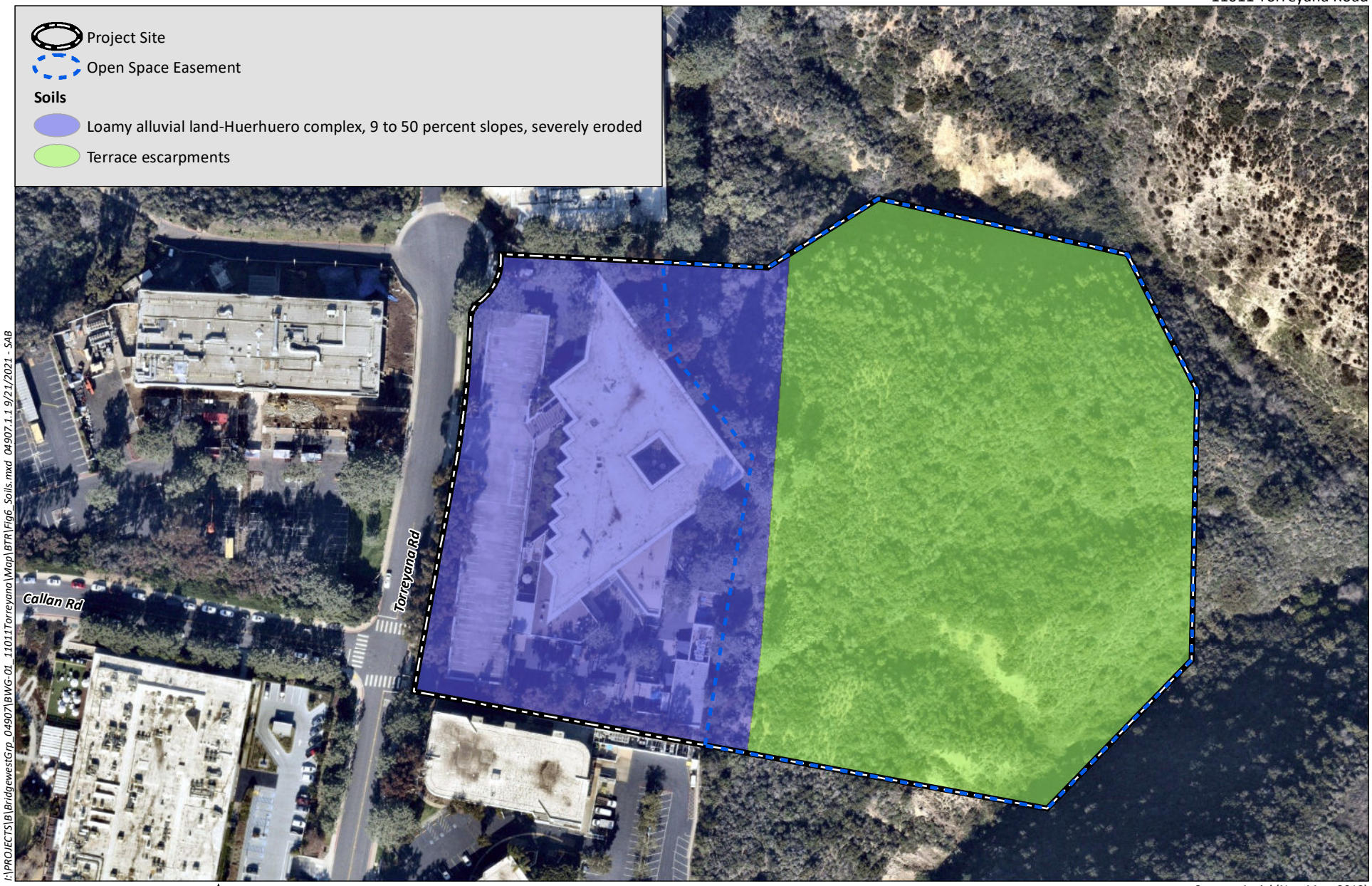
Developed land does not meet the definition of sensitive habitat. Impacts on this vegetation community do not require mitigation.

5.2 SPECIAL STATUS PLANT SPECIES

Special status plant species have been afforded special status and/or recognition by the USFWS, CDFW, and/or the City (e.g., MSCP narrow endemic species), and may also be included in the CNPS Inventory of Rare and Endangered Plants. Their status is often based on one or more of three distributional attributes: geographic range, habitat specificity, and/or population size. A species that exhibits a small or restricted geographic range (such as those endemic to a region) is geographically rare. A species may be generally abundant but occur only in very specific habitats. Lastly, a species may be widespread but exist naturally in small populations.

5.2.1 Special Status Plant Species Observed

Two special status plant species were observed in the project site during the general biological survey: Nuttall's scrub oak (*Quercus dumosa*) and Torrey pine (*Pinus torreyana* ssp. *torreyana*) are discussed below. Neither of these species is federally or state listed. Torrey pine is covered under the City's MSCP Subarea Plan (City 1997). A list of all plant species observed is included as Appendix B.



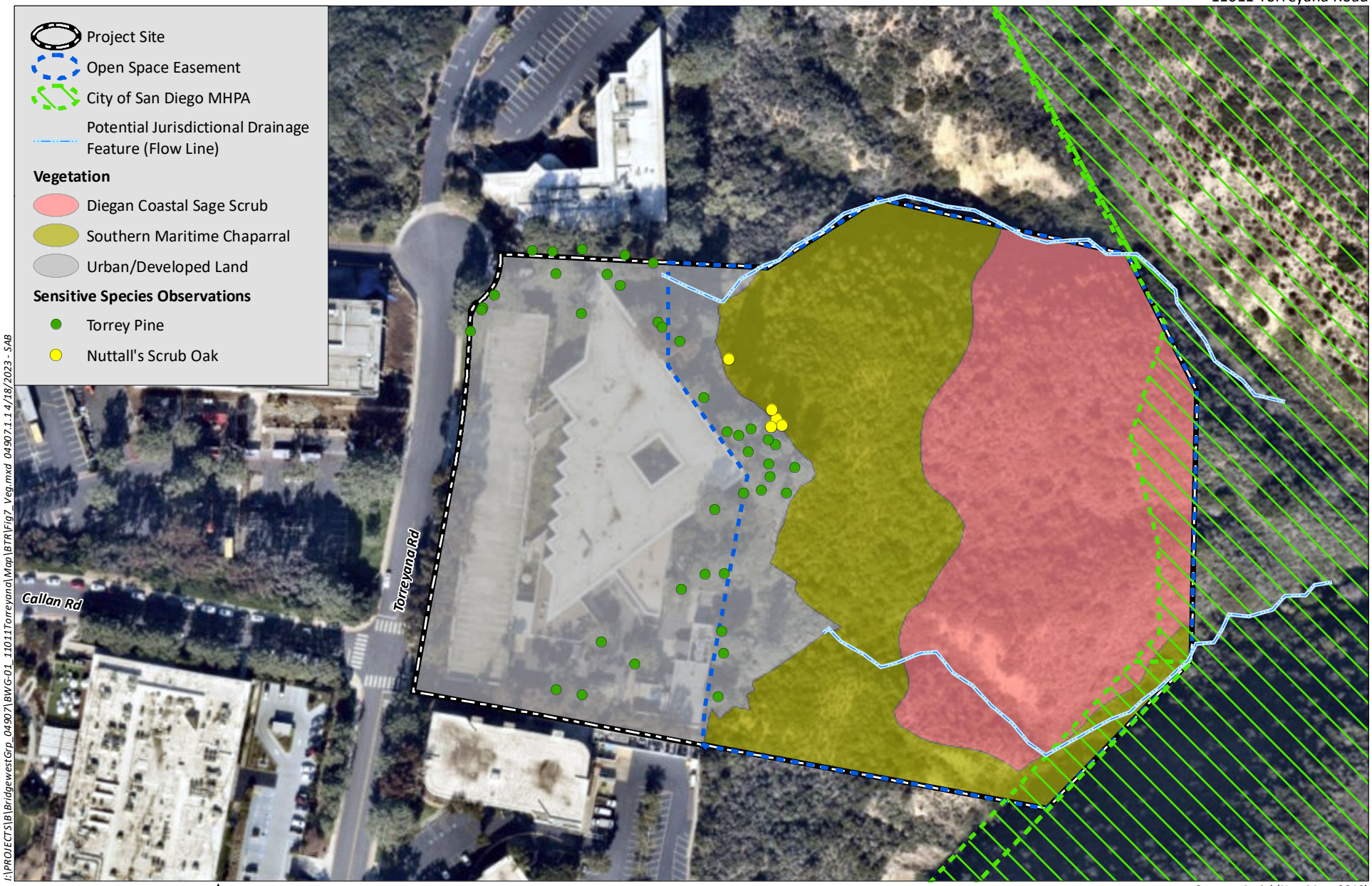
I:\PROJECTS\B\BridgewestGrp_04907\BWG-01_11011Torreyana\Map\BTR\Fig6_Soils.mxd 04907.1.1 9/21/2021 - SAB

Source: Aerial (NearMap, 2019)

HELIX Environmental Planning

Soils

Figure 6



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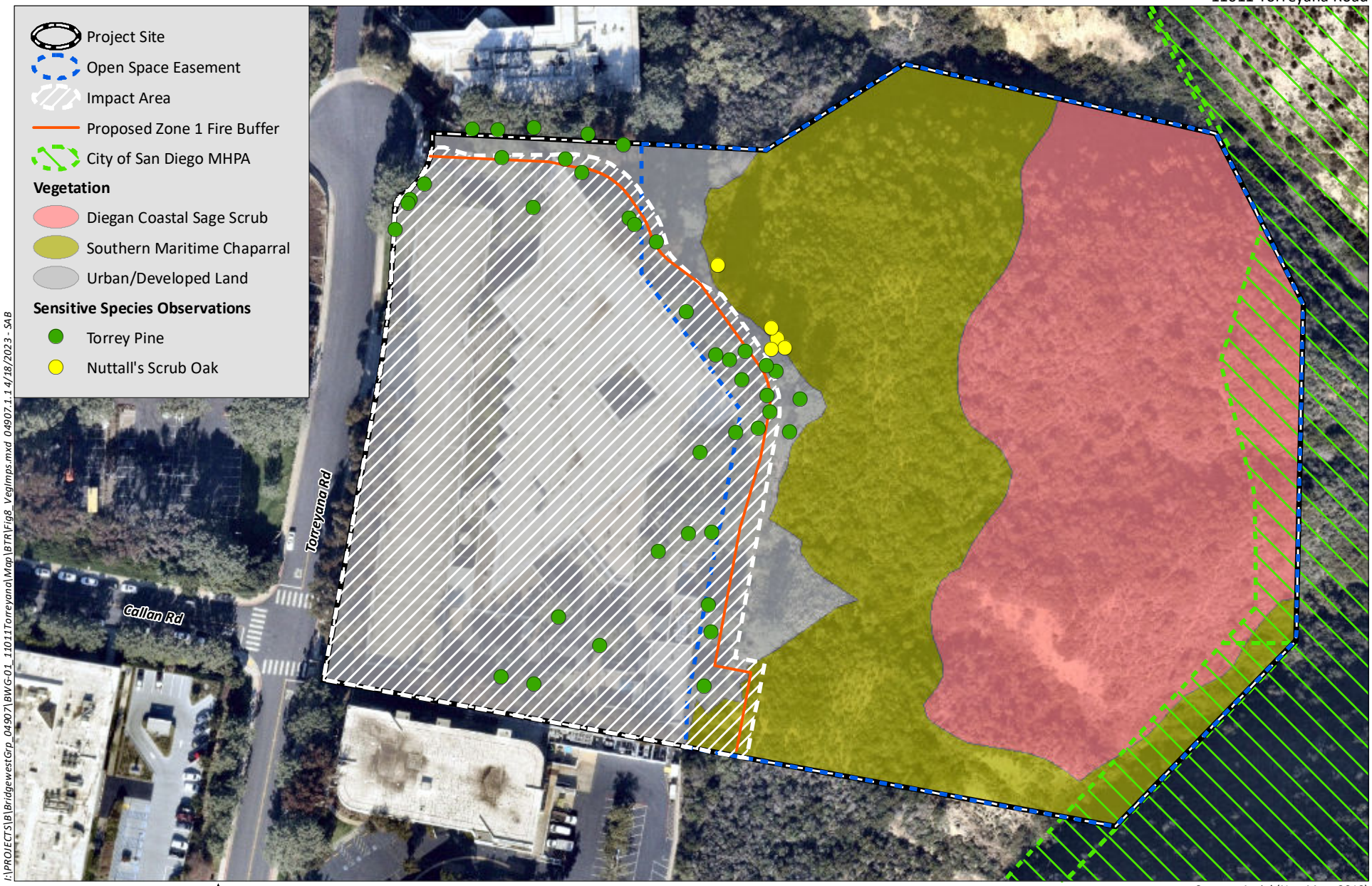
Source: Aerial (NearMap, 2019)

HELIX Environmental Planning

Vegetation Communities and Sensitive Resources

Figure 7



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Source: Aerial (NearMap, 2019)

HELIX Environmental Planning

Vegetation Communities and Sensitive Resources/Impacts

Figure 8

Nuttall's scrub oak (*Quercus dumosa*)
Listing: --/--; CRPR 1B.1
Distribution: Occurs along the coast between Ventura County and San Diego County.
Habitat: Closed cone coniferous forest, coastal scrub, and chaparral.
Presence within the Project Site: Five individuals of this species are present within the southern maritime chaparral habitat and developed land in the central portion of the project site.

Torrey pine (*Pinus torreyana* ssp. *torreyana*)
Listing: --/--; CRPR 1B.2; MSCP Covered
Distribution: Occurs in only two locations: along the coast near Del Mar (*Pinus torreyana* ssp. *torreyana*) and on Santa Rosa Island (*P. t.* ssp. *insularis*)
Habitat: Torrey pine woodlands and southern maritime chaparral.
Presence within the Project Site: 40 cultivated individuals of this species are present within the developed portion of the project site in landscaped areas.

5.2.2 Special Status Plant Species with Potential to Occur

Special status plant species that were not observed but may have the potential to occur on-site are included in Appendix D, *Special Status Plant Species Observed or With Potential Occur*. Nine species are listed with a high potential to occur: Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*), San Diego County viguiera (*Bahiopsis laciniata*), wart-stemmed ceanothus (*Ceanothus verrucosus*), San Diego barrel cactus (*Ferocactus viridescens*), graceful tarplant (*Holocarpha virgata* ssp. *elongata*), decumbent goldenbush (*Isocoma menziesii* var. *decumbens*), Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), sea dahlia (*Leptosyne maritima*), and ashy spike-moss (*Selaginella cinerascens*). No additional species have a high potential to occur primarily due to the lack of suitable conditions. The study area does not support the vegetation associations, soils, or hydrology required by many of the special status plants known to the region.

5.3 SPECIAL STATUS ANIMAL SPECIES

Special status animal species include those that have been afforded special status and/or recognition by the USFWS, CDFW, and/or the City. In general, the principal reason an individual taxon (species or subspecies) is given such recognition is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution, resulting in most cases from habitat loss.

5.3.1 Special Status Animal Species Observed or Otherwise Detected

No special status animal species were detected in the project site during biological surveys.

5.3.2 Special Status Animal Species with Potential to Occur

Special status animal species with the potential to occur within the project site are included in Appendix E, *Special Status Animal Species Observed or With Potential Occur*. They are grouped into invertebrates and vertebrates (fish, amphibians, reptiles, birds, and mammals) and are alphabetized by scientific name. Six special status animal species were determined to have a high potential to occur: Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*), San Diego tiger whiptail (*Aspidoscelis tigris stejnegeri*), Cooper's hawk (*Accipiter cooperii*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), coastal California gnatcatcher, and San Diego Bryant's (formerly

desert) woodrat (*Neotoma bryanti [formerly lepida] intermedia*). No additional species have a high potential to occur, primarily due to the lack of suitable habitat and development in the area. Crotch's bumble bee, a CESA candidate species, has a low potential to occur but is discussed in further detail in Section 5.3.2.1 below. Appendix F, *Explanation of Status Codes for Plant and Animal Species*, includes explanations of sensitivity codes.

