# **APPENDIX B**

**Biological Resources** 

## BIOLOGICAL TECHNICAL REPORT FOR THE COLLEGE BOULEVARD IMPROVEMENT PROJECT

Prepared for:

**City of Oceanside** 300 North Coast Highway Oceanside, California 92054

Prepared by:

# DUDEK

605 Third Street Encinitas, California 92024 Contact: Tricia Wotipka 760.942.5147

## **AUGUST 2018**

Printed on 30% post-consumer recycled material.

## TABLE OF CONTENTS

## Section

## Page No.

1	INTRODUCTION1					
	1.1	Purpose of the Report	1			
	1.2	Location				
	1.3	Project Description	1			
2	PHYS	SICAL CHARACTERISTICS	7			
	2.1	Topography	7			
	2.2	Soils	7			
3	METHODS9					
	3.1	Literature Review	9			
	3.2	Vegetation Mapping	9			
	3.3	Special-Status Plants	10			
	3.4	Special-Status Wildlife				
	3.5	Jurisdictional Wetland Delineation				
4	RESULTS					
	4.1	Vegetation Communities/Land Cover Types	13			
		4.1.1 Urban/Developed Land (DEV)	13			
	4.2	Floral Diversity	13			
	4.3	Wildlife	.14			
	4.4	Special-Status and Regulated Resources	.14			
		4.4.1 Special-Status Vegetation Communities				
		4.4.2 Special-Status Plants				
		4.4.3 Special-Status Wildlife	15			
		4.4.4 Jurisdictional Wetlands Delineation				
	4.5	Wildlife Corridors and Habitat Linkages				
	4.6	Regional Resources Planning Context				
5	PROJ	JECT IMPACTS	.19			
	5.1	Definition of Impacts	19			
	5.2	Direct Impacts	20			
		5.2.1 Vegetation Communities				
		5.2.2 Special-Status Plant Species				
		5.2.3 Special-Status Wildlife Species				
		5.2.4 Wildlife Corridors/Habitat Linkages				
	5.3	Indirect Impacts	.23			

## TABLE OF CONTENTS (CONTINUED)

## Section

#### Page No.

8	REF	ERENCES	
	7.4	Habitat Linkages/Wildlife Corridors	
	7.3	Special-Status Wildlife	
	7.2	Special-Status Plants	
	7.1	Vegetation Communities	
7	MIT	IGATION	
	6.5	Habitat Linkages/Wildlife Corridors	
	6.4	Special-Status Wildlife	
	6.3	Special-Status Plants	
	6.2	Vegetation Communities	
	6.1	Explanation of Findings of Significance	
6	ANA	ALYSIS OF SIGNIFICANCE	27
		5.3.4 Wildlife Corridors/Habitat Linkages	
		5.3.3 Special-Status Wildlife Species	
		5.3.2 Special-Status Plant Species	
		5.3.1 Vegetation Communities	

## APPENDICES

А	Plant Compendium
---	------------------

- B Wildlife Compendium
- C Special-Status Plant Species and the Potential to Occur in the Project Corridor
- D Special-Status Wildlife Species and the Potential to Occur in the Project Corridor

## FIGURES

Figure 1	Regional Map	3
Figure 2	Vicinity Map	5
Figure 3	Biological Resources Map with Impacts	21
Figure 4	CNDDB Special-Status Species Occurrences Map	25

## TABLES

Table 1 Schedule of Surveys and Site Conditions	9
Table 2 Existing Vegetation Communities and Land Covers Within the Project	
Corridor	13

## 1 INTRODUCTION

## 1.1 Purpose of the Report

This biological technical report summarizes the results of recent biological studies conducted for the proposed College Boulevard Improvement Project (project) site and describes the existing site conditions, including vegetation communities, jurisdictional resources, flora and fauna, potential for special-status<sup>1</sup> species to occur on site, and wildlife movement corridors. The significance of these biological resources and the potential project impacts to these resources are evaluated and discussed, including measures to reduce significant impacts where feasible to less-than-significant levels (i.e., avoiding, minimizing, or mitigating).

## 1.2 Location

The proposed project is located in northern San Diego County, within the City of Oceanside (Figure 1). The proposed project corridor stretches from Waring Road north to Old Grove Road for a distance of approximately 2.41 miles. The improvement corridor is primarily bordered by residential uses to the east and west however; the corridor also borders commercial uses in the Del Oro Marketplace, Gateway Plaza, and Rancho Del Oro Plaza near the College Boulevard / Oceanside Boulevard intersection and educational uses, commercial properties, and industrial designated lands near Old Grove Road (Figure 2).

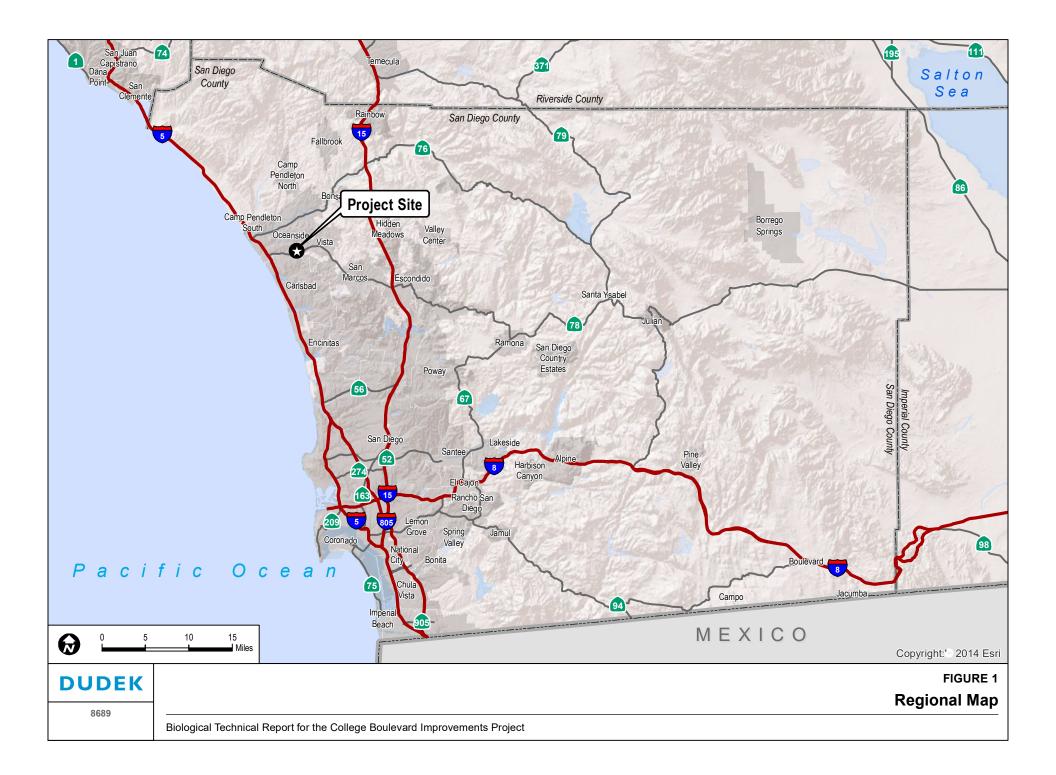
The approximate centroid of the site is 33°11'58.57" North, 117°17'16.96" West and lies within the U.S. Geological Survey (USGS) 7.5-minute map, San Luis Rey Quadrangle. The project corridor lies within Sections 15, 27, and 22, Township 11 South, and Range 4 West within the USGS 7.5 Minute San Luis Rey Quadrangle.

## **1.3 Project Description**

The College Boulevard project proposes to widen segments of College Boulevard Road from a four-lane major arterial road to a six-lane major arterial road, including curb/gutter improvements and the relocation of existing utilities, as needed, as well as installation of retaining walls, raised landscaped medians, bike lanes, lighting, and sidewalks in various locations along College Boulevard.