5.3.2.1 Crotch's Bumble Bee

A focused habitat assessment for the species was completed by HELIX and the species was determined to have a low potential to utilize the project impact area for nesting, foraging, and overwintering, as detailed below.

Crotch's bumble bee is found throughout southwestern California, generally inhabiting hot open grassland and scrub habitats. Colonies are annual, with newly mated queens emerging from hibernation in early spring to forage and search for a nest site, followed by emerging workers. Although not much is known about overwintering sites specific to Crotch's bumble bee, other bumble bees generally overwinter in soft, disturbed soil, under leaf litter, or other debris (Xerces Society 2018). They primarily nest underground in abandoned rodent nests, but can also nest above ground in tufts of grass, rock piles, or dead tree cavities. They forage on a variety of flowers with shallow corollas due to their short tongue. The species has most commonly been observed on flowering species in the *Fabaceae*, *Asteraceae*, and *Lamiaceae* families. Occurrences have also been linked to habitats containing *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia*, and *Salvia* genera (IUCN 2024).

Prior to the habitat assessment, literature regarding the species was reviewed and databases were searched for nearby occurrence records of the species. The closest recorded occurrences include two recent occurrences reported to iNaturalist (2024), one from April 29, 2024 located approximately 1.2 miles southeast of the project site and another from March 21, 2024 located approximately 2.1 miles northeast of the project site. Aside from these recent occurrences, the species has not been recorded within the vicinity of the project site for over 40 years. The third most recent recorded observation nearby occurred in 1983 when four individuals were collected approximately 1.3 miles northwest of the project site within the Torrey Pines State Park (CDFW 2023b). The only other record within the surrounding 5-mile radius occurred in 1928 approximately 4.3 miles southwest of the project site. Several other occurrences were noted beyond 5 miles from the site, as reported to iNaturalist, Bumble Bee Watch (2024), and the CNDDB (CDFW 2023b). Richardson (2023) and the Bumble Bee Conservation Benefit Agreement Occurrence Areas database report the project site occurring within the estimated range of Crotch's bumble bee, although the closest reported occurrence is approximately 10.0 miles south in the Point Loma area. However, records may be lacking considering this is a recent candidate for listing.

HELIX biologists conducted a focused habitat assessment for Crotch's bumble bee on February 20, 2024, in accordance with the Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023c). The habitat assessment survey confirmed that, although the eastern edge of the project site contains potentially suitable sage scrub habitat, the impact area and immediately adjacent areas do not contain suitable open grassland or scrub habitat as they are primarily contained within maintained landscaping associated with the existing development on the property. The impact area of the project primarily overlaps the existing development on the property, with limited portions extended into the maintained landscaping and existing BMZs. Small areas of bare ground occur sporadically throughout the impact area, however rodent burrows and rock piles that could serve as potential nest sites were not observed.

Furthermore, evidence of standard pest control practices (e.g., rodent traps) for the existing development were observed throughout the impact area, indicating that the impact areas are regularly maintained for pest animal species. Dead trees and stumps were inspected, and no cavities that could serve as potential nest sites were observed. Surrounding land uses are dominated by developed land and dense chaparral habitat, rendering surrounding lands equally unlikely to support suitable nesting habitat. The impact area is also actively irrigated by an above ground irrigation system, reducing the likelihood of the species nesting onsite due to frequent watering. As mentioned, the impact area is actively maintained, including landscaping maintenance, mowing, and non-native species removal within the BMZ. This level of regular disturbance further reduces the likelihood of the species nesting within the impact area. Therefore, Crotch's bumble bee has a low potential to nest onsite.

Although flowering plant species were observed within the project site and surrounding areas, including those preferred by the species in the *Fabaceae, Asteraceae*, and *Lamiaceae* families, the only plant species observed immediately adjacent to the impact area that has been further linked to species occurrence is black sage of the *Salvia* genera. Furthermore, the flowering species are highly concentrated within the undisturbed portions in the central and eastern portions of the project site that would be avoided by the project, while the impact area is comparatively bare. Dominant species observed flowering within the impact area during the habitat assessment include onionweed (*Asphodelus fistulosus*), Bermuda buttercup (*Oxalis pes-caprae*), and acacia (*Acacia* sp.). Crotch's bumble bee has a low potential to forage onsite.

Potentially suitable overwintering habitat within the impact area occurs as woodland (i.e., planted landscaping trees) understory with a layer of shallow leaf litter comprised of eucalyptus and pine tree debris. However, as mentioned above, the impact area is actively irrigated, reducing the likelihood of individuals overwintering onsite due to frequent watering. Additionally, the impact area is actively maintained, including landscaping maintenance, mowing, raking and removal of leaf litter, and non-native species removal within the BMZ. This level of regular disturbance further reduces the likelihood of the species overwintering within the impact area. Crotch's bumble bee has a low potential to overwinter onsite.

In summary, Crotch's bumble bee was found to have a low potential to nest, forage, and overwinter at the project site due to the marginal quality and limited amount of potential habitat on-site, and prevalence of disturbances associated with the existing developments.

5.4 JURISDICTIONAL WATERS AND WETLANDS

The project site supports waterways that may be potentially subject to the jurisdiction of the USACE, RWQCB, and/or CDFW. Potential jurisdictional resources within the project site consist of two ephemeral drainage features within the central portion and along the northern and southern borders of the site, within the open space easement (Figure 7). Drainage widths range from one to three feet.

There are no areas within the project site that meet the criteria to be considered City ESL wetlands or single-parameter wetlands within the Coastal Overlay Zone. No surface water, saturated soils, or hydric soil indicators were observed. The two ephemeral drainage features lack sufficient hydrology to support significant and self-sustaining stands of wetland-dependent vegetation. As such, the drainage features do not meet the criteria for a City ESL wetland or single-parameter wetland within the Coastal Overlay Zone.

5.5 HABITAT CONNECTIVITY AND WILDLIFE CORRIDORS

Wildlife corridors connect otherwise isolated pieces of habitat and allow the movement or dispersal of plants and animals. Local wildlife corridors allow access to resources such as food, water, and shelter within the framework of their daily routine. Regional corridors provide these functions over a larger scale and link two or more large habitat areas, allowing the dispersal of organisms and the consequent mixing of genes between populations. A corridor is a specific route that is used for the movement and migration of species and may be different from a linkage in that it represents a smaller or narrower avenue for movement. A linkage is an area of land that supports or contributes to the long-term movement of animals and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stone linkages that are made up of a fragmented archipelago arrangement of habitat over a linear distance.

The project site occurs within the Los Peñasquitos Lagoon/Del Mar Mesa/Peñasquitos Canyon core biological resource area, which encompasses one of the few intact natural open space areas in coastal San Diego County that is still linked to larger expanses of habitat to the east (City 1997). The easternmost portion of the site also occurs within the MHPA, which serves as a wildlife corridor and linkage. The site is located within a highly urbanized area and is primarily characterized by existing commercial development. However, undeveloped land within the eastern portion of the site occurs within the open space easement and contains native vegetation communities. This habitat is contiguous with native habitat within the adjacent Torrey Pines State Natural Reserve and has a connection to open space areas further north and east, such as the Los Peñasquitos Lagoon and Los Peñasquitos Canyon Preserve. As such, habitat within the eastern portion of the site may facilitate wildlife access and usage of the site, and contributes to the larger wildlife movement linkage and corridor within the local area and northern San Diego region.

6.0 MULTIPLE SPECIES CONSERVATION PROGRAM CONSISTENCY ANALYSIS

The following section details the project's consistency with the City's MSCP Subarea Plan applicable guidelines, management directives, and policies.

6.1 LAND USE ADJACENCY GUIDELINES – SECTION 1.4.3 OF THE MSCP

The City's MSCP Subarea Plan (City 1997) addresses indirect impacts to preserve areas from adjacent development in Section 1.4.3, Land Use Adjacency Guidelines (LUAGs). The LUAGs provide requirements for land uses adjacent to the habitat preserve in order to minimize indirect impacts from drainage, toxics, lighting, noise, barriers, invasive species, brush management, and grading to the sensitive resources contained therein. Projects that are within or adjacent to the MHPA must demonstrate compliance with the LUAGs.

The project site is located adjacent to the MHPA, and the easternmost portion of the project site occurs within the MHPA. The project's compliance with the City's LUAGs is summarized below:

Drainage

- All new and proposed parking lots and development areas in and adjacent to the preserve must not drain directly into the MHPA.

  The proposed project would primarily occur within previously developed and disturbed areas. The project would not result in a substantial increase in impervious surface area and would have negligible effects on drainage. The project would not drain directly into the MHPA.

- *All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials, and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA.*

  Best Management Practices (BMPs) would be implemented during project construction to control runoff, erosion, and contaminants, as necessary, in order to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, and other elements that might be contained within stormwater. The BMP program would meet the applicable requirements of the SWRCB and the City's Municipal Code and Storm Water Standards Manual. Furthermore, the project would strictly prohibit and would not introduce exotic plant materials into any revegetation or landscaped area adjacent to the MHPA. With the incorporation of BMPs and restrictions, the project would not degrade or harm the natural environment or ecosystem processes within the MHPA.

Toxins

- *Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as manure, that are potentially toxic or harmful to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA.*

  The proposed project does not involve agriculture or the creation of recreational areas, such as playing fields, or any other uses that would introduce new toxins, chemicals, or by-products within the MHPA.

Lighting

- *Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.*

  Project lighting would be shielded and directed away from the MHPA to protect resources in the MHPA from artificial night lighting.

Noise

- *Uses in or adjacent to the MHPA must be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA.*

  The project site is characterized by existing commercial development adjacent to existing roadways and a major transportation corridor (Interstate 5). The proposed project would retain similar vehicular uses, as compared to the existing commercial uses, and is not expected to result in an adverse noise impact on wildlife use of the MHPA.

- *Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.*

  Temporary noise generated from sources, such as grubbing, earthwork, and construction, could adversely and temporarily impact local wildlife potentially present within the MHPA. Such impacts could occur to the coastal California gnatcatcher if the activities are implemented during the gnatcatcher breeding season (which is defined by the City as March 1 to August 15). As a condition of project approval, preconstruction surveys for California gnatcatcher would be required to determine species presence/absence if construction were to occur during the gnatcatcher breeding season. If surveys are not conducted, the presence of the species would be assumed, and the implementation of noise attenuation and biological monitoring would be required during the gnatcatcher breeding season if construction would generate noise levels higher than 60 dBA or ambient (whichever is higher).

Barriers

- *New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation.*

  This guideline is not applicable as the project does not propose new development within or directly adjacent to the MHPA. The proposed development would be located approximately 400 feet west of the MHPA boundary. Native habitat within the existing open space easement would separate the development from the MHPA.

Invasive Species

- *No invasive non-native plant species shall be introduced into areas adjacent to the MHPA.*

  BMPs during construction would include measures to avoid the introduction of invasive plants into construction areas by equipment. All equipment shall be clean and free of debris and mud prior to entering the project site to reduce the potential for the introduction of invasive plant species. The proposed landscaping associated with the project shall not include plant species identified as invasive by the California Invasive Plant Council (2021). Landscaping and plantings adjacent to native habitat areas would strictly prohibit the use of invasive, non-native plant species.

Brush Management

- *New residential development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate Zone 1 brush management areas on the development pad and outside of the MHPA. Zones 2 and 3 will be combined into one zone (Zone 2) and may be located in the MHPA upon granting of an easement to the City (or other acceptable agency) except where narrow wildlife corridors require it to be located outside of the MHPA.*

  The project brush management zones would not encroach into the MHPA and would not result in any additional impacts to biological resources within the MHPA.

Grading/Land Development

- *Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.*

  All manufactured slopes are located within the development footprint and do not occur within the MHPA.

6.2 GENERAL MANAGEMENT DIRECTIVES – SECTION 1.5.2 OF THE MSCP

The following general management directives apply to the project, as outlined in Section 1.5.2 of the City's MSCP Subarea Plan (City 1997). The project would comply with these general management directives as outlined below:

Mitigation

- *Mitigation, when required as part of project approvals, shall be performed in accordance with the City's Environmentally Sensitive Lands Ordinance and Biology Guidelines.*

The project would result in minimal impacts to Tier I southern maritime chaparral totaling 0.07 acre. Pursuant to the City's Significance Determination Thresholds (City 2018), impacts to Tier I through IIIB habitats totaling less than 0.1 acre are not considered significant and do not require mitigation. As such, impacts to 0.07 acre of southern maritime chaparral are not considered significant and no mitigation is required.

Invasive Exotics Control and Removal

- *Do not introduce invasive non-native species into the MHPA.*

The project would not result in the introduction of non-native species into the MHPA. The project has been designed to incorporate and adhere to the City LUAGs, as detailed above. All proposed landscaping shall not include plant species identified as invasive by the California Invasive Plant Council (2021). Landscaping and plantings adjacent to native habitat areas would strictly prohibit the use of invasive, non-native plant species and would not introduce invasive plants into the MHPA.

6.3 GENERAL PLANNING POLICIES AND DESIGN GUIDELINES – SECTION 1.4.2 OF THE MSCP

The MSCP establishes specific guidelines that limit activities that occur within or adjacent to the MHPA. In general, activities occurring within or adjacent to the MHPA must conform to these guidelines and, wherever feasible, should be located in the least sensitive areas. Land uses considered conditionally compatible with the biological objectives of the MSCP, and thus allowed within the City's MHPA, include passive recreation, Zone 2 brush management, limited agriculture, limited low density residential uses, utility lines (e.g., sewer, water, etc.), limited water facilities, and other essential public facilities. The project's conformance with the applicable policies and guidelines from Section 1.4.2 of the MSCP are discussed below.

Fencing, Lighting, and Signage

- *Fencing or other barriers will be used where it is determined to be the best method to achieve conservation goals and adjacent to land uses incompatible with the MHPA. For example, use chain link or cattle wire to direct wildlife to appropriate corridor crossings, natural rocks/boulders or split rail fencing to direct public access to appropriate locations, and chain link to provide added protection of certain sensitive species or habitats (e.g., vernal pools).*

  The proposed development would be located approximately 400 feet west of the MHPA boundary and would not result in the introduction of any fencing or other barriers that would inhibit or preclude wildlife access and use within the MHPA. Native habitat within the existing open space easement would separate development from the MHPA.

- *Lighting shall be designed to avoid intrusion into the MHPA and effects on wildlife. Lighting in areas of wildlife crossings should be of low-sodium or similar lighting. Signage will be limited to access and litter control and educational purposes.*

  Project lighting would be shielded and directed away from the MHPA to protect resources in the MHPA from artificial night lighting.

6.4 CONDITIONS OF COVERAGE FOR SENSITIVE SPECIES

One MSCP-covered plant species was observed within the project site: Torrey pine. Three MSCP-covered plant species were determined to have a high potential to occur: Del Mar manzanita, wart-stemmed ceanothus, and San Diego barrel cactus. No MSCP-covered animal species were observed within the project; however, four MSCP-covered species were determined to have a high potential to occur: Belding's orange-throated whiptail, Cooper's hawk, southern California rufous-crowned sparrow, and coastal California gnatcatcher. The MSCP includes conditions for coverage for these species, which are discussed below.

Del Mar Manzanita

This species was not observed within the proposed impact area of the project. There are no conditions for coverage for this species; therefore, the project is consistent with the MSCP. Nevertheless, suitable southern maritime chaparral habitat within the eastern portion of the site would continue to be preserved within the existing open space easement.

Wart-stemmed Ceanothus

- *Revegetation efforts within appropriate habitats must include restoration of this species. Area specific management directives for the protected populations must include specific measures to increase populations. Area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Management measures to accomplish this may include prescribed fire. Any newly found populations should be evaluated for inclusion in the preserve strategy through acquisition, like exchange, etc.*

  No wart-stemmed ceanothus individuals were observed within the impact footprint. Suitable southern maritime chaparral habitat within the eastern portion of the site would continue to be preserved within the existing open space easement.

San Diego Barrel Cactus

- *Area specific management directives must include measures to protect this species from edge effects, unauthorized collection, and include appropriate fire management/control practices to protect against a too frequent fire cycle.*

  No San Diego barrel cactus individuals were observed within the impact footprint. Suitable southern maritime chaparral and Diegan coastal sage scrub habitat within the eastern portion of the site would continue to be preserved within the existing open space easement. The development would be primarily limited to existing developed and disturbed areas and would not substantially add to edge effects already present in the existing condition. The project would adhere to the City LUAGs, as detailed in Section 6.1, and implement standard construction BMPs, as needed, to minimize indirect impacts to this species.

Torrey Pine

There are no conditions for coverage for this species; therefore, the project is consistent with the MSCP. Furthermore, Torrey pine trees within the project site are comprised of cultivated trees that have been planted as part of previous development's landscaping and do not represent native or naturalized individuals or a naturally occurring population. Nevertheless, where practicable and safe to do so, cultivated Torrey pines would be retained in place. Torrey pine trees that would be removed by the project would be replaced on-site with minimum 15-gallon size replacement Torrey pine trees in accordance with the project's landscape plans.

Belding's Orange-Throated Whiptail

- *Area specific management directives must address potential edge effects.*

  The development would be primarily limited to existing developed and disturbed areas and would not substantially add to edge effects already present in the existing condition. The project would adhere to the City LUAGs, as detailed in Section 6.1, and implement standard construction BMPs, as needed, to minimize indirect impacts to this species.

Coastal California Gnatcatcher

- *Area specific management directives must include measures to reduce edge effects and minimize disturbance during the nesting period, fire protection measures to reduce the potential for habitat degradation due to unplanned fire, and management measures to maintain or improve habitat quality including vegetation structure. Additionally, no clearing of occupied habitat within the City MHPA or County's Biological Core Resource Areas between March 1 and August 15.*

  The development would be primarily limited to existing developed and disturbed areas and would not substantially add to edge effects already present in the existing condition. The project would adhere to the City LUAGs, as detailed in Section 6.1, and implement standard construction BMPs, as needed, to minimize indirect impacts to this species. The project would not impact any habitat within the MHPA and does not include the removal of suitable gnatcatcher habitat (i.e., coastal sage scrub).

Cooper's Hawk

- *Area specific management directives must include 300-foot impact avoidance areas around the active nests, and minimization of disturbance in oak woodlands and oak riparian forests.*

  As a condition of project approval, pre-construction surveys for nesting birds and raptors would be required prior to the removal of habitat with the potential to support active nests during the breeding season (generally February 1 to September 15). The project would comply with the conditions for coverage for this species through the establishment of the required 300-foot avoidance setback if nesting Cooper's hawk are found. The project would not impact oak woodlands or oak riparian forests as neither community occurs within the project site. This is consistent with the conditions of coverage for the Cooper's hawk that requires the minimization of disturbance to those habitats.

Southern California Rufous-crowned Sparrow

- *Area specific management directives must include maintenance of dynamic processes, such as fire, to perpetuate some open phases of coastal sage scrub with herbaceous components.*

  The proposed project would be primarily limited to existing developed and disturbed areas, with less than 0.1 acre of impacts occurring to native habitats with the potential to support this species. Native habitat within the eastern portion of the site would continue to be preserved in its current condition within the open space easement.

7.0 ANALYSIS OF PROJECT IMPACTS

This section presents an analysis of anticipated direct and indirect impacts to biological resources associated with the implementation of the project. Direct impacts immediately alter the affected biological resources, such as when those resources are eliminated temporarily or permanently. Indirect impacts consist of secondary effects of a project, including drainage and toxins (water quality), lighting, noise, and invasive plant species.

7.1 CRITERIA FOR DETERMINING IMPACT SIGNIFICANCE

The following guidance (City Biology Guidelines 2018) is used to determine the potential significance of impacts on biological resources pursuant to the City's Significance Determination Thresholds (City 2018). A project would result in a significant or potentially significant biological resources impact if it would result in:

- A substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP, VPHCP, or other local or regional plans, policies, or regulations, or by the CDFW or USFWS;

- A substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development Manual or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS;

- A substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through the direct removal, filling, hydrological interruption, or other means;

- Substantial interference with the movement of any native resident or migratory fish or wildlife species, or with an established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, VPHCP, or impediment of the use of native wildlife nursery sites;

- A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other local, regional, or state habitat conservation plan, either within the MSCP or VPHCP plan area or in the surrounding region;

- An introduction of land use within an area adjacent to the MHPA that would result in adverse edge effects;

- A conflict with any local policies or ordinances protecting biological resources; or

- An introduction of invasive plant species into a natural open space area.

7.2 IMPACTS TO VEGETATION COMMUNITIES

The proposed project would result in direct impacts to 3.6 acres of habitat or land cover types comprised of less than 0.1 acre (0.07 acre) of Tier I southern maritime chaparral and 3.6 acres of non-sensitive Tier IV developed land (Figure 8, *Vegetation Communities and Sensitive Resources/Impacts*; Table 3, *Vegetation Communities/Land Cover Type Impacts*). Pursuant to the City's Significance Determination Thresholds (City 2018), impacts to Tier I through IIIB habitats totaling less than 0.1 acre are not considered significant and do not require mitigation (City 2018). As such, impacts to 0.07 acre of southern maritime chaparral are not considered significant, and mitigation is not required. Impacts to developed land are not considered significant and do not require mitigation.

Table 3
VEGETATION COMMUNITIES/LAND COVER TYPE IMPACTS

Vegetation Community / Land Cover Type	Habitat Tier	Impacts[1] (acres)[2] Outside Open Space	Within Open Space	Total
Sensitive Upland Habitat				
Southern Maritime Chaparral (37C00)	I	--	<0.1	<0.1
Diegan Coastal Sage Scrub (32500)	II	--	--	--
Sensitive Uplands Subtotal		**--**	***<0.1***	***<0.1***
Non-Sensitive Upland Habitat				
Developed (12000)	IV	3.2	0.4	3.6
Non-Sensitive Upland Subtotal		***3.2***	***0.4***	***3.6***
TOTAL		**3.2**	**0.4**	**3.6**

[1] Temporary and permanent impacts combined. All impacts occur outside of the MHPA.
[2] Acreages rounded to the nearest 0.1 acre; total reflects rounding.

Project construction would occur immediately adjacent to sensitive upland habitat. Inadvertent intrusion into these adjacent areas by construction vehicles, equipment, and personnel could result in additional disturbance if appropriate avoidance measures are not implemented. The project would be required to implement standard avoidance and minimization measures as conditions of project approval to ensure the avoidance of sensitive habitats located immediately adjacent to construction work areas. Therefore, potential indirect impacts to adjacent sensitive habitat would be avoided.

7.3 IMPACTS TO SPECIAL STATUS SPECIES

The proposed project has been specifically designed to primarily occur within existing developed and disturbed areas associated with previous development and avoid impacts to sensitive biological resources to the greatest extent possible. Project impacts on special status plant and animal species are described below.

Special Status Plant Species

Two special status plant species were observed in the project site during the general biological survey: Nuttall's scrub oak and Torrey pine. Neither of these species are federally or state listed nor City narrow endemic plant species. Nuttall's scrub oak is listed as CRPR 1B.1. Torrey pine is listed as CRPR 1B.2 and is covered under the MSCP. In addition to the observed species, nine special status plant species were determined to have a high potential to occur within Diegan coastal sage scrub and southern maritime chaparral habitat located in the eastern portion of the site.

The proposed project is primarily limited to existing developed and disturbed areas, and impacts to native habitats with the potential to support these species would be minimal (0.07 acre of southern maritime chaparral). No special status plant species were documented within the impact footprint, and direct impacts are unlikely to occur based on the small amount of habitat to be impacted. The Nuttall's scrub oak and Torrey pine canopies on the site would be preserved. Therefore, no significant impact to Nuttall's scrub oak or other special status plant species would occur.

Torrey pine within the project site consists of 40 cultivated trees that were planted as part of the previous development's landscaping and do not represent a naturally occurring population. Where

practicable and safe to do so, cultivated Torrey pines would be retained in place. Torrey pine trees that would be removed by the project would be replaced on-site with minimum 15-gallon size replacement Torrey pine trees in accordance with the project's landscape plans. The project would not result in impacts to naturally occurring Torrey pine, and no impact would occur.

Special Status Animal Species

No special status animal species were detected within the project site during the general biological survey. Six special status species were determined to have high potential to occur: Belding's orange-throated whiptail, San Diego tiger whiptail, Cooper's hawk, southern California rufous-crowned sparrow, coastal California gnatcatcher, and San Diego Bryant's (formerly desert) woodrat. The project would result in minimal impacts to on-site native habitat, approximately 0.07 acre of southern maritime chaparral, with the potential to support Belding's orange-throated whiptail, San Diego tiger whiptail, southern California rufous-crowned sparrow, and San Diego Bryant's (formerly desert) woodrat. These impacts would be less than significant based on the small amount of habitat that would be impacted.

The project would not result in impacts to Diegan coastal sage scrub. Therefore, no direct impacts to coastal California gnatcatcher or suitable gnatcatcher habitat would occur. Potential indirect impacts to coastal California gnatcatcher could occur if construction activities were to take place within 500 feet of suitable gnatcatcher habitat located within the MHPA during the gnatcatcher breeding season (March 1 to August 15). As a condition of project approval, pre-construction surveys for California gnatcatcher would be required to determine species presence/absence if construction were to occur during the gnatcatcher breeding season. If surveys are not conducted, the presence of the species would be assumed, and the implementation of noise attenuation and biological monitoring would be required during the gnatcatcher breeding season if construction would generate noise levels higher than 60 dBA or ambient (whichever is higher). Therefore, potential indirect impacts to coastal California gnatcatcher would be avoided.

The project could result in impacts to Cooper's hawk, if individuals were determined to be nesting on or within 300 feet of the project site during project construction. As a condition of project approval, pre-construction surveys for nesting birds and raptors would be required prior to the removal of habitat with the potential to support active nests during the breeding season (generally February 1 to September 15). As such, potential direct impacts on nesting Cooper's hawk would be avoided. Potential indirect impacts to nesting Cooper's hawk would be avoided through the implementation of conditions of coverage for this species, which require a 300-foot avoidance setback to nesting Cooper's hawk.

Crotch's Bumble Bee

The project was evaluated for its potential to impact the Crotch's bumble bee, a CESA candidate species. A focused habitat assessment for the species was completed by HELIX and the species was determined to have a low potential to utilize the project impact area for nesting, foraging, or overwintering, as described above within Section 5.3.2.1.

As described above in Section 7.2, the proposed project would result in direct impacts to 3.6 acres of habitat or land cover types comprised of less than 0.1 acre (0.07 acre) of Tier I southern maritime chaparral and 3.6 acres of non-sensitive Tier IV developed land (Figure 8, *Vegetation Communities and Sensitive Resources/Impacts*; Table 3, *Vegetation Communities/Land Cover Type Impacts*). These impact areas were found to provide marginal quality nesting, foraging, and/or overwintering habitat for the Crotch's bumble bee, although no individual bees, potential nest sites, primary foraging resources, or

potential overwintering sites were observed during biological surveys conducted in 2021, 2022, 2023, or 2024. The project would not impact potential nesting habitat, potential nest sites, potential overwintering habitat, or potential overwintering sites of the Crotch's bumble bee, as such habitat is not located within the proposed project impact area.

Although several flowering plant species occur within the impact area (i.e., onionweed, Bermuda buttercup, acacia), none of the specific plant species or plant species belonging to the plant families linked to Crotch's bumble bee occurrence were observed within the impact area. The impact area is mostly maintained bare ground within the understory of planted trees. Black sage, a plant species linked to Crotch's bumble bee occurrence, was observed immediately adjacent to the impact area, and additional foraging resources occur further to the east, outside of the impact area and within the proposed open space for the project. The project would be required to implement standard avoidance and minimization measures as conditions of project approval to ensure potential foraging resources located immediately adjacent to construction work areas within the proposed open space are avoided during construction. Given the fact that the flowering species found within the impact area are not considered significant foraging habitat for the Crotch's bumble bee and given the abundance of better-quality foraging resources available for the species outside of the proposed impact area, project impacts on potential foraging habitat for the Crotch's bumble bee would be less than significant.

7.4 IMPACTS TO JURISDICTIONAL RESOURCES

The project site contains waterways, wetlands, and riparian habitat potentially subject to USACE, RWQCB, and/or CDFW jurisdiction. The project proposes to avoid all impacts to these areas (Figure 8); therefore, no impact would occur to jurisdictional wetlands and waterways, and no mitigation is required.

7.5 WILDLIFE MOVEMENT AND NURSERY SITES

The project site is located within the Los Peñasquitos Lagoon/Del Mar Mesa/Peñasquitos Canyon core biological resource area, and the easternmost portion of the site is located within the MHPA. However, the proposed project is primarily limited to existing developed and disturbed areas and would not result in the introduction of new land uses within the MHPA or core biological resource area. As such, the proposed project would not substantially alter current baseline conditions for local wildlife movement within and around the project area. The project would not create any barriers to wildlife movement and would not impede wildlife movement or the use of native nursery sites. Therefore, no significant impact would occur to wildlife corridors or linkages, or native nursery sites.

7.6 CONFLICT WITH THE LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLANS

The project has been specifically designed to minimize impacts to biological resources addressed in the City's MSCP Subarea Plan (1997) and Land Development Code (2018). The project would be consistent with the MSCP, and impacts to 0.07 acre of southern maritime chaparral previously impacted by brush management activities are not considered significant in accordance with Land Development Code requirements, as detailed in Sections 6.2 and 7.2 above. The project would not conflict with the local, regional, or state conservation plans.

7.7 ADVERSE EDGE EFFECTS ON THE MHPA

The project is subject to the City's MHPA Land Use Adjacency Guidelines designed to minimize edge effects to sensitive resources contained in the MHPA and thus maintain the value of the preserve, as described in Section 6.1 above. Project impacts would avoid the small section of the MHPA in the eastern portion of the project area. No changes to existing land use designations are anticipated through project implementation. Therefore, the project is in accordance with the Land Use Adjacency Guidelines, and the project would not result in significant edge effects on the MHPA.

7.8 CONFLICT WITH ANY LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES

The project site is located adjacent to southern maritime chaparral, which is one of the communities categorized as ESHA, as described in Section 3.2.3. One sensitive species, Nuttall's scrub oak, occurs within this community and would not be impacted by the project. Southern maritime chaparral is considered rare habitat, and this community is easily disturbed/degraded by human activities.

As described in Table 3, the project would result in direct impacts to 0.07 acre of proposed ESHA habitat, in the form of southern maritime chaparral. As stated in the City's Biology Guidelines (City 2018), impacts to less than 0.1 acre of sensitive upland habitats would not be significant and do not require mitigation.

The project would provide protection to the habitats within the MHPA, and would not conflict with any of the LCP Specific Language in the North City LCP (City 2019a) or the University-La Jolla LCP Addendum related to ESHA (City 1981).

Pursuant to the City Land Development Code ESL regulations (City 2018) and MSCP implementing agreement (City 1997), a new covenant of easement shall be placed over the existing easement to further protect the remaining open space ESL and MHPA. The easement shall include only the remaining biological resources and natural steep hillsides.

Steep hillsides, defined as slopes greater than 25 percent, are present within the project site. As described in Section 142.0142 of the San Diego Municipal Code (City 2018), within the Coastal Overlay Zone, steep hillsides shall be preserved in their natural state. When encroachment onto such steep hillsides is unavoidable, encroachment shall be minimized; except that encroachment is permitted in such steep hillsides to provide for a development area (including Zone 1 brush management) of up to a maximum of 25 percent of the premises on premises containing less than 91 percent of such steep hillsides.