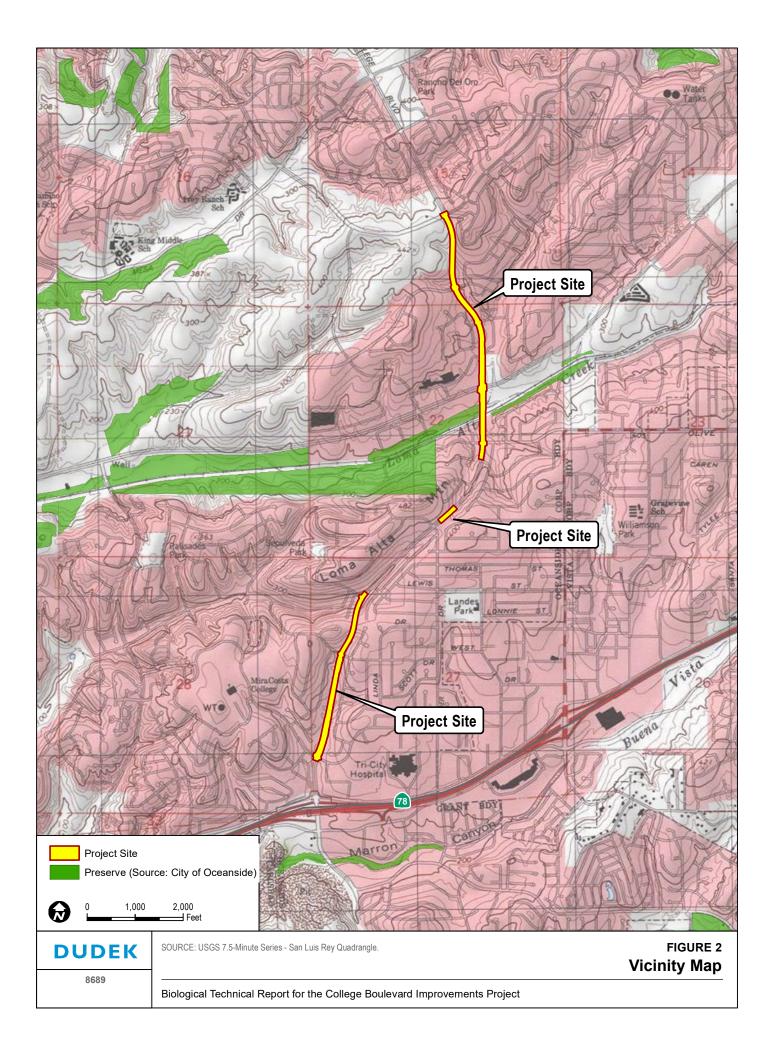
<sup>&</sup>lt;sup>1</sup> The term "special-status" is used in this report instead of "sensitive," with the exception of where it occurs in headings or text cited from the Final Oceanside Subarea Habitat Conservation Plan/Natural Communities Conservation Plan (City of Oceanside 2010). Herein, these terms are interchangeable and have the same meaning.

For purposes of this report and biological analysis, the project study area was determined by the limits of the proposed improvement plans, which total 26.69 acres. Due to the extent of developed lands adjacent to the improvement corridor, a study area buffer beyond the limits of the proposed improvement plans was not applied.



#### INTENTIONALLY LEFT BLANK

DUDEK



#### INTENTIONALLY LEFT BLANK

DUDEK

## 2 PHYSICAL CHARACTERISTICS

## 2.1 Topography

In general the project corridor is oriented in the north-south direction, with various elevations throughout the corridor ranging from approximately 412 feet above mean sea level (AMSL) in the north boundary to approximately 224 feet AMSL in the south boundary. The topography of the project corridor is characterized by relatively uniform flat developed terrain with a general slope trend in the southern direction.

#### 2.2 Soils

The proposed project corridor is entirely developed with impervious surfaces and does not support native soils.

#### INTENTIONALLY LEFT BLANK

DUDEK

## 3 METHODS

General surveys for biological resources were conducted for the proposed project in May and June 2016 by Dudek senior biologist Tricia L. Wotipka and by Dudek biologist Olivia Koziel in August 2018. The biological surveys included mapping vegetation communities and land cover types within the project corridor, an evaluation of jurisdictional wetlands or waters, and an assessment of the potential for special-status species to occur in the project area (Table 1).

Table 1Schedule of Surveys and Site Conditions

Date	Time	Personnel	Focus	Conditions
27 May 2016	1230–1330	Tricia L. Wotipka	General	71°F; 85% cloud cover, 4–6 miles per hour (mph) winds
6 June 2016	1150–1330	Tricia L. Wotipka	General	71-77°F; 100%-85% cc; 1–2 mph winds
10 August 2018	1345–1500	Olivia L. Koziel	General	86°F; 0% cloud cover; 4–8 mph winds

## 3.1 Literature Review

A review of existing biological resource information for the proposed project was conducted to provide baseline information regarding special-status biological resources potentially occurring on the site and in the nearby surrounding areas. The following data sources were reviewed to assist with the biological and jurisdiction efforts:

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2018a)
- City of Oceanside Final Subarea Plan (City of Oceanside 2010)
- North County Multiple Habitat Conservation Plan (SANDAG 2003)

## 3.2 Vegetation Mapping

The mapping of on-site vegetation and land cover types within the project corridor was originally conducted in May 2016 and updated in August 2018 (Table 1). Vegetation communities and land covers were mapped directly in the field onto a 100-scale (1 inch = 100 feet) digital orthographic map with an overlay of the project boundary (Bing Maps). The mapping was performed on-foot by meandering throughout the project corridor. Vegetation community classifications follow Holland (1986), as revised by Oberbauer et al. (2008). Following completion of fieldwork, vegetation polygons were digitized using ArcGIS, and geographic information system (GIS) coverage was created. Acreage calculations of vegetation communities and land covers were determined using ArcGIS.

## 3.3 Special-Status Plants

Special-status plant species present or potentially present in the project corridor were identified through a literature search using the CNDDB (CDFW 2018a). The potential for special-status plant species to occur in the project corridor was evaluated based on the elevation, soils, vegetation communities, and level of disturbance, as well as plant status and distribution in the vicinity of the proposed project site. All plant species encountered during the biological field survey were identified and recorded. Latin and common names for plant species with a California Rare Plant Rank (CRPR) follow the California Native Plant Society's Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2018).

Due to the extent of developed lands in the project corridor and lack of native soils and habitats on site, focused surveys to detect special-status plants were not conducted. However, all plant species encountered during the field surveys were identified to subspecies or variety, if applicable, to determine sensitivity status.

## 3.4 Special-Status Wildlife

Endangered, rare, or threatened wildlife species, as defined in the California Environmental Quality Act (CEQA) Guidelines, Section 15380(b) (14 California Code of Regulations 15000 et seq.), are referred to as "special-status wildlife species" and, as used in this report, include (1) endangered or threatened wildlife species recognized in the context of the California Endangered Species Act and federal Endangered Species Act; (2) California species of special concern and Watch List species, as designated by CDFW (2018b); (3) mammals and birds that are fully protected species, as described in Fish and Game Code Sections 4700 and 3511; (4) Birds of Conservation Concern as designated by USFWS (2008); and (5) wildlife species considered "sensitive" by the City's Final Subarea Plan (City of Oceanside 2010). Special-status wildlife species present or potentially present in the study area were identified through a literature search using the CNDDB (CDFW 2018a).

All wildlife species detected during the field surveys by sight, vocalizations, burrows, tracks, scat, and other signs were recorded. Binoculars (10x40 and 8.5x42 magnifications) were used to aid in the identification of observed wildlife. Latin and common names used in this report are based on American Ornithologists' Union (AOU 1998, 2013a, 2013b) for birds, and Wilson and Reeder (2005) for mammals. The potential for special-status wildlife species to occur was evaluated based on the elevation, vegetation communities, and level of disturbance in the project corridor, as well as wildlife status and distribution in the vicinity and the results of wildlife surveys conducted in the project corridor.

## 3.5 Jurisdictional Wetland Delineation

The entire project corridor was thoroughly evaluated for indicators (i.e., hydrology, hydrophytic vegetation, and hydric soils) of potentially jurisdictional wetlands or non-wetland waters in accordance with the *1987 U.S. Army Corps of Engineers Wetland Delineation Manual* (TR Y-87-1), (USACE 1987), the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (September 2008) (USACE 2008), and the USACE/EPA Rapanos Guidance (USACE and EPA 2007).

#### INTENTIONALLY LEFT BLANK

DUDEK

## 4 RESULTS

## 4.1 Vegetation Communities/Land Cover Types

One land cover type, urban/developed, was identified and mapped within the proposed project corridor. The acreage of the mapped area is presented in Table 2, the spatial distribution is presented on Figure 3, and the land cover type is described in detail below. Also included in Table 2 is the designation of vegetation community sensitivity, based on rarity and ecological importance, as identified by Section 4 of the Multiple Habitat Conservation Plan (MHCP) and the City's Subarea Plan (SANDAG 2003; City of Oceanside 2010).

Table 2Existing Vegetation Communities and Land Covers Within the Project Corridor

Vegetation Community or Land Cover Type	MHCP Habitat Group Designation	Acreage
Urban/Developed	None	26.69
	Total	26.69

#### 4.1.1 Urban/Developed Land (DEV)

According to Oberbauer et al. (2008), urban/developed represents areas that have been built on or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, roads, sidewalks, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping.

Within the project corridor, urban/developed land includes College Boulevard and associated pedestrian sidewalks, and various planted ornamental landscaping found within the project boundaries.

Urban/developed land is not regulated by the environmental resource agencies, and is often considered a disturbed category. Additionally, urban/developed land is not a habitat group as defined in the Oceanside Subarea Plan, indicating that it has little to no habitat value and impacts do not require mitigation.

#### 4.2 Floral Diversity

Thirty-four species of vascular plants were recorded in the project corridor, six native (18%) species and twenty-eight non-native (82%) species. The floral diversity is low due to the

extent of developed and disturbed lands in the project corridor. The plant species present are associated with street and residential, commercial, and industrial landscaping that is irrigated and maintained. The complete list of plant species identified in the project corridor during the surveys is provided as Appendix A.