The project proposes no additional impacts to steep hillsides within the project site. The existing site is already developed within the maximum of 25 percent of steep hillsides, and the project proposes to develop within the existing 25 percent of steep hillsides; therefore, the project would not conflict with the Development Regulations for Steep Hillsides in the San Diego Municipal Code (City 2018).

Furthermore, any increase in runoff resulting from the development of the site shall be directed away from any steep hillside areas and either into an existing or newly improved public storm drain system or onto a street developed with a gutter system or public right of way designated to carry surface drainage runoff.

7.9 INVASIVE PLANT SPECIES

As described in Section 6.1 above, BMPs during construction would include measures to avoid the introduction of invasive plants into construction areas by equipment. All equipment shall be clean and free of debris and mud prior to entering the project site to reduce the potential for the introduction of invasive plant species. The proposed landscaping associated with the project shall not include plant species identified as invasive by the California Invasive Plant Council (2021). Landscaping and plantings adjacent to native habitat areas would strictly prohibit the use of invasive, non-native plant species. The project would not result in the introduction or spread of invasive plant species within the conserved area.

7.10 CUMULATIVE IMPACTS

Adverse cumulative impacts are not expected from the implementation of the proposed project. Projects which adhere to the City's MSCP Subarea Plan (City 1997) are not expected to have significant cumulative impacts to resources regulated and covered by these plans. Cumulative impacts are not expected from the project, as the project would comply with the City's MSCP SAP (including Biology Guidelines and ESL Regulations) and the MHPA LUAG requirements.

8.0 MITIGATION MEASURES

8.1 MITIGATION FOR IMPACTS TO SENSITIVE UPLAND HABITATS

The project would result in minimal impacts to 0.07 acre of southern maritime chaparral habitat, located outside of the MHPA. Impacts to Tier I through IIIB habitats totaling less than 0.1 acre are not considered significant and do not require mitigation (City 2018). As such, impacts to 0.07 acre of Tier I southern maritime chaparral are not considered significant, and mitigation is not required.

The project would not result in significant direct impacts to sensitive vegetation communities, jurisdictional wetlands and waterways, or special status species; therefore, no mitigation is required.

Pursuant to the City Land Development Code ESL regulations and the MSCP implementing agreement, a new covenant of easement shall be placed over the existing open space easement.

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Appendix A

Representative Site Photographs

Photo 1. Northern portion of developed land within the project site (facing northwest).

Photo 2. Northern portion of developed land within the open space easement (facing west).

Photo 3. Northern portion of developed land within the open space easement (facing south).

Photo 4. Northern portion of developed land within the open space easement (facing southeast).

Photo 5. Eastern portion of developed land bordering southern mixed chaparral within the open space easement (facing southeast).

Photo 6. Eastern portion of developed land bordering southern mixed chaparral within the open space easement (facing northwest).

Photo 7. Southern portion of developed land bordering southern mixed chaparral within the open space easement (facing north).

Photo 8. Eastern portion of developed land bordering southern mixed chaparral within the open space easement (facing southwest).

Photo 9. Eastern portion of developed land bordering southern mixed chaparral within the open space easement (facing south).

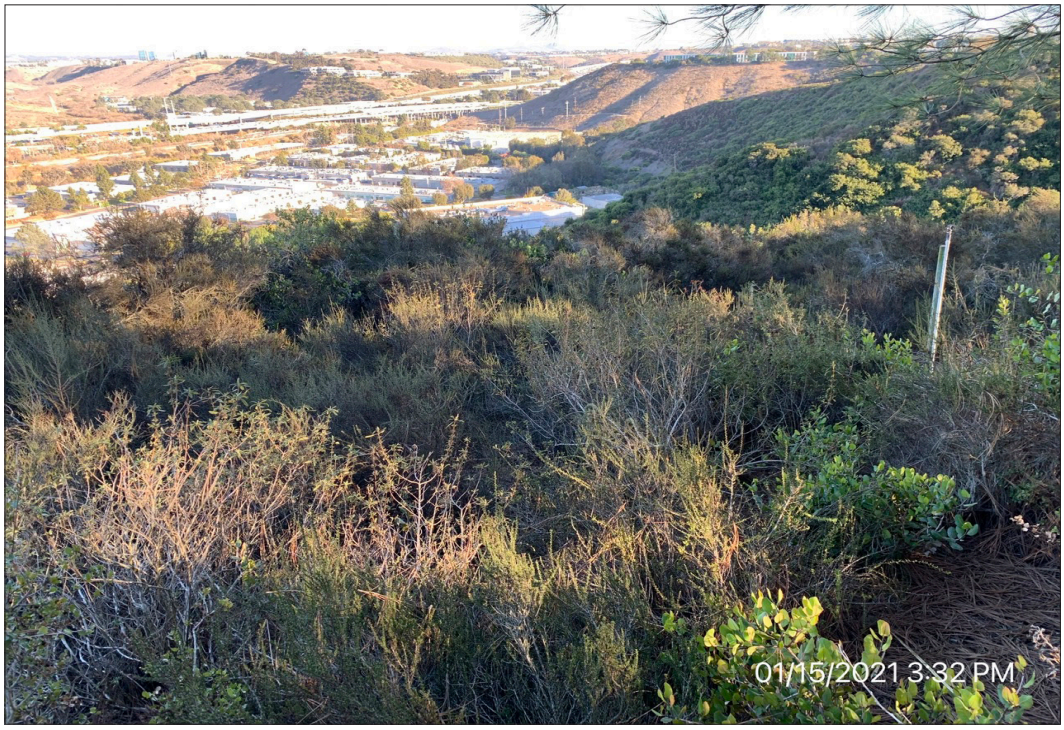

Photo 10. Overview of southern mixed chaparral within the open space easement (facing east).

Photo 11. Southern portion of developed land bordering southern mixed chaparral within the open space easement (facing north).

Photo 12. Southern portion of developed land bordering southern mixed chaparral within the open space easement (facing north).

Appendix B

Plant Species Observed

Family	Scientific Name*,†	Common Name
Anacardiaceae	*Malosma laurina*	laurel sumac
	Rhus integrifolia	lemonadeberry
	Rhus ovata	sugar bush
	*Schinus molle**	Peruvian pepper tree
Apiaceae	*Foeniculum vulgare**	fennel
Apocynaceae	*Vinca major**	vinca
Asteraceae	*Artemisia californica*	California sagebrush
	Baccharis pilularis	coyote brush
	Encelia californica	California encelia
	Hazardia squarrosa	saw-toothed goldenbush
	Isocoma menziesii	Menzies' goldenbush
	Pseudognaphalium canescens	Wright's cudweed
	*Sonchus sp.**	sow thistle
Asphodelaceae	*Asphodelus fistulosus**	onionweed
Cactaceae	*Opuntia oricola*	prickly pear
Ericaceae	*Xylococcus bicolor*	mission manzanita
Fabaceae	*Acacia* sp.*	acacia
	Acmispon glaber	deerweed
Fagaceae	*Quercus berberidifolia*	inland scrub oak
	Quercus dumosa†	Nuttall's scrub oak
Geraniaceae	*Erodium cicutarium**	redstem filaree
Lamiaceae	*Salvia mellifera*	black sage
Myrsinaceae	*Lysimachia arvensis**	scarlet pimpernel
Myrtaceae	*Eucalyptus* sp.*	gum tree
Oxalidaceae	*Oxalis pes-caprae**	Bermuda buttercup
Pinaceae	*Pinus torreyana* ssp. *torreyana*†	Torrey pine
Poaceae	*Cortaderia jubata**	pampas grass
	*Pennisetum setaceum**	fountain grass
Polygonaceae	*Eriogonum fasciculatum*	buckwheat
Rosaceae	*Adenostoma fasciculatum*	chamise
	Rosa californica	California rose
Salicaceae	*Salix lasiolepis*	arroyo willow
Strelitziaceae	*Strelitzia reginae**	bird of paradise

† Special Status Species

* Non-native Species

Appendix C

Animal Species Observed or Otherwise Detected

Taxon		Scientific Name	Common Name
Order	**Family**		
VERTEBRATES			
Reptiles			
Squamata	Phrynosomatidae	*Sceloporus occidentalis*	Western Fence Lizard
	Viperidae	*Crotalus oreganus helleri*	Southern Pacific Rattlesnake
Birds			
Accipitriformes	Accipitridae	*Buteo lineatus*	Red-shouldered Hawk
Apodiformes	Trochilidae	*Calypte anna*	Anna's Hummingbird
		Selasphorus sasin	Allen's Hummingbird
Passeriformes	Corvidae	*Aphelocoma californica*	California Scrub-Jay
	Passerellidae	*Melospiza melodia*	Song Sparrow
		Melozone crissalis	California Towhee
		Pipilo maculatus	Spotted Towhee
	Sylviidae	*Chamaea fasciata*	Wrentit
	Tyrannidae	*Sayornis nigricans*	Black Phoebe

Appendix D

Special Status Plant Species Observed or with Potential to Occur

Species	Status[1]	Habit, Ecology and Life History	Potential to Occur[2]
San Diego thorn-mint *(Acanthomintha ilicifolia)*	FT/SE CRPR 1B.1 MSCP Covered NE	Annual herb. Typically found on clay soils within chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Flowering period: April to June. Elevation: below 3,150 feet (960 meters).	**None.** The site lacks suitable clay soils associated with the species.
Nuttall's lotus (*Acmispon prostratus*)	--/-- CRPR 1B.1 MSCP Covered	Annual herb. Found in the coastal regions of southern California and Baja California. Habitats include coastal dunes, coastal scrub with sandy soils, and disturbed areas. Flowering Period: March to June. Elevation: below 33 feet (10 meters).	**Low.** Though the species has been observed within the project vicinity, the site is located above the species known elevation range.
California adolphia (*Adolphia californica*)	--/-- CRPR 2B.1	Perennial shrub. Most often found in sage scrub but occasionally occurs in peripheral chaparral habitats, particularly hillsides near creeks on clay soils. Flowering period: December to April. Elevation: below 1,312 feet (400 meters).	**None**. The site lacks suitable clay soils associated with the species.
Shaw's agave (*Agave shawii* var*. shawii*)	--/-- CRPR 2B.1 MSCP Covered NE	Perennial succulent. Most often found on coastal bluffs and along mesas and foothills. Flowering period: September to May. Elevation: below 984 feet (300 meters).	**Low.** Suitable coastal bluff habitat is absent and observations in the project vicinity are concentrated along the immediate coast within the Torrey Pines State Natural Reserve.
Singlewhorl burrobrush (*Ambrosia monogyra*)	--/-- CRPR 2B.2	Perennial shrub. Found on sandy soils within washes and dry riverbeds within chaparral communities. Flowering period: September to November. Elevation: below 1,640 feet (500 meters).	**None.** Suitable wash or riverbed habitat is not present within the project site.
San Diego ambrosia (*Ambrosia pumila*)	FE/-- CRPR 1B.1 MSCP Covered NE	Perennial herb. Occurs in open habitats in coarse substrates near drainages and in upland areas on clay slopes. Found in sparse grasslands and marginal wetlands such as dry drainages, stream floodplain terraces, vernal pool margins, and alkali playas. Flowering period: April to July. Elevation: 164 to 1,969 feet (50 to 600 meters).	**None.** The project site lacks suitable wetland habitats and other soils and habitats associated with this species.
Aphanisma (*Aphanisma blitoides*)	--/-- CRPR 1B.2 MSCP Covered NE	Annual herb. Found coastally on bluffs and saline sand within sage scrub communities. Flowering period: June to September. Elevation: below 656 feet (200 meters).	**None.** The project site lacks suitable coastal bluffs associated with the species.
Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*)	FE/-- CRPR 1B.1 MSCP Covered	Perennial shrub. Found within relatively open, coastal chaparral. At occasional inland sites it occurs in denser mixed chaparral vegetation. Elevation: below 1,200 feet. Flowering Period: December to June.	**High.** Suitable chaparral habitat occurs within the project site and the species has been documented to occur within the project vicinity.

Species	Status[1]	Habit, Ecology and Life History	Potential to Occur[2]
San Diego sagewort (*Artemisia palmeri*)	--/-- CRPR 4.2	Perennial herb. Typically found along stream courses, often beneath riparian woodland, on sandy and mesic soils. May occur in coast live oak woodland, coastal sage scrub, and southern mixed chaparral. Flowering period: June to October. Elevation: below 1,969 feet (600 meters).	**Low.** The project site lacks suitable natural stream courses and other mesic areas associated with the species.
Western spleenwort (*Asplenium vespertinum*)	--/-- CRPR 4.2	Perennial rhizomatous herb. Occurs in chaparral, cismontane woodland, and coastal scrub along rocky bluffs. Flowering period: February to June. Elevation: 590 to 3,280 feet (180 to 1,000 meters).	**None.** The site is located below the known elevation range for the species, and there are no documented occurrences within the project vicinity.
Coastal dunes milk vetch (*Astragalus tener* var. *titi*)	FE/SE CRPR 1B.1 MSCP Covered NE	Annual herb. Occurs in coastal bluff scrub, coastal dunes, and coastal prairie. Associated with moist, sandy depressions of bluffs or dunes near the Pacific Ocean. Flowering period: March to May. Elevation: 5 to 165 feet (1 to 50 meters).	**None.** Suitable coastal bluffs and dunes are absent from the project site.
Coulter's saltbush (*Atriplex coulteri*)	--/-- CRPR 1B.2	Perennial herb. Occurs on alkaline or clay soils within coastal dunes, coastal bluffs, coastal sage scrub, and grasslands. Flowering periods March to October. Elevation: below 1,510 feet (460 meters).	**None.** Suitable alkaline and clay soils are not mapped within the project site.
South coast saltscale (*Atriplex pacifica*)	--/-- CRPR 1B.2 County List A	Annual herb. Found coastally on dunes and within playas in alkali sinks and wetland riparian communities. Flowering period: March to October. Elevation: below 984 feet (300 meters).	**None.** The project site lacks suitable coastal dunes, playas, or wetland riparian communities to support this species.
Parish's brittlescale (*Atriplex parishii*)	--/-- CRPR 1B.1	Annual herb. Found in playas or vernal pools within shadscale scrub, alkali sinks, freshwater wetlands, or other wetland riparian communities. Flowering period: June to October. Elevation: below 1,542 feet (470 meters).	**None.** The project site lacks suitable playas, vernal pools, or wetland riparian communities to support this species.
Encinitas baccharis (*Baccharis vanessae*)	FT/SE CRRP 1B.1 MSCP Covered NE	Perennial shrub. Grows on sandstone within chaparral, maritime chaparral, woodlands, and Torrey-pine forest understory. Flowering period: August to December. Elevation: 196 to 2,400 feet (60 to 720 meters).	**Moderate.** Suitable chaparral habitat occurs within the project site but the there are no documented occurrences within the project vicinity.

Species	Status[1]	Habit, Ecology and Life History	Potential to Occur[2]
San Diego County viguiera (*Bahiopsis laciniata*)	--/-- CRPR 4.3	Perennial shrub. Occurs on a variety of soil types within coastal sage scrub. Generally, shrub cover is more open than at mesic, coastal locales supporting sage scrub. Flowering period: February to August. Elevation: 295 to 2,461 feet (90 to 750 meters).	**High.** Suitable sage scrub habitat occurs within the project site and the species has been reported to occur within the project vicinity.
Golden-spined cereus (*Bergerocactus emoryi*)	--/-- CRPR 2B.2	Stem succulent shrub. Occurs coastally on sandy open hills within chaparral, sage scrub, and closed-cone pine forests. Flowering period: May to June. Elevation: below 328 feet (100 meters).	**Moderate.** Suitable habitat is present and the species has been reported to occur within the Torrey Pines State Nature Reserve, however, sandy areas typically associated with the species do not occur.
San Diego goldenstar (*Bloomeria clevelandii*)	--/-- CRPR 1B.1 MSCP Covered	Perennial bulbiferous herb. Occurs in valley grasslands and coastal scrub, particularly near mima mound topography or in the vicinity of vernal pools, on clay soils. Flowering period: April to May. Elevation: 164 to 1,526 (50 to 465 meters).	**None.** The project site lacks clay soils associated with the species.
Thread-leaved brodiaea (*Brodiaea filifolia*)	FT/SE CRPR 1B.1 MSCP Covered NE	Perennial bulbiferous herb. Often associated with vernal pools and known from habitats including valley grassland, foothill woodland, coastal sage scrub, freshwater wetlands, and wetland-riparian. Flowering period: March to June. Elevation: 82 to 2821 feet (25 to 860 meters).	**None.** The project site lacks suitable vernal pools or other wetland habitats associated with the species.
Orcutt's brodiaea (*Brodiaea orcuttii*)	--/-- CRPR 1B.1 MSCP Covered	Perennial bulbiferous herb. Occurs within closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools. Prefers mesic or clay soils. Flowering period: May to July. Elevation: 98 to 5,550 feet (30 to 1,692 meters).	**None.** The project site lacks mesic or clay soils associated with the species.
Brewer's calandrinia (*Calandrinia breweri*)	--/-- CRPR 4.2	Annual herb. Occurs within chaparral or coastal scrub on sandy or loamy soil, disturbed sites, and after burns. Flowering Period: January to June. Elevation: 32 to 4,000 feet (10 to 1,220 meters).	**Moderate.** The site contains suitable habitat but documented occurrences within the vicinity are limited to historical observations.
Dunn's mariposa lily (*Calochortus dunnii*)	--/-- CRPR 1B.2 County List A MSCP Covered MSCP NE	Perennial bulbiferous herb. Found in closed-cone coniferous forest, chaparral, and valley and foothill grassland, typically on gabbroic, metavolcanics, or rocky soils. Flowering Period: Feb to June. Elevation: 600 to 6,000 feet (185 to 1,830 meters).	**None.** The project site lacks suitable gabbroic, metavolcanic, and rocky soils. There are no documented occurrences within the project vicinity.

Species	Status[1]	Habit, Ecology and Life History	Potential to Occur[2]
Lakeside ceanothus (*Ceanothus cyaneus*)	--/-- CRPR 1B.2 MSCP Covered	Perennial shrub. Occurs on slopes and ridgelines in closed cone coniferous forest and chaparral. Flowering period: April to June. Elevation: 770 to 2,540 feet (235 to 755 meters).	**None.** The project site is located below the species known elevation range.
Wart-stemmed ceanothus (*Ceanothus verrucosus*)	--/-- CRPR 2B.2 MSCP Covered	Perennial shrub. Found on rocky slopes within chaparral, particularly southern maritime chaparral. Flowering period: December to May. Elevation: below 1,148 feet (350 meters).	**High.** Suitable southern maritime chaparral habitat occurs in the central portion of the site and multiple occurrences of this species have been recorded nearby.
Southern tarplant (*Centromadia parryi* ssp. *australis*)	--/-- CRPR 1B.1	Annual herb. Found at the margins of salt marshes, vernally mesic areas within grasslands, and vernal pools. Found in the coastal regional from Santa Barbara County south to San Diego County. Flowering Period: May to November. Elevation: below 1,575 feet (480 meters).	**None.** The project site lacks suitable vernally mesic areas or vernal pools where this species is typically found.
Smooth tarplant (*Centromadia pungens* ssp. *laevis*)	--/-- CRPR 1B.1	Annual herb. Occurs on alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland. Flowering Period: April to September. Elevation: below 2,100 feet (640 meters).	**None.** The project site lacks suitable habitat and soils associated with the species.
Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*)	--/-- CRPR 1B.1	Annual herb. Found on coastal dunes and sandy coastal bluff scrub. Typically, in proximity to moist ocean breezes. Elevation: below 328 feet (100 meters). Flowering Period: January to August.	**None.** The project site lacks suitable coastal dune and coastal bluff habitat.
Southern mountain misery (*Chamaebatia australis*)	--/-- CRPR 4.2	Perennial shrub. Occurs in chaparral on gabbroic or metavolcanics soils. Blooms November to May. Elevation: 980 to 3,350 feet (300 to 1,020 meters).	**None.** The site lacks suitable gabbroic soils and occurs below the species known elevation range.
Orcutt's spineflower (*Chorizanthe orcuttiana*)	FE/SE CRPR 1B.1	Annual herb. Found in sandy openings of coastal sage scrub, chaparral, and coniferous forests. Flowering period: March to May. Elevation: below 410 feet (125 meters).	**Moderate.** Suitable habitat occurs within the project site and the species has been documented to occur within the project vicinity, but the site lacks sandy soils often associated with the species.
Long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*)	--/-- CRPR 1B.2	Annual herb. Occurs in chaparral, coastal scrub, and native grassland, often in sandy soils. Flowering period: April to June. Elevation: 98 to 4,920 feet (30 to 1,500 meters).	**Moderate.** Suitable habitat occurs within the project site and the species has been documented to occur within the project vicinity, but the site lacks sandy soils often associated with the species.

Species	Status[1]	Habit, Ecology and Life History	Potential to Occur[2]
Delicate clarkia (*Clarkia delicata*)	--/-- CRPR 1B.2 County List A	Annual herb. Occurs in shaded areas or the periphery of oak woodlands and cismontane chaparral, often on gabbroic soils. Flowering period: April to May. Elevation: below 3,281 feet (1,000 meters).	**Low.** The project site lacks gabbroic soils associated with the species and there are no documented occurrences within the project vicinity.
Summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*)	--/-- CRPR 1B.2	Perennial shrub. Occurs in chaparral and cismontane woodland. Flowering period: May to June. Elevation: 328 to 1,804 feet (100 to 550 meters).	**Low.** Suitable chaparral habitat occurs within the project site but there are documented occurrences within the project site. This conspicuous perennial shrub would most likely have been observed if present.
Small-flowered morning-glory (*Convolvulus simulans*)	--/-- CRPR 4.2	Annual herb. Occurs on clay soils and serpentinite seeps in openings within chaparral, coastal scrub, and native grassland. Flowering period: April to June. Elevation: 98 to 2,871 feet (30 to 875 meters).	**None**. Suitable clay soils and serpentinite seeps are not mapped within the project site.
San Diego sand aster (*Corethrogyne filaginifolia* var. *incana*)	--/-- CRPR 1B.1	Perennial herb. Occurs within grasslands, coastal bluff scrub, coastal scrub, and chaparral. Flowering period: June to September. Elevation: 15 to 2,362 feet (5 to 720 meters).	**Low.** Suitable habitat occurs is present but there are no documented occurrences within the project vicinity.
Del Mar Mesa sand aster (*Corethrogyne filaginifolia* var. *linifolia*)	--/-- CRPR 1B.1 MSCP Covered	Perennial herb. Found on sandy soils and disturbed areas within southern maritime chaparral, coastal sage scrub, and coastal bluffs. Flowering Period: May to September. Elevation: below 492 feet (150 meters).	**Moderate.** Suitable habitat and disturbed areas occur within the project, however, reported occurrences within the vicinity are limited to historical observations.
Snake cholla (*Cylindropuntia californica* var. *californica*)	--/-- CRPR 1B.1 MSCP Covered NE	Perennial stem succulent. Occurs in chaparral and coastal scrub. Flowering period: April to July. Elevation: 50 to 950 feet (15 to 290 meters).	**Low.** Suitable habitat occurs within the project site but there are no reported occurrences within the project vicinity. This conspicuous perennial shrub would most likely have been observed if present.
Western dichondra (*Dichondra occidentalis*)	--/-- CRPR 4.2 County List D	Perennial herb. Found among rocks and shrubs within grasslands, coastal sage scrub, chaparral, and oak woodlands. Often proliferates on recently burned slopes. Flowering period: March to June. Elevation: below 1,706 feet (520 meters).	**Moderate.** Suitable habitat occurs within the project site and there are documented occurrences within the project vicinity, however, the site lacks rocky areas and burned slopes typically associated within the species.
Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*)	--/-- CRPR 1B.1 MSCP Covered NE	Perennial herb succulent. Grows on open, rocky slopes, often on serpentine or clay dominated soils in coastal sage scrub and valley grassland communities. Flowering period: April to June. Elevation: below 1,476 feet (450 meters).	**Low.** The site lacks serpentine and clay soils typically associated with the species, and there are no documented occurrences within the project vicinity.

Species	Status[1]	Habit, Ecology and Life History	Potential to Occur[2]
Short-leaved dudleya (*Dudleya brevifolia*)	--/SE CRPR 1B.1 MSCP Covered NE	Perennial herb. Occurs in open areas and sandstone bluffs of coastal scrub, chaparral, or Torrey pine forest. Flowering Period: April to May. Elevation: 98 to 820 feet (30 to 250 meters).	**Low.** The species is known to occur within the vicinity at the Torrey Pines State Nature Reserve, however, the site lacks suitable sandstone bluff typically associated with the species.
Variegated dudleya (*Dudleya variegata*)	--/-- CRPR 1B.2 MSCP Covered NE	Perennial herb succulent. Occurs on clay soils of dry hillsides and mesas within chaparral, valley grassland, foothill woodland and coastal sage scrub communities. Flowering period: April to June. Elevation: below 984 feet (300 meters).	**Low.** There are documented occurrences within the project vicinity, but the site lacks clay soils typically associated with the species.
Sticky dudleya (*Dudleya viscida*)	--/-- CRPR 1B.2 MSCP Covered	Perennial herb. Occurs in rocky areas within coastal bluffs, coastal sage scrub, chaparral, and woodlands. Grows primarily on very steep north-facing slopes. Flower period: May to June. Elevations below 1,800 feet.	**Low.** Though suitable habitat is present, there are no documented occurrences within the project vicinity and the site lacks north-facing slopes.
Palmer's goldenbush (*Ericameria palmeri* var. *palmeri*)	--/-- CRPR 1B.1 MSCP Covered	Perennial Shrub. Found in mesic areas within coastal sage scrub and chaparral. Flowering period: September to November. Elevation: below 1,968 feet (600 meters).	**Low.** Coastal sage scrub habitat occurs within the project site but the site lacks suitable mesic areas and there are no documented occurrences within the project vicinity.
San Diego button-celery (*Eryngium aristulatum var. parishii*)	FE/SE CRPR 1B.1 MSCP Covered VPHCP Covered VP species	Annual or perennial herb. Grows in vernal pools and other mesic areas, such as marshes. Flowering period: May to June. Elevation: below 2,313 feet (705 meters).	**None. T**he project site lacks suitable vernal pool or mesic habitat to support this species.
Sand-loving wallflower (*Erysimum ammophilum*)	--/-- CRPR 1B.2 MSCP Covered	Perennial herb. Found in open areas and sandy soils within coastal dunes, coastal strand, coastal sage scrub, and maritime chaparral. Flowering period: February to June Elevation: below 197 feet (60 meters).	**Moderate.** Suitable coastal sage scrub habitat occurs is present and the species has been documented to occur within the Torrey Pines State Nature Reserve, however, sandy soils are generally absent from the site.
Cliff spurge (*Euphorbia misera*)	--/-- CRPR 2B.2	Perennial shrub. Found in rocky areas of coastal bluffs, coastal sage scrub, and Mojavean desert scrub. Flowering period: December to August. Elevation: below 1,800 feet (500 meters).	**Moderate.** Suitable coastal sage scrub habitat occurs is present and the species has been documented to occur within the Torrey Pines State Nature Reserve, however, rocky areas do not occur within the project site.
San Diego barrel cactus (*Ferocactus viridescens*)	--/-- CRPR 2B.1 MSCP Covered	Perennial (stem succulent) shrub. Grows in sandy to rocky areas within coastal scrub, chaparral, grasslands, and vernal pools. Flowering period: May to June. Elevation: below 1,480 feet (450 meters).	**High.** Suitable habitat occurs within the project site and there are reported occurrences within the project vicinity, primarily within the Torrey Pines State Nature Reserve.

Species	Status[1]	Habit, Ecology and Life History	Potential to Occur[2]
Campbell's liverwort (*Geothallus tuberosus*)	--/-- CRPR 1B.1	Bryophyte. Grows in moist coastal scrub and vernal pools. Elevation: 30 to 1,970 feet (10 to 600 meters).	**None.** The project site lacks suitable moist coastal scrub and vernal pool habitat known to support this species.
Mission Canyon bluecup (*Githopsis diffusa* ssp. *filicaulis*)	--/-- CRPR 3.1	Annual herb. Occurs in mesic and disturbed areas within chaparral. Flowers April to June. Flowering period: April to June. Elevation: 1,475 and 2,300 feet (450 to 700 meters).	**None.** The project site lacks suitable mesic areas and occurs outside of the known elevation range for this species.
San Diego gumplant (*Grindelia hallii*)	--/-- CRPR 1B.2	Perennial herb. Typically occurs with sunny openings of chaparral and lower montane coniferous forests. Also found in meadows and seeps, and grasslands. Prefers very wet locales in early spring, although such places usually dry quickly as spring turns to summer. Flowering Period: May to October. Elevation: 605 to 5,725 feet (185 to 1,745 meters).	**None.** The project site lacks suitable wet locales preferred by this species and the site occurs below the species known elevation range.
Palmer's grapplinghook (*Harpagonella palmeri*)	--/-- CRPR 4.2	Annual herb. Found in clay soils in annual grasslands and coastal sage scrub. Flowering period: March to May. Elevation: 65 to 3,100 feet (20 to 955 meters).	**None.** The project site lacks suitable clay soils to support this species.
Beach goldenaster (*Heterotheca sessiliflora* ssp. *sessiliflora*)	--/-- CRPR 1B.1	Perennial herb. Occurs in coastal chaparral, coastal dunes, and coastal scrub. Flowering Period: March to December. Elevation: below 4,020 feet (1,225 meters).	**Low.** Although this species has not been reported within five miles of the project site, the project site partially consists of suitable chaparral and coastal scrub habitat to support this species.
Graceful tarplant (*Holocarpha virgata* ssp. *elongata*)	--/-- CRPR 4.2	Annual herb. Occurs in grasslands, coastal scrub, chaparral, and cismontane woodland. Flowering period: May to November. Elevation: 66 to 3,675 feet (20 to 1,120 meters).	**High.** Suitable chaparral and coastal scrub habitat is present and there are reported occurrences within the project vicinity.
Vernal barley (*Hordeum intercedens*)	--/-- CRPR 3.2	Annual herb. Occurs in vernal pools, alkaline flats, and dry, saline streambeds. Also found in saline flats and depressions within grasslands. Flowering period: March to June. Elevation: below 3,280 feet (1,000 meters).	**None.** The project site lacks suitable vernal pool, alkaline flat, or dry, saline streambed habitat to support this species.
Ramona horkelia (*Horkelia truncata*)	--/-- CRPR 1B.3	Perennial herb. Occurs on clay and gabbroic soils within chaparral and woodlands. Flowering period: May to June. Elevation: 1,310 to 4,265 feet (400 to 1,300 meters).	**None.** The project site lacks suitable clay or gabbroic soils to support his species and falls outside of the known elevation range for this species.