## 4.3 Wildlife

Nine wildlife species were recorded in the project corridor and immediate vicinity. (Appendix B). All wildlife species observed are common, disturbance-adapted species typically found in urban and suburban settings, such as American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), house finch (*Haemorhous mexicanus*) and Anna's hummingbird (*Calypte anna*). As previously mentioned the project corridor is heavily developed and provides relatively few resources for wildlife due to the lack of cover, lack of connectivity to any adjacent open space habitat areas, and existing surrounding development that discourages potential wildlife movement/dispersal.

## 4.4 Special-Status and Regulated Resources

#### 4.4.1 Special-Status Vegetation Communities

As described in Section 4.0, there are no special-status vegetation communities present in the project corridor. The project area is dominated by urban/developed land consisting of paved roads, ornamental slopes and greenbelts, and previously developed landscapes supporting buildings, parking lots, and associated infrastructure. This land cover type is not considered sensitive and impacts to this land cover type do not require mitigation.

#### 4.4.2 Special-Status Plants

No special-status plant species were identified during the general biological surveys. Due to the extent of developed and disturbed lands in the project corridor and the lack of native soils and habitats in the area, there is no potential for special-status plant species to occur. As such, no focused surveys for special-status plants were conducted.

A search of CNPS (2018) and CNDDB (2018) records was utilized to develop a matrix of special-status plant species that may have potential to occur in the project corridor due to the presence of suitable habitat (taking into consideration vegetation communities, soils, elevation, and geographic range, life form/blooming period, etc.). This matrix of special-status plants (i.e., federally, state, or locally listed species), their favorable habitat conditions, and their potential to occur on site based on the findings of the field investigations is presented in Appendix C. Species considered special-status under the City's Subarea Plan (Subarea Plan Tables 3-3 and 3-

4), are included in the matrix (City of Oceanside 2010). Eleven special-status plant species were recorded within two miles of the project corridor as illustrated on Figure 4 (CNDDB 2018): the federally and state endangered thread-leaved brodiaea (*Brodiaea filifolia*), CRPR List 1B.1; Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*), CRPR List 1B.1; Nuttall's scrub oak (*Quercus dumosa*), CRPR List 1B.1; federally endangered San Diego ambrosia (*Ambrosia pumila*), CRPR List 1B.1; federally threatened and state endangered San Diego thornmint (*Acanthomintha ilicifolia*), CRPR List 1B.1; Wiggans' cryptantha (*Cryptantha wiggansii*), CRPR List 1B.1; cliff spurge (*Euphorbia misera*), CRPR List 2B.2; sea dahlia (*Coreopsis maritima*), CRPR List 2B.2; south coast saltscale (*Atriplex pacifica*), CRPR List 1B.2; and summer holly (*Comarostaphylis diversifolia* (Parry) Greene ssp. *diversifolia*), CRPR List 1B.2.

Due to the extent of developed lands and lack of native habitats and substrate, the special-status plant species listed above and outlined in Appendix C are not expected to occur in the project corridor.

#### 4.4.3 Special-Status Wildlife

Appendix D lists special-status wildlife species reported in the USGS 7.5-minute San Luis Rey quad and the surrounding seven topographic quadrangles (CDFW 2018a), as well as species listed in Tables 3-3 and 3-4 of the Final Oceanside Subarea Habitat Conservation Plan/Natural Communities Conservation Plan (City of Oceanside 2010). Appendix D also analyzes each of these special-status species' occurrence or potential to occur based on known range, habitat associations, geographic range, and elevation. Where applicable, a distinction is made between foraging and breeding habitat available in the project corridor.

Eight special-status wildlife species were recorded within two miles of the project corridor as illustrated on Figure 4 (CDFW 2018a): the federally threatened coastal California gnatcatcher (*Polioptila californica californica*); the federally and state endangered least Bell's vireo (*Vireo bellii pusillus*); the federally and state endangered southwestern willow flycatcher (*Empidonax trailli extimus*); the federally endangered and state threatened Stephens' kangaroo rat (*Dipodomys stephensi*); yellow warbler (Setophaga petechial), a USFWS Bird of Conservation Concern (BCC); yellow-breasted chat (*Icteria virens*), a California Species of Special Concern; white-tailed kite (*Elanus leucurus*), a California Fully Protected Species; and vernal pool fairy shrimp – either the federally endangered San Diego fairy shrimp (*Branchinecta sandiegonensis*) or Riverside fairy shrimp (*Streptocephalus woottoni*).

No special-status wildlife species were detected in the project corridor during any of the biological resource surveys and due to the extent of developed lands and lack of native habitat in the project corridor, none are expected to occur. However, one single red-tailed hawk (*Buteo jamaicensis*) individual was observed in flight over College Boulevard near Waring Road.

Hawks, also referred to as "birds of prey," are a valuable resource to the State of California, and therefore are protected under Sections 3503, 3503.5, 3505 and 3513 of the California Fish and Game Code, and California Code of Regulation, Title 14, Sections 251.1, 652 and 783-786.6. Despite the roadway traffic and general human presence in the project corridor, red-tailed hawks and other more urban-adapted raptor species including, but not limited to, red-shouldered hawk (*Buteo lineatus*) have a moderate potential to nest within the taller eucalyptus and ornamental trees along College Boulevard.

#### 4.4.4 Jurisdictional Wetlands Delineation

Within the project corridor, no jurisdictional wetlands or non-wetland waters of the U.S. were observed during the surveys. Evidence of hydrology and vegetation were evaluated throughout the project corridor but, because no potential wetland sites or non-wetland waters of the U.S. (i.e., natural drainages/channels) were identified, no data station pits were dug, and no formal wetland determination data forms were recorded. The project corridor crosses Loma Alta Creek, an east-west trending perennial, vegetated stream. However, the proposed improvements are limited to the existing road right-of-way in this area and will not encroach into the adjacent wetland and non-wetland waters of the U.S. associated with this waterway.

Ultimately, due to the lack of any indicators detected on site, no wetlands, waters, or other potential jurisdictional resources were mapped in the project corridor, and are not discussed further in this report.

## 4.5 Wildlife Corridors and Habitat Linkages

Wildlife movement typically occurs in wildlife corridors and habitat linkages that provide space and connectivity to other suitable habitat areas. Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals, and may also serve as primary habitat for smaller animals such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as stepping stones for dispersal.

To function effectively, a wildlife corridor must link two or more patches of habitat for which connectivity is desired, and it must be suitable for the focal target species to achieve the desired demographic and genetic exchange between populations.

The approximate 26.69-acre project corridor is not expected to provide for considerable wildlife movement or serve as an important habitat linkage. The project is centered on College Boulevard, a busy, north-south, four-lane major arterial roadway. The project corridor is extensively developed and is surrounded by existing, high-density commercial and residential development and industrial uses. Because of regular human activity and considerable vehicle traffic in and surrounding the project corridor, predominantly urban-adapted wildlife species are expected to occur in this area, such as raccoons (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), and brush rabbits (*Sylvilagus* spp.).

Moreover, the City's Subarea Plan identifies regional corridors and local corridors. According to this Subarea Plan (City of Oceanside 2010), a regional corridor runs north/south and is vital to linking core California gnatcatcher populations in Carlsbad to populations in Camp Pendleton. Local corridors, or east/west "feeder" corridors, connect with the larger, more extensive regional corridors. The project corridor is not located in either a California gnatcatcher regional corridor or a local corridor; the nearest local corridor is located west of the project corridor and west of Old Grove Road.

## 4.6 Regional Resources Planning Context

The project area is located within the Oceanside Subarea Plan, which is part of the North County MHCP (SANDAG 2003). The purpose of the Oceanside Subarea Plan is to address how the City "will conserve natural biotic communities and sensitive plant and wildlife species pursuant to the California Natural Community Conservation Planning Act (NCCP Act) and the U.S. Endangered Species Act (ESA)" (City of Oceanside 2010). One of the functions of the Oceanside Subarea Plan is to allow the City to construct infrastructure projects dictated by the City's Capital Improvement Program (City of Oceanside 2010).

The goals of the Oceanside Subarea Plan include the following:

- Conserve 90% to 100% of all hardline conservation areas per the details of the Subarea Plan.
- Conserve a minimum of 2,511 acres of existing native habitats as biological Preserve in the City.
- Conserve a net 100% of aquatic and wetland habitats by 98% preservation and compensatory replacement of acreage, function, and values for an estimated 2% of wetlands impacts.

## DUDEK

- Conserve a minimum of 95% of Rare and Narrow Endemic Species populations within the Preserve, and a minimum of 80% throughout the City as a whole.
- Restore a minimum of 164 acres of coastal sage scrub habitat within the City, of which 145 acres will be within the Wildlife Corridor Planning Zone.
- Prepare a comprehensive open space monitoring and management plan for the City's Preserve.
- Minimize the need for consultations with the Wildlife Agencies on a project-by-project approach for approval and mitigation requirements.
- Develop a tracking database and submit annual monitoring reports to the Wildlife Agencies that will document that conservation of habitat is occurring in rough-step to development of habitat.
- Ensure that mitigation is directed to the Wildlife Corridor Planning Zone and Preapproved Mitigation Areas such that the high-quality habitats and critical linkage areas become incorporated into the City's Preserve, while allowing development in lower-quality habitat areas.
- Implement local regulatory actions as specified in Section 5.3.3 in the MHCP Vol. I.
- Provide adequate funding for management and monitoring of the City's Preserve, including Priority 1 lands acquired by the Wildlife Agencies and excluding Wildlife Agency-owned lands, according to MHCP standards.