Species	Status[1]	Habit, Ecology and Life History	Potential to Occur[2]
Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*)	--/-- CRPR 1B.2	Perennial shrub. Occurs in sandy soil and disturbed areas on the inland side of dunes, hillsides, and arroyos within coastal sage scrub and chaparral communities. Flowering period: July to November. Elevation: below 656 feet (200 meters).	**High.** Suitable habitat and disturbed areas occur within the project site and this species has been reported to occur within the project vicinity.
San Diego marsh-elder (*Iva hayesiana*)	--/-- CRPR 2B.2	Perennial herb. Found in alkaline flats, depressions, and streambanks within wetland communities. Flowering period: April to October. Elevation: 32 to 1,640 feet (10 to 500 meters).	**None.** Suitable alkaline flats, streambanks, and other wetland habitat to support is absent from the project site.
Southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*)	--/-- CRPR 4.2	Perennial herb. Found in moist saline environments such as alkaline seeps and meadows, and coastal salt marshes and swamps. Flowering period: May to June. Elevation: below 984 feet (300 meters).	**None.** Suitable saline habitats, alkaline seeps and meadows, and marsh or swamp habitat to support is absent from the project site.
Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)	--/-- CRPR 1B.1	Annual herb. Grows in vernal pools, playas, and saline habitats within alkali sinks, coastal salt marshes, and wetland communities. Flowering period: April to May. Elevation: below 3,281 feet (1,000 meters).	**None.** The project site lacks suitable vernal pool or other saline wetland communities to support this species.
Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*)	--/-- CRPR 4.3	Annual herb. Grows in openings in sage scrub and chaparral at the coastal and foothill elevations. Typically observed in relatively dry, exposed locales rather than beneath a shrub canopy. Also, found in disturbed areas. Flowering period: March to June. Elevation: below 9,186 feet (2,800 meters).	**High**. Suitable habitat occurs within the project site and this species has been reported within the project vicinity, primarily within the Torrey Pines State Natural Reserve.
Sea dahlia (*Leptosyne maritima*)	--/-- CRPR 2B.2	Perennial herb. Occurs within coastal scrub and coastal bluffs scrub. Flowering period: March to May. Elevation: below 500 feet (150 meters).	**High**. Suitable coastal scrub occurs within the project and the species has been documented to occur within the project vicinity, primarily within the Torrey Pines State Natural Reserve.
Small-flowered microseris (*Microseris douglasii* ssp. *platycarpha*)	--/-- CRPR 4.2	Annual herb. Found on clay soils within coastal sage scrub, woodlands, and grasslands. Often near vernal pools or serpentine outcrops. Flower period: March to May. Elevation: 49 to 3,510 feet (15 to 1,070 meters).	**None.** The project site lacks suitable clay soils, vernal pools, and serpentine outcrops to support this species. Furthermore, there are no documented occurrences within the project vicinity.

Species	Status[1]	Habit, Ecology and Life History	Potential to Occur[2]
Willowy monardella (*Monardella viminea*)	FE/SE CRPR 1B.1 MSCP Covered	Perennial herb. Occurs within alluvial ephemeral washes within coastal scrub, chaparral, and riparian habitats. Generally, there is no canopy cover, and river cobbles may lie in close proximity. Flowering period: June to August. Elevations below 1,000 feet (305 meters).	**None.** The project site lacks alluvial ephemeral washes to support this species. Furthermore, there are no documented occurrences within the project vicinity.
Felt-leaved monardella (*Monardella hypoleuca* ssp. *lanata*)	--/-- CRPR 1B.2 County List A MSCP Covered	Perennial rhizomatous herb. Occurs on rocky, granitic slopes or hilltops within chaparral and woodlands. Flowering period: June to August. Elevation: 1,000 to 5,170 feet (300 to 1,575 meters).	**None.** Though chaparral habitat occurs within the project site, suitable rocky and granitic soils are absent, and the site is located below the species known elevation range. Furthermore, there are no documented occurrences within the project vicinity.
Little mousetail (*Myosurus minimus* ssp. *apus*)	--/-- CRPR 3.1	Annual herb. Occurs in alkaline vernal pools within native grassland. Flowering period: March to June. Elevation: 65 to 2,100 feet (20 to 640 meters).	**None.** Suitable vernal pool habitat does not occur within the project site.
Spreading navarretia (*Navarretia fossalis*)	FT/-- CRPR 1B MSCP Covered VPHCP Covered VP species	Annual herb. Occurs in vernal pools, vernal swales, or roadside depressions. Population size is strongly correlated with rainfall. Depth of pool appears to be a significant factor as this species is rarely found in shallow pools. Flowering period: April to June. Elevation: 98 to 4,265 feet (30 to 1,300 meters).	**None.** Suitable vernal pool habitat does not occur within the project site.
Prostrate vernal pool navarretia (*Navarretia prostrata*)	--/-- CRPR 1B.1	Annual herb. Occurs in mesic soil within vernal pools in coastal scrub, meadows, seeps, valleys, and foothill grasslands. Grows at mid-levels within the deeper pools to the basin bottoms of the shallower pools. Flowering period: April to July. Elevations below 4,000 feet (1,220 meters).	**None.** Suitable vernal pool habitat does not occur within the project site.
Coast woolly-heads (*Nemacaulis denudata* var. *denudata*)	--/-- CRPR 1B.2	Annual herb. Occurs within coastal dunes. The back dunes in mildly protected areas seem to be preferred. Flowering Period: April to September. Elevation: below 330 feet (100 meters).	**None.** The project site lacks suitable coastal dune habitat.
California adder's-tongue (*Ophioglossum californicum*)	--/-- CRPR 4.2 County List D	Perennial rhizomatous herb. Occurs within mesic areas of chaparral and grassland habitats, and along the margins of vernal pools. Flowering period: January to June. Elevation: 196 to 1,722 feet (60 to 525 meters).	**Low.** Chaparral habitat occurs within the project site, but the site lacks suitable mesic areas and there are no documented occurrences within the project vicinity.

Species	Status[1]	Habit, Ecology and Life History	Potential to Occur[2]
Orcutt's grass (*Orcuttia californica*)	FE/SE CRPR 1B.1 MSCP Covered VPHCP Covered VP species	Annual grass. Grows in vernal pools in valley grassland and wetland communities. Flowering period: April to August. Elevation: 197 to 2,165 feet (60 to 660 meters).	**None. T**he project site lacks suitable vernal pool habitat to support this species.
Parish's broomrape (*Orobanche parishii* ssp. *brachyloba*)	--/-- CRPR 4.2	Parasitic perennial herb. Grows on dunes in coastal strand areas or coastal sage scrub. Flowering period: April to October. Elevation: below 984 feet (300 meters).	**None.** Suitable dune habitat, or other sandy areas, do not occur within the project site.
Golden-rayed pentachaeta (*Pentachaeta aurea* ssp. *aurea*)	--/-- CRPR 4.2	Annual herb. Occurs in grassy areas within coastal scrub, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland. Flowering period: March to July. Elevation: 260 to 6,100 feet (80 and 1,850 meters).	**Low.** Suitable grassy areas associated with the species do not occur within the project site.
Brand's star phacelia (*Phacelia stellaris*)	--/-- CRPR 1B.1	Annual herb. Occurs in sandy openings within coastal dunes and coastal scrub. Flowering Period: March to June. Elevation: below 1,315 feet (400 meters).	**Low.** The project site lacks suitable coastal and sandy openings associated with this species.
Torrey pine (*Pinus torreyana* ssp. *torreyana*)	--/-- CRPR 1B.2 MSCP Covered	Perennial evergreen tree. Occurs within closed cone coniferous forest and chaparral atop sandstone soils. Elevation: 98 and 430 feet (30 to 131 meters).	**Present.** Several cultivated individuals of this species are present within the developed portion of the project site in landscaped areas. No naturally occurring individuals are present.
Chaparral rein orchid (*Piperia cooperi*)	--/-- CRPR 4.2	Perennial herb. Generally found on dry sites within grasslands, chaparral, and cismontane woodland. Flowering period: March to June. Elevation: 50 to 5,200 feet (15 to 1,585 meters).	**Low.** Suitable chaparral habitat occurs within the project site, however, there are no documented occurrences within the project vicinity.
San Diego mesa mint (*Pogogyne abramsii*)	FE/SE CRPR 1B.1 MSCP Covered VPHCP Covered VP Species	Annual herb. Occurs within vernal pools. Flowering period: March to July. Elevation: 295 and 660 feet (90 to 200 meters).	**None.** Suitable vernal pool habitat does not occur within the project site.
Nuttall's scrub oak (*Quercus dumosa*)	--/-- CRPR 1B.1	Perennial shrub. Occurs on sandy or clay loam soils near the coast within coastal scrub, chaparral, cismontane woodland, and riparian woodland. Flowering period: March to May. Elevation: below 656 feet (200 meters).	**Present.** This species was observed within southern maritime chaparral habitat in the central portion of the project site.

Species	Status[1]	Habit, Ecology and Life History	Potential to Occur[2]
Engelmann oak (*Quercus engelmannii*)	--/-- CRPR 4.2 County List D	Perennial tree. Occurs on slopes and foothills within grasslands, chaparral, oak woodland, and riparian woodlands. Flowering period: March to June. Elevation: 160 to 4,300 feet (50 to 1,300 meters).	**Low.** Suitable chaparral habitat occurs within the project site but there are no documented occurrences within the project vicinity. This conspicuous perennial tree would most likely have been observed if present.
Munz's sage (*Salvia munzii*)	--/-- CRPR 2B.2	Perennial shrub. Occurs within chaparral and coastal scrub. Flowering period: February to April. Elevation: 370 and 3,500 feet (115 to 1,065 meters).	**Low.** Suitable chaparral and coastal scrub habitat occur is present but the project site is located below the species known elevation range, and there are no reported occurrences within the project vicinity.
Ashy spike-moss (*Selaginella cinerascens*)	--/-- CRPR 4.1	Rhizomatous fern. Occurs in chaparral and coastal sage scrub. Elevation: below 1,804 feet (550 meters).	**High.** Suitable chaparral and coastal scrub habitat exist within the project site and this species has been documented to occur within the project vicinity.
Chaparral ragwort (*Senecio aphanactis*)	--/-- CRPR 2B.2	Annual herb. Occurs on alkali flats and dry, open, rocky areas within foothill woodland, northern coastal scrub, and coastal sage scrub communities. Flowering period: February to May. Elevation: 33 to 1,804 feet (10 to 550 meters).	**Low.** Suitable coastal sage scrub habitat occurs within the project site but there are no documented occurrences within the project vicinity.
Salt spring checkerbloom (*Sidalcea neomexicana*)	--/-- CRPR 2B.2	Perennial herb. Occurs within chaparral, lower montane coniferous woodland, Mojavean desert scrub, playas, and coastal scrub. Flowering period: March to June. Elevation: 50 and 5,020 feet (15 to 1,530 meters).	**Low.** Suitable chaparral and coastal scrub habitat occur within the project site but there are no documented occurrences within the project vicinity.
Bottle liverwort (*Sphaerocarpos drewei*)	--/-- CRPR 1B.1	Bryophyte. Grows in shady areas in coastal sage scrub habitat. Elevation: 295 to 1,970 feet (90 to 600 meters).	**Low.** Suitable sage scrub habitat occurs within the project site, but there are no documented occurrences within the project vicinity.
San Diego County needle grass (*Stipa diegoensis*)	--/-- CRPR 4.2	Perennial herb. Found in rocky, mesic soils near streams or along the coast within coastal scrub and chaparral. Flowering period: February to June. Elevation: 30 to 2,600 feet (10 to 800 meters).	**None.** The project site lacks suitable mesic soils and natural stream habitat to support this species.
Estuary seablite (*Suaeda esteroa*)	--/-- CRPR 1B.2	Perennial herb. Found in coastal salt marshes and swamps. Flowering period: May to October. Elevation: below 16 feet (5 meters).	**None.** The project site lacks coastal salt marshes or swamps species associated within the species and occurs above the species known elevation range.

Species	Status[1]	Habit, Ecology and Life History	Potential to Occur[2]
Woven-spored lichen (*Texosporium sancti-jacobi*)	--/-- CRPR 3	Lichen. Grows in arid to semiarid shrub steppe, grassland, or savannah communities. Elevation: below 3,300 feet (1,000 meters).	**None.** The project site lacks suitable grassland habitat to support this species.
Rush-like bristleweed (*Xanthisma junceum*)	--/-- CRPR 4.3	Perennial herb. Grows on dry hillsides within coastal sage scrub and chaparral. Flowering period: May to January. Elevation: 785 to 3,280 feet (240 to 1,000 meters).	**None.** The project site occurs outside of the known elevation range for this species and there are no documented occurrences within the project vicinity.

[1] Listing codes as follows: F = Federal; S = State of California; E = Endangered; T = Threatened; CE = Candidate Endangered; R = Rare

CRPR = California Native Plant Society Rare Plant Rank: 1A – presumed extirpated in California and either rare or extinct elsewhere; 1B – rare, threatened, or endangered in California and elsewhere; 2A – presumed extirpated in California, but more common elsewhere; 2B – rare, threatened, or endangered in California, but more common elsewhere; 3 – more information needed; 4 – watch list for species of limited distribution. Extension codes: .1 – seriously endangered; .2 – moderately endangered; .3 – not very endangered.

MSCP Covered Species: Covered Species under City Multiple Species Conservation Plan (MSCP) Subarea Plan; VPHCP Covered Species: Covered Species under the City Vernal Pool Habitat Conservation Plan (VPHCP); NE = Narrow Endemic Species; VP Species = Vernal Pools Species listed under the VPHCP.

[2] Potential to Occur is assessed as follows: **None**: There are no present or historical records of the species occurring on or in the immediate vicinity of the project site and the diagnostic habitats and soils associated with the species do not occur on or in the immediate vicinity of the project; **Low**: Suitable habitat is present in the project site and a historical record of the species occurs in the immediate vicinity but existing conditions such as elevation, soils, density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, and/or isolation substantially reduce the possibility that the species may occur; **Moderate**: The diagnostic habitats associated with the species occur on or in the immediate vicinity of the project site, but there is not a recorded occurrence of the species within the immediate vicinity. Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity; **High**: Suitable habitat occurs in the project site and the species has been recorded recently on or in the immediate vicinity but the species was not observed during project surveys; **Present**: The species was observed during biological surveys for the project and is assumed to occupy the project site; **Presumed Absent**: Species would be visible all year and would have been observed if present.

Appendix E

Special Status Animal Species Observed or with Potential to Occur

Species	Status[1]	Habitat Associations	Potential to Occur[2]
Invertebrates			
Crotch's Bumblebee (*Bombus crotchii*)	-- / SCE	Found throughout southwestern California from the Central Valley south to the U.S./Mexico border. Inhabits open grasslands and scrub habitats. Primarily nests underground and forages on a wide variety of flowers, but a short tongue renders it best suited to open flowers with short corollas. Most commonly observed on flowering species in the *Fabaceae, Asteraceae*, and *Lamiaceae* families. Occurrence has also been linked to habitats containing *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia*, and *Salvia* genera.	**Low Nesting/Foraging/Overwintering.** Although the eastern edge of the project site contains potentially suitable sage scrub habitat, the impact area and immediately adjacent areas do not contain suitable open grassland or scrub habitats. Surrounding land uses are dominated by developed land and dense chaparral habitat, rendering surrounding lands equally unlikely to support suitable nesting habitat. Features that could serve as potential nest sites were not observed. Although plants in the *Fabaceae, Asteraceae*, and *Lamiaceae* families have been recorded onsite, the only plant species observed onsite that has been further linked to species occurrence is black sage of the *Salvia* genera. The flowering species are highly concentrated within the undisturbed portions in the central and eastern portions of the project site that will be avoided by the project, while the impact area is comparatively bare. Furthermore, the species has not been recorded within the surrounding vicinity for over 40 years. The most recent recorded observation nearby occurred in 1983 approximately 1.3 miles northwest of the project site. See Section 7.3 for more detail.