The project area is located outside of the coastal zone within the urban/developed part of the Oceanside Subarea Plan area and includes, but is not limited to, the following designated land uses: single-family residential, multi-family residential, regional and community shopping, transportation, and extractive industry (City of Oceanside 2010, Figure 2-3). Furthermore, according to the Oceanside Subarea Plan the project corridor is not located within any of the City's pre-approved mitigation areas, softline preserve areas, or hardline preserve areas (City of Oceanside 2010, Figure 4-1). However, the project is adjacent to a hardline preserve area on the east and west side of College Boulevard where the road crosses Loma Alta Creek (Figure 2).

The project area is not located within any of the Biological Core and Linkage Areas identified in the North County MHCP (SANDAG 2003, Figure 2-4).

## 5 PROJECT IMPACTS

### 5.1 Definition of Impacts

This section defines the types of impacts to analyze the proposed project's potential effects on biological resources. Proposed impacts are shown on Figure 3 and are discussed in more detail below.

*Direct impacts* include both the permanent loss of on-site habitat and the plant and wildlife species that it contains and the temporary loss of on-site habitat. Furthermore, direct impacts are where proposed project activities such as vegetation clearing, grading, excavation, or other ground-disturbing activities would result in the loss or removal of existing biological resources. Direct permanent impacts typically refer to the loss of a biological resource wherever the existing vegetation or land cover is permanently affected.

Direct impacts to plants can include complete or partial removal of the plants; crushing, trimming, or mowing; and compression of soil around roots. Direct impacts to wildlife refer to loss of habitat and/or loss of or harm to individuals that can be immediately attributed to the project. Loss or harm to individuals may vary by wildlife species, but the result is a net loss of a portion of a species population. For example, equipment used for excavation or grading can cause direct wildlife mortality or injure or entomb individuals, resulting in their eventual death. Vegetation clearing and/or grading can also result in destruction of birds' nests, resulting in the loss of eggs and young.

*Indirect impacts* are reasonably foreseeable effects caused by project implementation on remaining or adjacent biological resources outside the limits of work. Indirect impacts may affect areas within the defined project area but outside the limits of work, including non-impacted areas and areas outside of the project area. Indirect impacts include short-term effects immediately related to construction activities and long-term or chronic effects related to implementation of a project. In most cases, indirect effects are not quantified, but in some cases, quantification might be included, such as using a noise contour to quantify indirect impacts to nesting birds.

*Cumulative impacts* refer to the combined environmental effects of a project and other relevant projects. In some cases, the impact from a single project may not be significant, but when combined with other projects, the cumulative impact may be significant. Part of the City's participation in the North County MHCP is to avoid and minimize cumulative impacts to special-status biological resources throughout San Diego County. This planning effort provides a regional plan for preservation and mitigation of special-status biological resources within San

Diego County. The program addresses cumulative biological effects on a jurisdictional and regional level for MHCP-covered species in the North County MHCP area.

Implementation of mitigation measures to address site-specific impacts, and the proposed project's consistency with the City's Subarea Plan would reduce cumulative impacts to biological resources to less-than-significant levels. Therefore, cumulative impacts are not discussed further in this report.

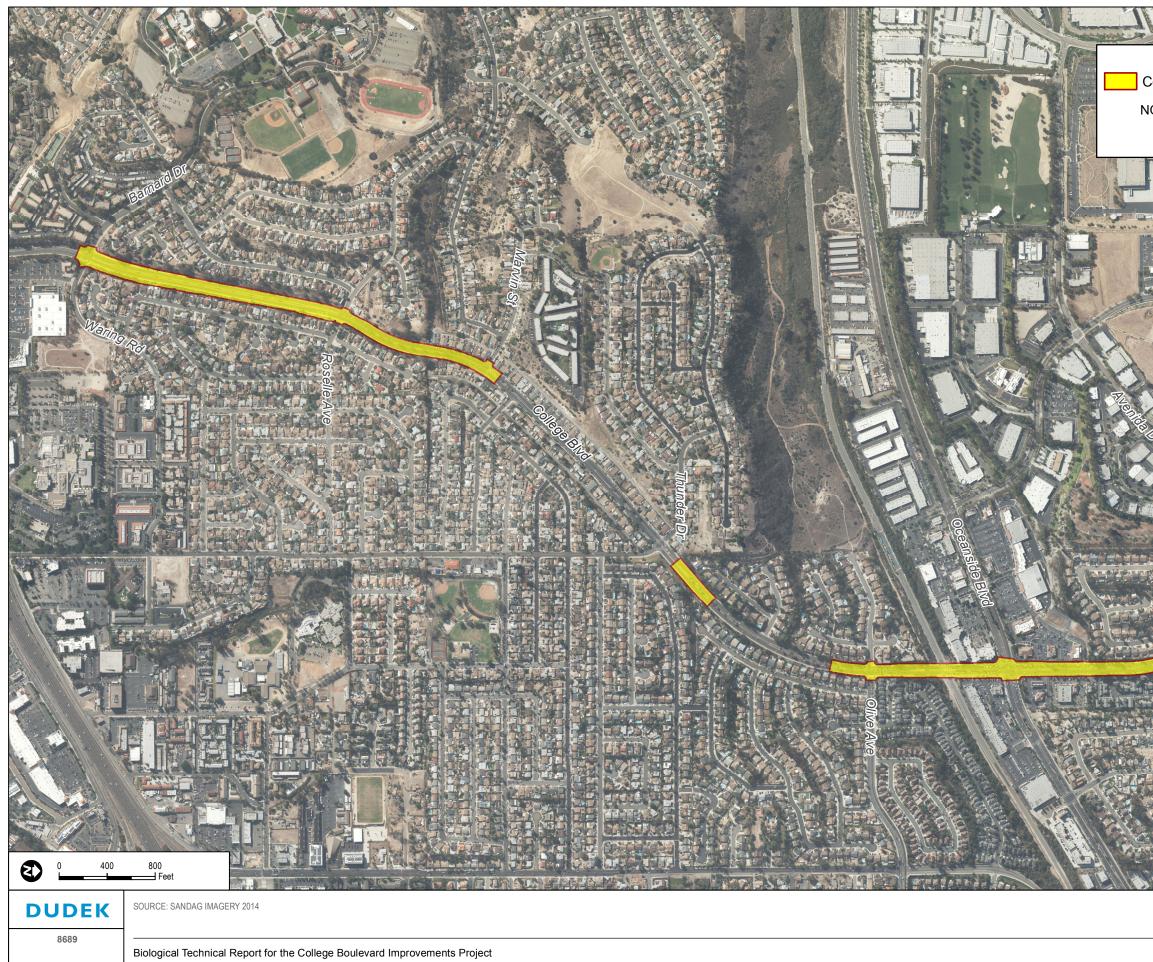
## 5.2 Direct Impacts

Direct impacts were analyzed by overlaying the project improvement plans onto the biological resources map. Impacts include direct impacts resulting from grading and widening of the existing roadway from a four-lane to a six-lane road and the associated improvements to College Boulevard. Direct impacts (i.e., proposed project limits) are depicted on Figure 3 and include the entire project site, no off-site areas are included in this project. Permanent impacts are areas where hardscape features (e.g., concrete, pavement, structures, etc.) will replace naturally vegetated (i.e., non-developed) areas. Temporary impacts are defined as areas impacted by initial construction, but will be restored post construction to retain native vegetation. No specific brush management zones were analyzed for this biological report.

#### 5.2.1 Vegetation Communities

Under the proposed project, permanent direct impacts to 26.69 acres of urban/developed land would occur due to implementation of the proposed roadway improvements. The distribution of biological resources in the project corridor and the locations where proposed impacts would occur are presented on Figure 3.

Clearing, trampling, or grading of vegetation outside of designated limits of work could occur in the absence of avoidance and mitigation measures, specifically where College Boulevard crosses Loma Alta Creek. At this location, there is a small patch of extensively disturbed Diegan coastal sage scrub in the adjacent, off-site uplands, and low-growing wetlands and open stream habitat associated with Loma Alta Creek, located just off site and adjacent to the project corridor. The potential effects associated with clearing, trampling, or grading of vegetation outside of designated limits of work could damage vegetation communities and alter their ecosystem, creating gaps in vegetation that allow exotic, non-native plant species to become established, thus increasing soil compaction and leading to soil erosion.



#### College Boulevard Improvements Project Limits

NOTE: Vegetation Type/Land Cover consists only of Developed Lands.

> FIGURE 3 Biological Resources Map with Impacts

INTENTIONALLY LEFT BLANK

8689 August 2018 There are no vegetation communities considered to be special status by the MHCP and City's Subarea Plan (City of Oceanside 2010) in the project corridor.

#### 5.2.2 Special-Status Plant Species

No special-status plant species were observed during the biological surveys and due to the extensively developed and disturbed context of the site and based on the results of the extensive literature review, special-status plants are not expected to occur in the project corridor (Appendix C). Therefore, no direct impacts to special-status plants are expected to occur as a result of the project.

#### 5.2.3 Special-Status Wildlife Species

No special-status wildlife species were observed during the biological resource surveys with the exception of a single red-tailed hawk (*Buteo jamaicensis*) observed in flight over College Boulevard near Waring Road.

No special-status bird species are expected to be directly impacted by the proposed project; however, if vegetation removal or other vegetation- or ground-disturbing activities associated with construction occur during the breeding season (typically March 1 through September 15, starting January 1 for raptors), nesting birds protected under the Migratory Bird Treaty Act (MBTA) could be directly impacted. Vegetation removal or other disturbances in active nesting habitat during the breeding season could cause direct injury or mortality, or the loss of nests, eggs, and fledglings of species protected under the MBTA.

#### 5.2.4 Wildlife Corridors/Habitat Linkages

As described in Section 4.5, the project corridor is not expected to provide for considerable wildlife movement or serve as an important habitat linkage for wildlife species. The project corridor is extensively developed and disturbed and is centered on a paved, four-lane major arterial roadway surrounded by existing commercial and residential development with limited industrial and educational developments as well. Permanent direct impacts to wildlife corridors/habitat linkages are not anticipated as a result of the proposed project.

#### 5.3 Indirect Impacts

Indirect impacts may result from (1) temporary, short-term effects due to construction activity and (2) long-term effects from annual maintenance activities.

#### 5.3.1 Vegetation Communities

Indirect impacts to vegetation communities would primarily result from adverse "edge effects." During vegetation removal and grading activities, short-term edge effects may include dust, soil erosion, and runoff from dust control that could disrupt plant vitality in non-impacted areas. However, all grading would be subject to the proposed project's best management practices (BMPs) and typical restrictions and requirements that address dust control, erosion, and runoff.

#### 5.3.2 Special-Status Plant Species

No special-status plant species were observed within the project corridor during biological surveys and due to the extensively developed and disturbed context of the project corridor special-status plant species are not expected to occur. In addition, no special-status species have a moderate or high potential to occur on site (Appendix C). Thus, no indirect impacts to special-status plant species are anticipated.

#### 5.3.3 Special-Status Wildlife Species

Potential temporary indirect impacts to wildlife species include dust, noise, lighting, and increased human presence. Nesting birds protected under the MBTA, including red-tailed hawk, can be significantly affected by short-term construction-related noise, resulting in decreased reproductive success or abandonment of an area as nesting habitat.

Commonly urban-adapted passerine and raptor species (e.g., house finch, mourning dove, redtailed hawk) likely use the ornamental shrubs and trees on or adjacent to the project corridor for nest construction and foraging. Indirect impacts from construction-related noise may occur to bird species if construction occurs during the typical breeding season (i.e., March 1 through September 15, starting January 1 for raptors). Indirect impacts from dust are not expected to impact birds because they are highly mobile and on-site dust control measures (routine spraying areas with a water truck) will be implemented during earthwork activities. Artificial lighting is not expected because work will occur during the day. Further, because College Boulevard is currently exposed to lights at night from street lamps, headlights, building lights, house/property lights, stop lights, etc., the incorporation of improved lighting along College Boulevard is not expected to result in an adverse effect to special-status wildlife species.

#### 5.3.4 Wildlife Corridors/Habitat Linkages

Temporary indirect impacts to wildlife corridors/habitat linkages are not expected to occur. Due to the highly developed nature of the project corridor, wildlife corridors and habitat linkages are not expected to be indirectly impacted.

- Project Corridor Two Mile Buffer
- College Boulevard Improvements Project Limits

#### CNDDB Occurrence

- Blochman's dudleya
- California adolphia
- Nuttall's scrub oak
- San Diego ambrosia
- San Diego thorn-mint
- Southern Riparian Forest
- Southern Riparian Scrub
- Stephens' kangaroo rat
- Wiggins' cryptantha
- cliff spurge
- ocoastal California gnatcatcher
- least Bell's vireo
- sea dahlia
- south coast saltscale
- southwestern willow flycatcher summer holly
- thread-leaved brodiaea vernal pool fairy shrimp
- white-tailed kite
- yellow warbler
- yellow-breasted chat

1,875

DUDEK

3,750

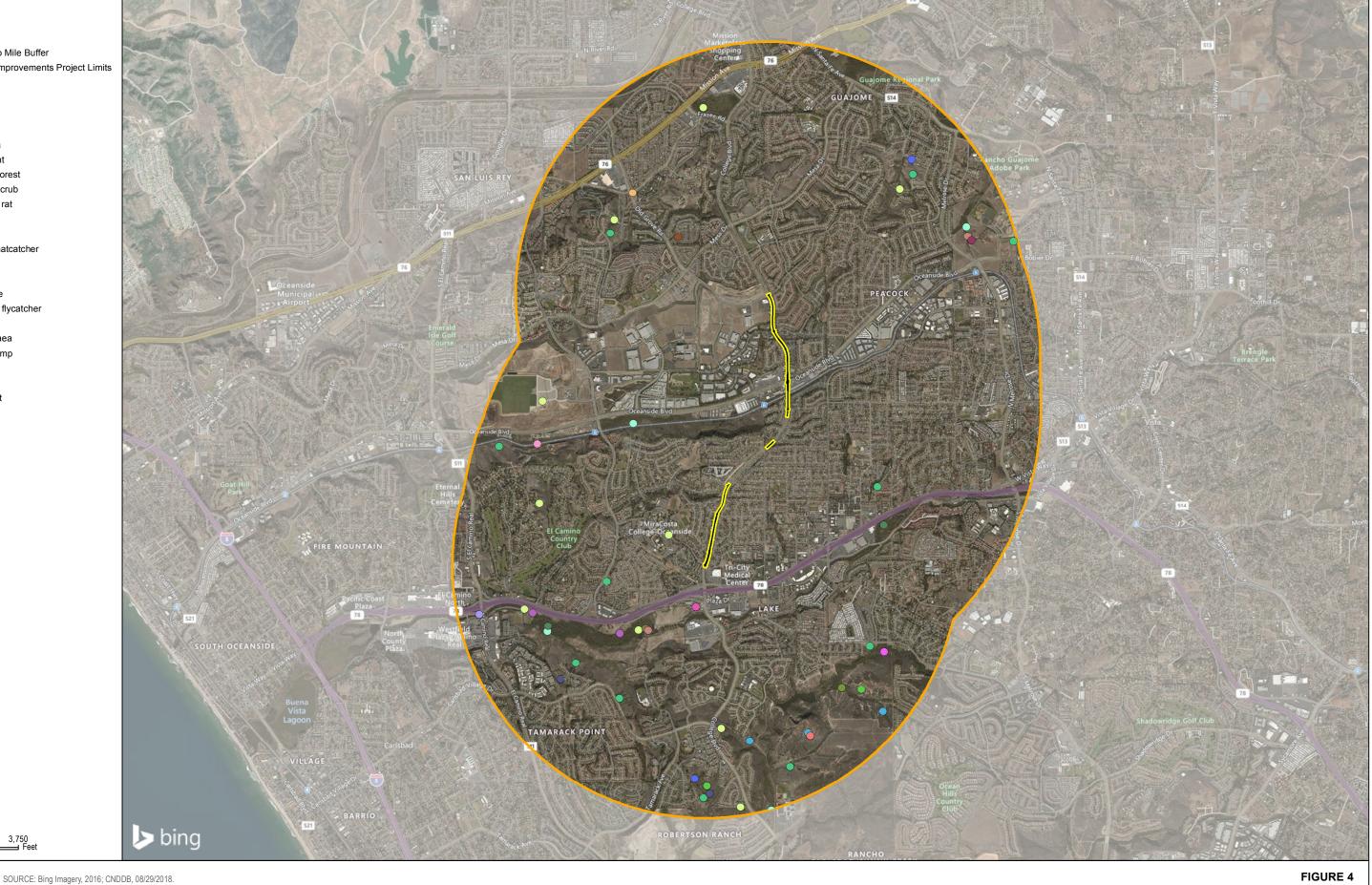


FIGURE 4 CNDDB Special-Status Species Occurences Map

INTENTIONALLY LEFT BLANK

8689 August 2018

## 6 ANALYSIS OF SIGNIFICANCE

## 6.1 Explanation of Findings of Significance

Impacts to special-status vegetation communities, special-status plants, and special-status wildlife species must be quantified and analyzed to determine whether such impacts are significant under CEQA. CEQA Guidelines Section 15064(b) states that an ironclad definition of "significant" effect is not possible because the significance of an activity may vary with the setting. Appendix G of the CEQA Guidelines, however, does provide examples of consequences that may be "deemed to be a significant effect on the environment" (CEQA Guidelines, Section 15064(e)). These effects include substantial effects on rare or endangered species of animals or plants, or the habitat of the species. Guidelines Section 15065(a) is also helpful in defining whether a project may have "a significant effect on the environment." Under that section, a proposed project may have a significant effect on the environment if the project has the potential to (1) substantially degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, (5) reduce the number or restrict the range of a rare or endangered plant or animal, or (6) eliminate important examples of a major period of California history or prehistory.