Species	Status[1]	Habitat Associations	Potential to Occur[2]
San Diego fairy shrimp (*Branchinecta sandiegonensis*)	FE/-- MSCP Covered VPHCP Covered	Restricted to vernal pools and other ephemeral basins in southern California from coastal Orange County to San Diego County. Found in seasonally astatic pools which occur in tectonic swales or earth slump basins and other areas of shallow, standing water often in patches of grassland and agriculture interspersed in coastal sage scrub and chaparral.	**None.** The project site lacks suitable vernal poolhabitat required by this species.
Quino checkerspot butterfly (*Euphydryas editha quino*)	FE/-- MSCP Covered	Occurs in California from western Riverside County southwards to southern San Diego County. Inhabits open and sparsely vegetated areas that contain larval host plant species (principally dot-seed plantain [*Plantago erecta*], woolly plantain [*Plantago patagonia*] but also Coulter's snapdragon [*Antirrhinum coulterianum*], and rigid bird's beak [*Cordylanthus rigidus*]) and nectar sources. Often found on rounded hilltops, ridgelines, and occasionally rocky outcrops. Occurs within a wide range of open-canopied habitats including vernal pools, sage scrub, chaparral, grassland, and open oak and juniper woodland communities.	**Not Expected**. Suitable habitat occurs within the project site but there are no documented occurrences within the project vicinity and the site occurs outside the recommended quino survey area (USFWS 2014).
Amphibians			
Western spadefoot toad (*Spea hammondii*)	--/SSC	Occurs from northern California southward to San Diego County, and to the west of the Sierra Nevada at elevations below 4,500 feet. Terrestrial species requiring temporary pools for breeding. Suitable upland habitats include coastal sage scrub, chaparral, and grasslands. Most common in grasslands with vernal pools or mixed grassland-coastal sage scrub areas. Breeds in temporary pools formed by heavy rains, but also found in riparian habitats with suitable water resources. Breeding pools must lack exotic predators such fish, bullfrogs, and crayfish for the species to successfully reproduce. Estivates in burrows within upland habitats adjacent to potential breeding sites.	**Low**. The project site lacks suitable temporary pools or riparian habitat required by the species for breeding.

Species	Status[1]	Habitat Associations	Potential to Occur[2]
Reptiles			
Southwestern Pond Turtle (*Actinemys pallida*)	--/SSC MSCP Covered	Occurs in most major coast-facing drainages below 4,700 feet from Washington south to Baja California, Mexico. In California, occurs from the central coast south of the San Francisco Bay area to San Diego County, including the Mojave River (San Bernardino County) and Andreas Canyon (Riverside County). Habitat generalist that occurs within many types of water from freshwater to brackish environments and permanent to intermittent waterbodies. Inhabit creeks, slow moving rivers, marshes, ponds, lakes, reservoirs, vernal pools, canals and even sewage treatment plants. Prefers habitats with slow flowing water particularly where basking sites (such as rocks, downed logs, or emergent vegetation), deep water retreats, and egg laying areas are readily available. Leaves water and travels to surrounding upland habitats to nest, over-winter, and aestivate.	**None.** Theproject site lacks suitable habitat to support this species.
San Diegan legless lizard (*Anniella stebbinsi*)	--/SSC	Occurs in southern California from San Barbara County south to San Diego County, and east into Antelope Valley of the western Mojave Desert. An isolated population is found in the Tehachapi and Piute mountains of Kern County. Inhabits sparsely vegetated areas with moist warm, loose soil with plant cover; moisture is essential. Common in several habitats but especially in beach dunes, coastal scrub, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Found primarily in areas with sandy or loose organic soils or where there is plenty of leaf litter. Sometimes found in suburban gardens in southern California.	**Low.** Suitable habitat is present but moist soils are generally do not occur within the project site.

Species	Status[1]	Habitat Associations	Potential to Occur[2]
California glossy snake (*Arizona elegans occidentalis*)	--/SSC	Occurs along the coastal regions from San Francisco south to San Diego County; though it is absent along the central coast of California. Inhabits arid scrub, rocky washes, grasslands, and chaparral. Prefers open areas and areas with soils loose enough for easy burrowing.	**Low.** Suitable chaparral habitat occurs within the project site; however, there are no recent reported occurrences of the species within the project vicinity. The most recent recorded observation is from the La Jolla area in 1946.
Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*)	--/WL MSCP Covered	Found within the southwestern portion of California in southern San Bernardino, western Riverside, Orange, and San Diego Counties on the western slopes of the Peninsular ranges below 3,500 feet. Suitable habitat includes coastal sage scrub, chaparral, juniper woodland, oak woodland, and grasslands along with alluvial fan scrub and riparian areas. Occurrence of the species correlated with the presence perennial plants (such as California buckwheat, California sagebrush, black sage, or chaparral) to provide a food base for its major food source, termites.	**High.** Suitable chaparral habitat occurs within the project site and there are multiple reported observations of the species within the project vicinity.
San Diego tiger whiptail (*Aspidoscelis tigris stejnegeri*)	--/SSC	Occurs along the coastal region of southern California from San Luis Obispo south to San Diego County. Inhabits a wide variety of habitats, primarily in hot and dry open areas with sparse vegetation, from sea level to 4,900 feet. Associated habitats include coastal sage scrub, chaparral, riparian areas, woodlands, and rocky areas with sandy or gravelly substrates.	**High.** Suitable sage scrub and chaparral habitat are present within the project site and the species has been recently observed within the project vicinity.
Red diamond rattlesnake (*Crotalus ruber*)	--/SSC	Occurs in the southwestern portion of California from San Bernardino County southward to San Diego County at elevations below 5,000 feet. Has a wide tolerance for varying environments including the desert, dense foothill chaparral, warm inland mesas and valleys, and cool coastal zones. Most found near heavy brush with large rocky microhabitats. Chamise and red shank chaparral associations may offer better structural habitat for refuges and food resources.	**Moderate.** Chaparral habitat occurs within the project site but preferred rocky areas are absent.

Species	Status[1]	Habitat Associations	Potential to Occur[2]
Blainville's horned lizard (*Phrynosoma blainvillii*)	--/SSC MSCP Covered	Occurs from southern California to northern Baja California. In California, the species predominately occurs from Kern County south to San Diego County west of the desert at elevations below 8,000 feet. Inhabits a wide variety of vegetation types including sagebrush scrub, chaparral, grasslands, forests, and woodlands but is restricted to areas with suitable sandy, loose soils with open areas for basking. Diet primarily composed of native harvester ants (*Pogonmyrmex* sp.) and are generally excluded from areas invaded by Argentine ants (*Linepithema humile*).	**Low.** Suitable habitat occurs within the project site, but loose soils are generally absent. There are few reported observations of the species within the vicinity.
Coronado skink (*Plestiodon skiltonianus interparietalis*)	--/WL	Occurs from in coastal and inland portions of southern San Diego County, though can also occur up into Riverside County where the species intergrades with Skilton's skink (*Plestiodon skiltonianus skiltonianus*). Suitable habitats include grassland, woodlands, pine forests, and chaparral, especially in open sunny areas such as clearings and edges of creeks or rivers. Prefers rocky areas near streams with lots of vegetation but can also be found in areas away from water. Occasionally seen foraging in leaf litter but more commonly found underneath surface objects, such as bark or rocks, where it lives in extensive burrows.	**Low.** Suitable habitat occurs within the project site, though rocky areas are absent. Historical records of this species occur within five miles of the project site; however, the most recent of these occurred in 2000.
Coast patch-nosed snake (*Salvadora hexalepis virgultea*)	--/SSC	Occurs in the coastal regions of California from the northern Carrizo Plains in San Luis Obispo County south to San Diego County at elevations below 7,000 feet. Inhabits semi-arid shrubby areas such as chaparral and desert scrub. Also found along washes, sandy flats, canyons, and rocky areas. Takes refuge and overwinters in burrows and woodrat nests.	**Low.** Suitable canyon and chaparral habitat occurs within the project site, though washes, sandy flats, and rocky areas are absent. There are no reported observations within the project vicinity.

Species	Status[1]	Habitat Associations	Potential to Occur[2]
Two-striped garter snake (*Thamnophis hammondii*)	--/SSC	Found in California from Monterey County south along the coast to San Diego County and into northern Baja California at elevations below 7,000 feet. Commonly inhabits perennial and intermittent streams with rocky beds bordered by riparian habitats dominated by willows and other dense vegetation. The species has also been found in stock ponds and other artificially created aquatic habitats if bordered by dense vegetation and potential prey, such as amphibians and fish, are present.	**None.** Suitable aquatic habitat to support the species is absent from the project site. There are several historic observations recorded within five miles of the project site; however, the most recent record occurred in 1997.
Birds			
Cooper's hawk (*Accipiter cooperii*)	--/WL MSCP Covered	In California, the species breeds from Siskiyou County south to San Diego County and east to the Owens Valley at elevations below 9,000 feet. Inhabits forests, riparian areas, and more recently suburban and urban areas nesting within dense woodlands and forests and isolated trees in open areas.	**High.** Suitable tree habitat occurs within the project site and there are numerous occurrences of the species reported within the project vicinity.
Southern California rufous-crownedsparrow (*Aimophila ruficeps canescens*)	--/WL MSCP Covered	Restricted to southwestern California occurring from Santa Barbara County southwards to San Diego County at elevations below 5,000 feet. Generally found on moderate to steep slopes vegetated with grassland, coastal sage scrub, and chaparral. Prefer areas with California sagebrush but area also generally absent from areas with dense stands of coastal sage scrub or chaparral. May occur on steep grassy slopes without shrubs if rock outcrops are present.	**High.** Suitable sloped chaparral and sage scrub occur within the western portion of the project site and there are numerous reported occurrences within the project vicinity.
Grasshopper sparrow (*Ammodramus savannarum*)	--/SSC	In California, generally occurs west of the Cascade and Sierra Nevada foothills from Del Norte County south to San Diego County below 4,900 feet. Primarily a grassland species that prefers short to middle-height, moderately open grasslands with scattered shrubs. More likely to be found in large tracts of habitat instead of small fragments.	**None.** The project site lacks suitable grassland habitat required by this species.

Species	Status[1]	Habitat Associations	Potential to Occur[2]
Bell's sparrow (*Artemisiospiza belli*)	BCC/WL	Non-migratory resident on the coastal ranges of California and western slopes of the central Sierra Nevada mountains. Occurs year-round in southern California. Breeds in dry coastal sage scrub and chaparral, desert scrub, and similar other open, scrubby habitats. In foothill chaparral, they tend toward younger, less dense stands that are recovering from recent fires; less common in older, taller stands that have remained unburned.	**Moderate**. Potentially suitable sage scrub and chaparral habitat occurs within the project site; however, there are few documented observations within the project vicinity.
Coastal Cactus Wren (*Campylorhynchus brunneicapillussandiegensis*)	BCC/SSC (San Diego and Orange Counties) MSCP Covered	One of seven subspecies occurring in southern California from southern Orange County south to San Diego County. Occupies native scrub vegetation with thickets of mature cacti consisting of cholla (*Cylindropuntia* spp.) or prickly-pear cactus (*Opuntia oricola*). Cacti must be tall enough to support and protect the bird's nest (typically 3 feet or more in height). Surrounding vegetation usually consists of coastal sage scrub habitat with shrubs normally below the level of nest placement.	**Low.** Suitable cacti required by this species is limited within the project site. One historical record of this species occurs within five miles of the project site and was recorded in 1998.
Western Snowy Plover (*Charadrius nivosus nivosus*)	FT,BCC/SSC MSCP Covered	Breeds primarily on coastal beaches from southern Washington to southern Baja California. Nesting habitat includes sand spits, dune-backed beaches, beaches at creek and river mouths, and salt pans at lagoons and estuaries. Usually prefer sand, silt or dry mud with even surface, avoiding rocky or broken ground. Exhibits high breeding site fidelity. In winter, found on many of the beaches used for nesting, as well as others where they do not nest. Also occur in man-made salt ponds and on estuarine sand and mud flats.	**None.** The project site lacks suitable wetland habitat and sandy soils to support this species.

Species	Status[1]	Habitat Associations	Potential to Occur[2]
Northern Harrier (*Circus cyaneus*)	--/SSC MSCP Covered	Occurs as a year-round resident in California. Inhabits open areas including wetlands, marshes, marshy meadows, grasslands, riparian woodlands, desert scrub, and pastures and agricultural areas. Breeding populations in southern California from Ventura County to San Diego County are highly fragmented with many local populations extirpated mostly likely as a result of habitat loss and degradation. Nests on the ground in wetlands and uplands within patches of dense, often tall, vegetation in undisturbed areas.	**Low**. Although this species has been reported within five miles of the project site, the site lacks suitable wetlands, marshes, meadows, grassland, riparian woodland, desert scrub, or pastures to support this species.
White-tailed Kite (*Elanus leucurus*)	--/FP	Year-long resident of California residing along the coasts and valleys west of the Sierra Nevada foothills and southeast deserts, though the species has also been documented breeding in arid regions east of the Sierra Nevada and within Imperial County. Inhabits low elevation grasslands, wetlands, oak woodlands, open woodlands, and is associated with agricultural areas. Breeds in riparian areas adjacent to open spaces nesting isolate trees or relatively large stands.	**Low**. Although this species has been reported within five miles of the project site, the site lacks suitable grasslands, wetlands, oak woodlands, open woodlands, or agricultural areas to support this species.
Peregrine Falcon (*Falco peregrinus*)	BCC/FP MSCP Covered	In California, the species breeds and winters throughout the State, except for desert areas. Very uncommon breeding resident and uncommon as a migrant. Active nesting sites of this species within California are known from along the coast north of Santa Barbara, in the Sierra Nevada, and other mountains of northern California. Few nest sites are known anecdotally for southern California mostly at coastal estuaries and inland oases. Inhabits a large variety of open habitats including marshes, grasslands, coastlines, and woodlands. Typically nest on cliff faces in remote rugged sites where adequate food is available nearby, but the species can also be found in urbanized areas nesting on man-made structures.	**Low**. The project site lacks suitable cliff faces typically required by this species; though the species could nest on suitable man-made structures that are found within the project site.

Species	Status[1]	Habitat Associations	Potential to Occur[2]
California Black Rail (*Laterallus jamaicensis coturniculus*)	BCC/ST, FP	In California, breeds in the Sacramento-San Joaquin River delta, San Francisco Bay area, Bolinas Lagoon and Tomales Bay in Marin County, Morro Bay in San Luis Obispo County, White Slough in San Joaquin County, the Salton Sea area, and the Lower Colorado River Valley. Inhabits salt marshes, freshwater marshes, and wet meadows. Associated with pickleweed, bulrush, alkali heath, and cordgrass. Requires dense cover of upland vegetation in tidal areas which allows for protection when rails must leave marsh habitats during high tide events.	**None.** Although this species has been historically reported within five miles of the project site, it is presumed extirpated from San Diego County. Furthermore, the site lacks suitable salt marshes, freshwater marshes, and wet meadows to support this species.
Osprey (*Pandion haliaetus*)	--/WL	Within California, breeding populations reside in the Cascade and Sierra mountain ranges, though small numbers of the species also breed within San Diego County. Although widely seen on the coast, these birds are rare transients in the interior portions of southern California. Restricted to large water bodies such as rivers, lakes, and reservoirs supporting fish with suitable nesting habitat such as rocky pinnacles or large trees and snags. Build their large nests, often in dead tops of older trees and man-made structures.	**None.** Although this species has been reported within five miles of the project site, the project site and immediate vicinity lacks suitable rivers, lakes, or reservoirs required by this species fornesting and/or foraging.
Belding's Savannah Sparrow (*Passerculus sandwichensis beldingi*)	--/SE MSCP Covered	Year-round resident of coastal salt marshes within southern California from Santa Barbara County south to San Diego County. Particularly associated with salt marsh habitat dominated by dense pickleweed (*Salicornia* sp.) within which most nests are found.	**None.** Although this species has been reported within five miles of the project site, the site lacks suitable salt marsh habitat to support this species.