The evaluation of whether an impact to a particular biological resource is significant must consider both the resource itself and the role of that resource in a regional context. Substantial impacts are those that contribute to or result in permanent loss of an important resource, such as a population of a rare plant or animal. Impacts may be important locally because they result in an adverse alteration of existing site conditions, but considered not significant because they do not contribute substantially to the permanent loss of that resource regionally. The severity of an impact is the primary determinant of whether that impact can be mitigated to a level below significant.

The following significance determinations were made based on the impacts from the proposed project.

#### 6.2 Vegetation Communities

The proposed project would result in direct permanent impacts to 26.69 acres of urban/developed land as discussed in Section 5.2.1 and as illustrated on Figure 3.

Direct permanent impacts to urban/developed land are not considered significant. However, clearing, trampling, or grading of vegetation outside of the authorized limits of work could occur in the absence of mitigation measures specifically where College Boulevard crosses Loma Alta

Creek. Such temporary direct impacts to vegetation outside of the approved work limits would be considered a significant impact, absent mitigation (Impact BIO-1).

## 6.3 Special-Status Plants

No special-status plant species are present on site and are not expected to occur due to the extent of developed lands and lack of native habitats and soils in the project corridor. Therefore, no direct or indirect impacts to special-status plant species are expected to occur.

#### 6.4 Special-Status Wildlife

A single red-tailed hawk was observed in flight over College Boulevard during the biological resource surveys. Raptors could nest in the eucalyptus trees and other tall ornamentally planted trees along College Boulevard and could utilize the ornamentally vegetated slopes adjacent to College Boulevard for foraging. No direct impacts to other special-status wildlife species or their habitat are anticipated due to the lack of suitable habitat within the proposed limits of work.

Short-term, temporary, or construction-related impacts to migratory birds and active migratory bird nests and/or eggs protected under the MBTA are considered a significant impact, absent mitigation (Impact BIO-2).

#### 6.5 Habitat Linkages/Wildlife Corridors

Implementation of the proposed project is not expected to preclude the long-term use of habitat adjacent to the roadway improvements or hinder its suitability as a corridor for local wildlife movement or habitat linkage. Although increased human presence and noise during construction could temporarily affect the use of habitat areas adjacent to the project corridor, particularly where College Boulevard crosses Loma Alta Creek, species that are expected to occur and move locally, such as rabbits, raccoons, and occasionally coyotes, are primarily nocturnal, and their use of adjacent habitat areas during and after construction would not be substantially affected. Therefore, there would be no significant impacts to habitat linkages or wildlife corridors as a result of the proposed project.

## 7 MITIGATION

This section describes the measures that are proposed to mitigate for significant impacts to the biological resources identified in Section 6.0.

#### 7.1 Vegetation Communities

This section describes the mitigation measures proposed for direct impacts to special-status vegetation communities.

- **Impact BIO-1** Impacts to special-status vegetation communities outside of the impact area.
- **MM BIO-1** To prevent inadvertent disturbance to areas outside the limits of grading, orange environmental fencing shall be installed to delineate the limits of grading, and all grading shall be monitored by a qualified biologist. A biologist shall be contracted to perform biological monitoring during all grading, clearing, grubbing, trenching, and construction activities.

The project biologist shall perform the following duties:

- 1. Attend the preconstruction meeting/training with the contractor and other key construction personnel prior to clearing, grubbing, or grading to reduce conflict between the timing and location of construction activities with other mitigation requirements (e.g., seasonal surveys for nesting birds). At a minimum, the training shall include the general provisions of the MHCP and the need to adhere to the provisions of the MHCP.
- 2. Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas prior to clearing, grubbing, or grading.
- 3. Discuss procedures for minimizing harm to or harassment of wildlife encountered during construction with the contractor and other key construction personnel prior to clearing, grubbing, or grading.
- 4. Review and/or designate the construction area in the field with the contractor in accordance with the final grading plan prior to clearing, grubbing, or grading.

- 5. Conduct a field review of the staking to be set by the surveyor, and the subsequent installation of orange environmental fencing designating the limits of all construction activity prior to clearing, grubbing, or grading.
- 6. Be present during initial vegetation clearing, grubbing, and grading. The biologist shall prepare periodic construction monitoring reports and a post-construction report to document compliance. If dead or injured listed species are located, initial notification must be made in writing within 3 working days to the applicable jurisdiction. Any native, special-status habitat, including wetlands and non-wetland waters, destroyed that is not in the identified project footprint shall be disclosed immediately to the City of Oceanside and shall be compensated at a minimum ratio of 5:1.
- 7. Any unauthorized impacts to wetlands and non-wetland waters of the U.S. associated with Loma Alta Creek will require a stop-work notice and notification made to the City of Oceanside and regulatory resource agencies.
- 8. Flush wildlife species (i.e., avian or other mobile species) from occupied habitat areas immediately prior to ground-disturbing activities. The project site shall be kept as clean of debris as possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site. Pets of project personnel shall not be allowed on site.

#### 7.2 Special-Status Plants

Implementation of the proposed project would not result in direct impacts to any special-status plants; therefore, no mitigation is proposed.

#### 7.3 Special-Status Wildlife

In the event that construction activities occur during the nesting bird season, the following mitigation measure is proposed for red-tailed hawk and other species protected under the MBTA.

- Impact BIO-2Direct and indirect impacts to nesting birds and raptors protected under the<br/>Migratory Bird Treaty Act.
- MM BIO-2 Within 72 hours of ground-disturbing activities associated with construction activities during the nesting/breeding season of native bird species potentially nesting on the site (March 1 through September 15, starting January 1 for

raptors), the City shall have surveys conducted by a qualified biologist to determine if active nests of bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the impact area or within 300 feet (500 feet for raptors) of the impact area.

If active nests are found, the biological monitor shall establish an avoidance buffer at his/her discretion (typically 50 to 500 feet, depending on the species) until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas. A biological monitor shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts to these nests occur.

### 7.4 Habitat Linkages/Wildlife Corridors

No mitigation is proposed for direct impacts to habitat linkages/wildlife corridors because the proposed impacts are not considered significant.

### INTENTIONALLY LEFT BLANK

### 8 REFERENCES

16 U.S.C. 703–712. Migratory Bird Treaty Act, as amended.

- AOU (American Ornithologists' Union). 1998. Checklist of North American Birds: The Species of Birds in North America from the Arctic through Panama, including the West Indies and Hawaiian Islands. 7th ed. Lawrence, Kansas: Allen Press Inc. http://www.aou.org/ checklist/north/print.php.
- AOU. 2013a. Fifty-Fourth Supplement to the American Ornithologists' Union Check-List of North American Birds. *Auk* 130(3): 558–571.
- AOU. 2013b. "Check-List of North American Birds: List of the 2,090 Bird Species Known From the AOU Check-List Area." Updated September 13, 2013. Accessed August 3, 2014. http://www.aou.org/checklist/north/full.php.
- CDFW (California Department of Fish and Wildlife). 2018a. California Natural Diversity Database (CNDDB). Rarefind. Version 5.2.14, Biogeographic Data Branch. August 2018.
- CDFW. 2018b. CNDDB. Special Animals List. Periodic publication. August 2018. 65 pp.
- City of Oceanside. 2010. *Final Oceanside Subarea Habitat Conservation Plan/Natural Communities Conservation Plan*. Accessed June 2016.http://www.ci.oceanside.ca.us/gov/dev/planning/subarea.asp.
- CNPS. 2018. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, California. Accessed August 2018. http://www.rareplants.cnps.org.
- Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Nongame-Heritage Program, California Department of Fish and Game. October 1986.
- Oberbauer, T., M. Kelly, and J. Buegge. 2008. Draft Vegetation Communities of San Diego County. March 2008.
- SANDAG (San Diego Association of Governments). 2003. *Final MHCP Plan*. Prepared for the North County Multiple Habitat Conservation Program. March 28, 2003. http://www.sandag.org/?projectid=97&fuseaction=projects.detail.
- U.S. Army Corps of Engineers (USACE). 1987. Corps of Engineers Wetlands Delineation Manual. Wetlands Research Program Technical Report Y-87-1.

### DUDEK

- USACE. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Environmental Laboratory, ERDC/EL TR-08-28. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center. September 2008.
- USACE and EPA (U.S. Environmental Protection Agency). 2007. Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States. June 5, 2007. http://water.epa.gov/lawsregs/guidance/wetlands/ upload/2008\_12\_3\_wetlands\_CWA\_Jurisdiction\_Following\_Rapanos120208.pdf.

USFWS. 2008. Birds of Conservation Concern 2008. December 2008.

Wilson, D.E., and D.M. Reeder, eds. 2005. *Mammal Species of the World: A Taxonomic and Geographic Reference*. 3rd ed. Baltimore, Maryland: Johns Hopkins University Press.

# **APPENDIX A**

Plant Compendium

### APPENDIX A Plant Compendium

#### **PLANT SPECIES**

- \* Melaleuca viminalis weeping bottlebrush
- \* *Sonchus oleraceus* common sowthistle
- \* Acacia longifolia Sydney golden wattle
- \* Avena fatua wild oat
- \* Bromus madritensis compact brome
- \* Carpobrotus edulis hottentot fig
- \* Cynodon dactylon Bermudagrass
- \* Eucalyptus camaldulensis river redgum
- \* Eucalyptus citriodora lemonscented gum
- \* Eucalyptus polyanthemos redbox
- \* *Festuca arundinacea* tall fescue
- \* Gazania linearis treasureflower
- \* Jacaranda mimosifolia blue jacaranda
- \* Lysimachia arvensis scarlet pimpernel
- \* Melaleuca citrina crimson bottlebrush
- \* Nerium oleander oleander
- \* Oxalis pes-caprae Bermuda buttercup
- \* Pennisetum setaceum crimson fountaingrass
- \* Phoenix dactylifera date palm
- \* *Punica granatum* pomegranate
- \* *Raphanus sativus* cultivated radish
- \* Salsola tragus prickly Russian thistle
- \* Schinus terebinthifolius Brazilian peppertree
- \* *Washingtonia robusta* Washington fan palm
- \* Bougainvillea glabra bougainvillea
- \* *Eucalyptus* sp. Eucalyptus
- \* Liquidambar styraciflua liquidambar
- *Rhaphiolepis indica* Indian hawthorn
  *Erigeron canadensis* Canadian horseweed
  *Heterotheca grandiflora* telegraphweed
  *Paspalum distichum* knotgrass
  *Platanus racemosa* California sycamore
  *Washingtonia filifera* California fan palm
  *Lagerstroemia indica* crepe myrtle

\* signifies introduced (non-native) species

DUDEK

#### INTENTIONALLY LEFT BLANK

# **APPENDIX B**

Wildlife Compendium

### APPENDIX B Wildlife Compendium

#### WILDLIFE SPECIES – VERTEBRATES

#### BIRDS

#### AEGITHALIDAE – LONG-TAILED TITS AND BUSHTITS

Psaltriparus minimus – bushtit

#### EMBERIZIDAE – EMBERIZIDS

*Melospiza melodia* – song sparrow

#### FRINGILLIDAE – FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

*Spinus psaltria* – lesser goldfinch *Haemorhous mexicanus* – house finch

### ACCIPITRIDAE – HAWKS, KITES, EAGLES, AND ALLIES

Buteo jamaicensis - red-tailed hawk

#### TROCHILIDAE – HUMMINGBIRDS

Calypte anna – Anna's hummingbird

#### CORVIDAE – CROWS AND JAYS

Corvus brachyrhynchos - American crow

#### MIMIDAE – MOCKINGBIRDS AND THRASHERS

Mimus polyglottos - northern mockingbird

#### COLUMBIDAE – PIGEONS AND DOVES

Zenaida macroura - mourning dove

DUDEK

#### INTENTIONALLY LEFT BLANK

## **APPENDIX C**

Special-Status Plant Species and the Potential to Occur in the Project Corridor

### APPENDIX C Special-Status Plant Species and the Potential to Occur in the Project Corridor

Scientific Name Common Name		Status Federal/State/ CRPR/Local	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation	Status On Site or Potential to Occur	
Abronia maritima	red sand-verbena	None/None/ 4.2/None	Coastal dunes/ perennial herb/ Feb–Nov/ 0–328 feet	Not expected to occur. No suitable habitat present.	
Abronia villosa var. aurita	chaparral sand- verbena	None/None/ 1B.1/None	Chaparral, coastal scrub, desert dunes/sandy/ annual herb/ Jan–Sep/ 246– 5,249 feet	Not expected to occur. The site is outside of the species' known elevation range.	
Acanthomintha ilicifolia	San Diego thorn- mint	FT/CE/ 1B.1/Covered, NE	Chaparral, coastal scrub, valley and foothill grassland, vernal pools/clay, openings/ annual herb/ Apr–Jun/ 33–3,150 feet	Not expected to occur. No suitable habitat present.	
Acmispon prostratus	Nuttall's lotus	None/None/ 1B.1/None	Coastal dunes, coastal scrub (sandy)/ annual herb/ Mar–Jun(Jul)/ 0–33 feet	Not expected to occur. No suitable habitat present.	
Adolphia californica	California adolphia	None/None/ 2B.1/None	Chaparral, coastal scrub, valley and foothill grassland/clay/ perennial deciduous shrub/ Dec-May/ 148-2,428 feet	Not expected to occur. There is no suitable vegetation present. This perennial species was not observed during site visits.	
Ambrosia pumila	San Diego ambrosia	FE/None/ 1B.1/Covered, NE	Chaparral, coastal scrub, valley and foothill grassland, vernal pools/sandy loam or clay, often in disturbed areas, sometimes alkaline/ perennial rhizomatous herb/ Apr– Oct/ 66–1,362 feet	Not expected to occur. No suitable habitat present.	
Arctostaphylos glandulosa ssp. crassifolia	Del Mar manzanita	FE/None/ 1B.1/Covered, NE	Chaparral (maritime, sandy)/ perennial evergreen shrub/ Dec–Jun/ 0–1,198 feet	Not expected to occur. No suitable habitat present.	
Artemisia palmeri	San Diego sagewort	None/None/ 4.2/None	Chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland/sandy, mesic/ perennial deciduous shrub/ (Feb),May–Sep/ 49–3,002 feet	Not expected to occur. No suitable habitat present.	
Asplenium vespertinum	western spleenwort	None/None/ 4.2/None	Chaparral, cismontane woodland, coastal scrub/rocky/ perennial rhizomatous herb/ Feb–Jun/ 591–3,281 feet	Not expected to occur. The site is outside of the species' known elevation range.	

Scientific Name	Common Name	Status Federal/State/ CRPR/Local	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation	Status On Site or Potential to Occur
Arctostaphylos rainbowensis	rainbow manzanita	None/None/1B.1/None	Chaparral/perennial evergreen shrub/Dec- Mar/670-2200 feet	Not expected to occur. The site is outside of the species' known elevation range.
Astragalus tener var. titi	coastal dunes milkvetch	FE/CE/ 1B.1/None	Coastal bluff scrub (sandy), coastal dunes, coastal prairie (mesic)/often vernally mesic areas / annual herb/ Mar–May / 3–164 feet	Not expected to occur. No suitable coastal vegetation communities present and no suitable soils are present on site for this species.
Atriplex coulteri	Coulter's saltbush	None/None/ 1B.2/None	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland/ alkaline or clay/perennial herb / Mar–Oct / 10–1,509 feet	Not expected to occur. No suitable habitat present.
Atriplex pacifica	South Coast saltscale	None/None/ 1B.2/None	Coastal bluff scrub, coastal dunes, coastal scrub, playas/ annual herb / Mar–Oct / 0– 459 feet	Low potential to occur. There is no suitable dune or bluff scrub on the site. This species is known to occur in the vicinity <sup>1</sup> .
Atriplex parishii	Parish's brittlescale	None/None/ 1B.1/None	Chenopod scrub, playas, vernal pools/alkaline/ annual herb/ Jun–Oct / 82– 6,234 feet	Not expected to occur. No suitable vegetation present. This perennial species was not observed during site visits.
Baccharis vanessae	Encinitas baccharis	FT/CE/ 1B.1/Covered, NE	Chaparral (maritime), cismontane woodland/ sandstone/ perennial deciduous shrub/ Aug–Nov/ 197–2,362 feet	Not expected to occur. There is no suitable vegetation present. This perennial species was not observed during site visits.
Bloomeria clevelandii	San Diego goldenstar	None/None/ 1B.1/None	Chaparral, coastal scrub, valley and foothill grassland, vernal pools/clay/ perennial bulbiferous herb/ Apr–May/ 164–1,526 feet	Not expected to occur. There is no suitable vegetation present. This perennial species was not observed during site visits.
Brodiaea filifolia	thread-leaved brodiaea	FT/CE/ 1B.1/Covered, NE	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools/often clay/ perennial bulbiferous herb/ Mar–Jun/ 82– 3,675 feet	Not expected to occur. No suitable habitat present.

Scientific Name	Common Name	Status Federal/State/ CRPR/Local	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation	Status On Site or Potential to Occur
Brodiaea orcuttii	Orcutt's brodiaea	None/None/ 1B.1/Covered	Closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools/mesic, clay, sometimes serpentinite/ perennial bulbiferous herb/ May–Jul/ 98– 5551 feet	Not expected to occur. No suitable habitat present.
Camissoniopsis lewisii	Lewis' evening- primrose	None/None/ 3/None		
Caulanthus simulans	Payson's jewel- flower	None/None/ 4.2/None	Chaparral, coastal scrub/sandy, granitic/ annual herb/ (Feb),Mar–May(Jun)/ 295– 7,218 feet	Not expected to occur. The site is outside of the species' known elevation range.
Ceanothus verrucosus	Wart-stemmed ceanothus	None/None/ 2B.2/Covered	Chaparral/ perennial evergreen shrub/ Dec–May/ 3–1,247 feet	Not expected to occur. There is no suitable vegetation present. This perennial species would have been observed if present.
Centromadia [Hemizonia] parryi spp. australis	southern tarplant	None/None/ 1B.1/None	Marshes and swamps (margins), valley and foothill grassland (vernally mesic), vernal pools/annual herb/ May–Nov/ 0–1,575 feet	Not expected to occur. No suitable marsh or vernal pool vegetation present.
Centromadia [Hemizonia] pungens ssp. laevis	smooth tarplant	None/None/ 1B.1/None	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland/alkaline/annual herb/ Apr– Sep/ 0–2,100 feet	Not expected to occur. There is no suitable meadow or riparian vegetation present. Suitable soils are not present onsite.
Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	None/None/ 1B.1/None	Coastal bluff scrub (sandy), coastal dunes/ annual herb/ Jan-Aug/ 0-328 feet	Not expected to occur. No suitable bluff or dune habitats present onsite.
Chamaebatia australis	southern mountain misery	None/None/4.2/None	Chaparral (gabbroic or metavolcanic)/perennial evergreen shrub/Nov–May/980–3345 feet	Not expected to occur. The site is outside of the species' known elevation range.