Species	Status[1]	Habitat Associations	Potential to Occur[2]
Coastal California gnatcatcher (*Polioptila californica californica*)	FT/SSC MSCP Covered	Year-round resident of California occurring from Ventura County south to San Diego County, and east to the western portions of San Bernardino and Riverside Counties. Typically occur in arid, open sage scrub habitats on gently slopes hillsides to relatively flat areas at elevations below 3,000 feet. The composition of sage scrub in which gnatcatchers are found varies; however, California sagebrush is at least present as dominant or co-dominant species. The species is mostly absent from areas dominated by black sage, white sage, or lemonadeberry, though the species may occur more regularly in inland regions dominated by black sage.	**High.** Suitable coastal sage scrub habitat is present within the project site and the species has been previously detected multiple times in the nearby vicinity, including as recently as 2017.
Light-footed Ridgway's Rail (*Rallus obsoletus levipes*)	FE/SE, FP MSCP Covered	One of six recognized subspecies occurring as a resident in coastal salt marshes and lagoons from Santa Barbara County south to Baja California. The species is found primarily in tall, dense cordgrass (*Spartina foliosa*) and occasionally pickleweed (*Salicornia pacifica*) in the low marsh zone. Also found in freshwater marshes in winter.	**None.** Although this species has been reported within five miles of the project site, the site lacks suitable salt marsh, lagoon, or freshwater marsh habitat to support this species.
California Least Tern (*Sternula antillarum browni*)	FE/SE, FP MSCP Covered	Occurs locally along California coastal regions breeding in colonies from San Francisco Bay south to San Diego County. Wintering areas in unknown areasof South America. Nests on relatively bare or sparselyvegetation beaches and mudflats near water. Forage in the bays and estuaries near their colonies, on the ocean near shore, and at inland lakes in the coastal lowland.	**None.** Although this species has been reported within five miles of the project site, the project site lacks suitable beaches or estuaries to support this species.

Species	Status[1]	Habitat Associations	Potential to Occur[2]
Least Bell's vireo (*Vireo bellii pusillus*)	FE/SE MSCP Covered	Breeds within California and northern Baja California, wintering in southern Baja California. In California, breeds along the coast and western edge of the Mojave Desert from Santa Barbara County south to San Diego County, and east to Inyo County, San Bernardino, and Riverside Counties. Breeding habitat consists of early to mid-successional riparian habitat, often where flowing water is present, but also found in dry watercourses within the desert. A structurally diverse canopy and dense shrub cover is required for nesting and foraging. Dominant species within breeding habitat includes cottonwood and willows with mule fat, oaks, and sycamore, and mesquite (*Prosopis glandulosa*) and arrowweed (*Pluchea sericea*) within desert habitats. The species can be tolerant of the presence of non-native species such astamarisk.	**None**. The project site lacks suitable riparian habitat required by the species.
Mammals			
Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)	--/SSC	Occurs throughout southwestern California from western Riverside County south to San Diego County at elevations below 6,000 feet. Inhabits coastal sage scrub, grasslands, and chaparral communities, and generally exhibits a strong microhabitat affinity for moderately gravelly and rocky substrates. Forage for seeds from California sagebrush, California buckwheat, lemonadeberry, and grasses under shrub and tree canopies, or around rock crevices.	**Low.** Though suitable chaparral habitat is present within the project site, the site lacks suitable gravelly or rocky soils. Furthermore, there are only historic records of this species within five miles of the project site. The most recent observation was recorded in 2001.
Western mastiff bat (*Eumops perotis californicus*)	--/SSC	In California, the species occurs from Monterey County south to San Diego County from the coast eastward to the Colorado Desert. Found in open, semi-arid to arid habitats including coastal and desert scrub, grasslands, woodlands, and palm oases. Prefers to roost in high situations above the ground on vertical cliffs, rock quarries, outcrops of fractured boulders, and occasionally tall buildings.	**Low**. Although this species has been recorded within five miles of the project site lacks preferred roosting habitat commonly associated with the species. The most recent observation of this species near the project site is from Los Peñasquitos Canyon Preserve in 2003.

Species	Status[1]	Habitat Associations	Potential to Occur[2]
Spotted bat (*Euderma maculatum*)	--/SSC	Occurs throughout western North America but is patchily distributed and considered rare. In California, the species has been found in a small number of localities in the foothills, mountains, and desert regions at elevations below 10,000 feet. Inhabits rocky arid and semi-arid environments including forested mountains, open shrublands, and deserts. Roosts in rock crevices along cliffs adjacent to wide expanses of open habitat. Occasionally roosts in caves and buildings.	**Low**. Although this species has been recorded within five miles of the project site, the project site is not located in foothills, mountains, or desert regions of San Diego County. The most recent record of this species is from 1955 on the University of California San Diego campus.
Western red bat (*Lasiurus blossevillii*)	--/SSC	In California, the species is locally common occurring from Shasta County south to San Diego County and west of the Sierra Nevada/Cascade Range and deserts. Mainly occurs in riparian woodlands populated by willows, cottonwoods, sycamores, and oak trees but can be found in non-native vegetation such as tamarisk, eucalyptus, and orchards. Primarily roosts in trees preferring heavily shaded areas that are open underneath.	**Low**. Although this species has been recorded within five miles of the project site, preferred riparian habitat does not currently occur on site. One historical report from 2003 is recorded from Los Peñasquitos Creek.
San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)	--/SSC	Occurs along the coastal regions of southern California south to northern Baja California. Found in arid regions preferring grasslands, agricultural fields, and sparse scrub. Typically absent from areas with high-grass or dense brush, such as closed-canopy chaparral, primarily occupying short-grass and open scrub habitats.	**Low**. Although this species has been recorded within five miles of the project site, the site lacks suitable open, sparse vegetation typically associated with this species. One historical report from 2002 recorded this species within the Carmel Mountain area.
San Diego Bryant's (formerly desert) woodrat (*Neotoma bryanti [formerly lepida] intermedia*)	--/SSC	Occurs along the coastal regions of California being found as far north as San Luis Obispo County, south to San Diego County, and in the western portions of San Bernardino and Riverside Counties. Inhabits a variety of shrub and desert habitats such as coastal sagebrush scrub, chaparral, pinyon-juniper woodland, and Joshua tree woodland among others. Often associated with rock outcroppings, boulders, cacti patches, and areas with dense understories. Construct dens used for shelter, food storage, and nesting around rock outcroppings and cacti using various materials such as twigs, sticks, and other debris.	**High**. Suitable sage scrub and dense chaparral habitat with cacti occur within the project site and there are several reports of the species within Torrey Pines State Nature Reserve.

Species	Status[1]	Habitat Associations	Potential to Occur[2]
Pocketed free-tailed bat (*Nyctinomops femorosaccus*)	--/SSC	Rare in California occurring from Los Angeles County eastwards to San Bernardino County, and southwards to San Diego County. Closely associated with their preferred roosting habitats consisting of vertical cliffs, quarries, and rocky outcrops. Sometimes roosts under tiled roofs and observed utilizing bat boxes. Habitat generalists foraging in grasslands, shrublands,riparian areas, oak woodlands, forests, meadows, and ponds favoring larger water bodies for drinking.	**Low**. Potentially suitable foraging habitat occurs within the project site, but the site lacks large bodies of water nearby for drinking. Preferred roosting habitat is absent, although this species may roost in man-made structures found on-site. There is one report of this species recorded in Del Mar in 2007.
Pacific pocket mouse (*Perognathus longimembris pacificist*)	--/SSC	Occurs from the San Joaquin Valley south to San Diego County. Typically found in open habitats associated with gentle terrain including grasslands and coastal sage scrub. Also found in alluvial fans anddesert scrub in desert regions. Prefers habitats with friable soils with scattered shrubs and mixed grasses.	**Low.** Although this species has been recorded within five miles of the project site and the site contains coastal sage scrub, the site lacks suitable gentle terrain with grasses to support this species. One report of this species was recorded in 1994 in Del Mar.
American badger (*Taxidea taxus*)	--/SSC MSCP Covered	Uncommon, permanent resident found through California, except for the extreme north coast areas. Associated with large blocks of undeveloped land composed of open valleys, alluvial fans, meadows, grasslands, and sandy desert. Dens function as sites for resting and parturition. Friable, easily crumbled soils are important for denning.	**Low.** Although this species has been reported within five miles of the project site, suitable large blocks of undeveloped land are not present. The most recent observation of this species within the project vicinity was recorded in 1953.

[1] Listing codes are as follows: F = Federal; S = State of California; E = Endangered; T = Threatened; SCE = Candidate Endangered; R = Rare; BCC = Federal Bird of Conservation Concern;SSC = State Species of Special Concern; FP = State Fully Protected; WL = Watch List
MSCP Covered Species: Covered Species under City Multiple Species Conservation Plan (MSCP) Subarea Plan; VPHCP Covered Species: Covered Species under the City Vernal PoolHabitat Conservation Plan (VPHCP); NE = Narrow Endemic Species; VP Species = Vernal Pools Species listed under the VPHCP.

[2] Potential to Occur is assessed as follows: **None**: Species is so limited to a particular habitat that it cannot disperse on its own, and habitat suitable for its establishment and survival does not occur in the project site; **Not Expected**: There are no present or historical records of the species occurring on or in the immediate vicinity of the project site. The species moves freely and might disperse through or across the site, but suitable habitat for residence or breeding does not occur; **Low**: Suitable habitat is present in the project site and there is a historical record of the species in the project vicinity, but no sign of the species was observed during surveys. Existing conditions such as elevation, species composition, density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, and/or isolation may substantially reduce the possibility that the species may occur;**Moderate:** Diagnostic habitats associated with the species occur on or adjacent to the project site, but there is not a recorded occurrence of the species within the immediate vicinity. Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity; **High**: Suitable habitat associated with the species occurs in the project site and the species has been recorded recently on or near the project, but was not observed during biological surveys; **Present**: The species was observed during biological surveys for the project and is assumed to occupy the project site.

Appendix F

Explanation of Status Codes for Plant and Animal Species

FEDERAL AND STATE CODES

U.S. Fish and Wildlife Service (USFWS)

BCC	Bird of Conservation Concern
BGEPA	Bald and Golden Eagle Protection Act
FC	Federal candidate species
FE	Federally listed endangered
FPD	Federally proposed for delisting
FPE	Federally proposed endangered
FPT	Federally proposed threatened
FT	Federally listed threatened

USFWS Birds of Conservation Concern (BCC)

The primary legal authority for Birds of Conservation Concern (2008) is the Fish and Wildlife Conservation Act of 1980 (FWCA), as amended. Other authorities include the Endangered Species Act, Fish and Wildlife Act (1956) and 16 USC §701. A FWCA 1988 amendment (Public Law 100-653, Title VIII) requires the Secretary of the Interior through the USFWS to "identify species, subspecies, and populations of all migratory non-game birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973." The 2008 BCC report is the most recent effort by the USFWS to carry out this proactive conservation mandate.

The BCC report aims to identify accurately the migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent the USFWS' highest conservation priorities and draw attention to species in need of conservation action. The USFWS hopes that by focusing attention on these highest priority species, the report will promote greater study and protection of the habitats and ecological communities upon which these species depend, thereby ensuring the future of healthy avian populations and communities. Birds of Conservation Concern 2008 lists are available online at https://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php.

USFWS Federal Candidate (FC) Species

Federal candidate species are those for which the USFWS has on file "sufficient information on biological vulnerability and threats to support a proposal to list as endangered or threatened, but for which preparation and publication of a proposal is precluded by higher-priority listing actions. [The USFWS] maintain[s] this list for a variety of reasons: to notify the public that these species are facing threats to their survival; to provide advance knowledge of potential listings that could affect decisions of environmental planners and developers; to provide information that may stimulate conservation efforts that will remove or reduce threats to these species; to solicit input from interested parties to help us identify those candidate species that may not require protection under the [Endangered Species Act] or additional species that may require the Act's protections; and to solicit necessary information for setting priorities for preparing listing proposals" (Federal Register 70:90 [May 11, 2005]).

USFWS Federal Proposed Endangered (FPE) Species

Any species the Service has determined is in danger of extinction throughout all or a significant portion of its range and the Service has proposed a draft rule to list as endangered. Proposed endangered species are not protected by the take prohibitions of section 9 of the ESA until the rule to list is finalized. Under section 7(a)(4) of the ESA, federal agencies must confer with the Service if their action will jeopardize the continued existence of a proposed species.

USFWS Federal Proposed Threatened (FPT) Species

Any species the Service has determined is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and the Service has proposed a draft rule to list as threatened. Proposed threatened species are not protected by the take prohibitions of section 9, consistent with any protective regulations finalized under section 4(d) of the ESA, until the rule to list is finalized. Under section 7(a)(4) of the ESA, federal agencies must confer with the Service if their action will jeopardize the continued existence of a proposed species.

USFWS Bald and Golden Eagle Protection Act (BGEPA)

In 1782, Continental Congress adopted the bald eagle as a national symbol. During the next one and a half centuries, the bald eagle was heavily hunted by sportsmen, taxidermists, fisherman, and farmers. To prevent the species from becoming extinct, Congress passed the Bald Eagle Protection Act in 1940. The Act was extremely comprehensive, prohibiting the take, possession, sale, purchase, barter, or offer to sell, purchase, or barter, export or import of the bald eagle "at any time or in any manner."

In 1962, Congress amended the Eagle Act to cover golden eagles, a move that was partially an attempt to strengthen protection of bald eagles, since the latter were often killed by people mistaking them for golden eagles. The golden eagle, however, is accorded somewhat lighter protection under the Act than the bald eagle. Another 1962 amendment authorizes the Secretary of the Interior to grant permits to Native Americans for traditional religious use of eagles and eagle parts and feathers.

California Department of Fish and Wildlife (CDFW)

SCE	State candidate for listing as endangered
SCT	State candidate for listing as threatened
SE	State listed endangered
SR	State listed rare
ST	State listed threatened
SSC	State species of special concern
WL	Watch List
FP	Fully Protected species refers to all vertebrate and invertebrate taxa of concern to the Natural Diversity Data Base regardless of legal or protection status. These species may not be taken or possessed without a permit from the Fish and Game Commission and/or CDFW.
Special Animal	Refers to all vertebrate and invertebrate taxa of concern to the Natural Diversity Database regardless of legal or protection status.

OTHER CODES AND ABBREVIATIONS

California Native Plant Society California Rare Plant Rank (CRPR) Codes

Lists

1A = Presumed extirpated in California and either rare or extinct elsewhere. Eligible for state listing.

1B = Rare, threatened, or endangered in California and elsewhere. Eligible for state listing.

2A = Presumed extirpated in California but common elsewhere. Eligible for state listing.

2B = Rare, threatened, or endangered in California but more common elsewhere. Eligible for state listing.

3 = Review List: Plants about which more information is needed. Some eligible for state listing.

4 = Watch List: Plants of limited distribution. Needs monitoring for changes in population status. Few (if any) eligible for state listing.

List/Threat Code Extensions

.1 = Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)

.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

A “CA Endemic” entry corresponds to those taxa that only occur in California.

All List 1A (presumed extinct in California) and some List 3 (need more information; a review list) plants lacking threat information receive no extension. Threat Code guidelines represent only a starting point in threat level assessment. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Code.

City of San Diego

Multiple Species Conservation Program (MSCP) Covered

Multiple Species Conservation Program covered species for which the City has take authorization within the MSCP area.

MSCP Narrow Endemic (NE)

Some native species (primarily plants with restricted geographic distributions, soil affinities, and/or habitats) are referred to as a narrow endemic species. For vernal pools and identified narrow endemic species, the jurisdictions will specify measures in their respective subarea plans to ensure that impacts to these resources are avoided to the maximum extent practicable.

Vernal Pool Habitat Conservation Plan (VPHCP) Covered

Threatened and endangered vernal pool species covered under the City's Vernal Pool Habitat Conservation Plan that do not currently have federal coverage under the City's Multiple Species Conservation Program Subarea Plan. The Vernal Pool Vernal Pool Habitat Conservation Plan is compatible with the MSCP and expands upon the City's existing Multi-Habitat Planning Area to conserve additional lands with vernal pool resources.