Scientific Name	Common Name	Status Federal/State/ CRPR/Local	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation	Status On Site or Potential to Occur
Chorizanthe orcuttiana	Orcutt's spineflower	FE/CE/ 1B.1/Covered, NE/None	Closed-cone coniferous forest, chaparral (maritime), Coastal scrub/sandy openings/ annual herb/ Mar–May/10–410 feet	Not expected to occur. There is no suitable vegetation present.
Chorizanthe polygonoides var. longispina	long-spined spineflower	None/None/ 1B.2/None	Chaparral, coastal scrub, Meadows and seeps, valley and foothill grassland, vernal pools/often clay/ annual herb/ Apr–Jul/ 98– 5,020 feet	Not expected to occur. There is no suitable vegetation present.
Cistanthe maritima	seaside cistanthe	None/None/ 4.2/None	Coastal bluff scrub, coastal scrub, valley and foothill grassland/sandy/ annual herb/ (Feb),Mar–Jun (Aug)/ 16–984 feet	Not expected to occur. There is no suitable vegetation present. This perennial species was not observed during site visits. This species is not known to occur in the vicinity <sup>1</sup> .
Clarkia delicata	delicate clarkia	None/None/ 1B.2/None	Chaparral, cismontane woodland/often gabbroic/ annual herb/ Apr–Jun/ 771–3,281 feet	Not expected to occur. The site is outside of the species' known elevation range, and there is no suitable vegetation present.
Comarostaphylis diversifolia ssp. diversifolia	summer holly	None/None/ 1B.2/Covered	Chaparral, cismontane woodland/ perennial evergreen shrub/ Apr–Jun/ 98–2,592 feet	Not expected to occur. There is no suitable vegetation present. This perennial species would have been observed if present.
Convolvulus simulans	small-flowered morning glory	None/None/ 4.2/None	Chaparral (openings), coastal scrub, valley and foothill grassland/clay, serpentinite seeps/ annual herb/ Mar–Jul/ 98–2,297 feet	Not expected to occur. There is no suitable vegetation present.
Corethrogyne filaginifolia var. incana	San Diego sand aster	None/None/ 1B.1/None	Coastal bluff scrub, chaparral, coastal scrub/perennial herb/ Jun–Sep/10–377 feet	Not expected to occur. There is no suitable vegetation present. This perennial species would have been observed during site visits if present. This species is not known to occur in the vicinity <sup>1</sup> .
Corethrogyne filaginifolia var. linifolia	Del Mar Mesa sand aster	None/None/ 1B.1/Covered, NE	Coastal bluff scrub, chaparral (maritime, openings), coastal scrub/sandy/ perennial herb/ May–Sep/ 49–492 feet	Not expected to occur. There is no suitable vegetation present. This perennial species would have been observed during site visits if present. This species is not known to occur in the vicinity <sup>1</sup> .

Scientific Name	Scientific Name Common Name		Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation	Status On Site or Potential to Occur
Cryptantha wigginsii	Wiggins' cryptantha	None/None/ 1B.2/None	Coastal scrub/often clay/ annual herb/ Feb– Jun/ 66–902 feet	Not expected to occur. There is no suitable vegetation present. This species is known to occur in the vicinity <sup>1</sup> .
Deinandra paniculata	paniculate tarplant	None/None/ 4.2/None	Coastal scrub, valley and foothill grassland, vernal pools/usually vernally mesic, sometimes sandy/ annual herb/ Apr–Nov/ 82–3,084 feet	Not expected to occur. There is no suitable vegetation present.
Dichondra occidentalis	western dichondra	None/None/ 4.2/None	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/ perennial rhizomatous herb/ (Jan), Mar–Jul/ 164–1,640 feet	Not expected to occur. There is no suitable vegetation present. The perennial species was not observed during site surveys.
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	None/None/ 1B.1/Covered	Coastal bluff scrub, chaparral, coastal scrub, valley and foothill grassland/rocky, often clay or serpentinite/ perennial herb/ Apr–Jun/ 16–1,476 feet	Not expected to occur. There is no suitable vegetation present.
Dudleya multicaulis	many-stemmed dudleya	None/None/ 1B.2/None	Chaparral, coastal scrub, valley and foothill grassland/often clay/ perennial herb/ Apr– Jul/ 49–2,592 feet	Not expected to occur. There is no suitable vegetation present. This species is not known to occur in the vicinity <sup>1</sup> .
Dudleya variegata	variegated dudleya	None/None/ 1B.2/Covered, NE	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools/clay/ perennial herb/ Apr–Jun/ 10– 1,903 feet	Not expected to occur. There is no suitable vegetation present.
Dudleya viscida	sticky dudleya	None/None/ 1B.2/Covered	Coastal bluff scrub, chaparral, cismontane woodland, coastal scrub/rocky/ perennial herb/ May–Jun/ 33–1,804 feet	Not expected to occur. There is no suitable vegetation present. This perennial species would have been observed during site visits if present.
Ericameria palmeri var. palmeri	Palmer's goldenbush	None/None/1B.1/None	Chaparral, Coastal scrub; mesic/perennial evergreen shrub/(July)Sep–Nov/95–1970 feet	Not expected to occur. There is no suitable vegetation present.

Scientific Name	Common Name	Status Federal/State/ CRPR/Local	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation	Status On Site or Potential to Occur
Eryngium aristulatum var. parishii	San Diego button- celery	FE/CE/ 1B.1/Covered, NE	Coastal scrub, valley and foothill grassland, vernal pools/mesic/ annual/ perennial herb/ Apr–Jun/ 66–2,034 feet	Not expected to occur. There are not suitable mesic soils onsite and site lacks vernal pool habitat.
Eryngium pendletonense	Pendleton button- celery	None/None/ 1B.1/None	Coastal bluff scrub, valley and foothill grassland, vernal pools/clay, vernally mesic/ perennial herb/ Apr–Jun(Jul)/ 49– 361 feet	Not expected to occur. No suitable vegetation present.
Erysimum ammophilum	sand-loving wallflower	None/None/1B.2/None	Chaparral (maritime), Coastal dunes, Coastal scrub; sandy, openings/perennial herb/Feb–June/0–195 feet	Not expected to occur. There is no suitable vegetation present.
Erythranthe diffusa	Palomar monkeyflower	None/None/4.3/None	Chaparral, Lower montane coniferous forest; sandy or gravelly/annual herb/Apr– June/4000–6005 feet	Not expected to occur. The site is outside of the species' known elevation range.
Euphorbia misera	cliff spurge	None/None/ 2B.2/Covered	Coastal bluff scrub, coastal scrub, Mojavean desert scrub/rocky/ perennial shrub/ Dec–Aug(Oct)/ 33–1,640 feet	Not expected to occur. There is no suitable vegetation present.
Ferocactus viridescens	San Diego barrel cactus	None/None/ 2B.1/Covered	Chaparral, coastal scrub, valley and foothill grassland, vernal pools/perennial stem succulent/ May–Jun/ 10–1,476 feet	Not expected to occur. There is no suitable vegetation present; this perennial cactus would have been observed.
Harpagonella palmeri	Palmer's grapplinghook	None/None/ 4.2/None	Chaparral, coastal scrub, valley and foothill grassland/clay/ annual herb/ Mar–May/ 66– 3,133 feet	Not expected to occur. There is no suitable vegetation present.
Hazardia orcuttii	Orcutt's hazardia	FC/CT/ 1B.1/Covered, NE	Chaparral (maritime), coastal scrub/often clay/ perennial evergreen shrub/ Aug–Oct/ 262–279 feet	Not expected to occur. There is no suitable vegetation present; this perennial species would have been observed if present.
Heterotheca sessiliflora ssp. sessiliflora	beach goldenaster	None/None/ 1B.1/None	Chaparral (coastal), coastal dunes, coastal scrub/ perennial herb/ Mar–Dec/ 0–4,019 feet	Not expected to occur. There is no suitable vegetation present. This species is not known to occur in the vicinity <sup>1</sup> .

Scientific Name	Name Common Name Federal/St		Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation	Status On Site or Potential to Occur
Holocarpha virgata ssp. elongata	graceful tarplant	None/None/ 4.2/None	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/ annual herb/ May–Nov/ 197–3,609 feet	Not expected to occur. There is no suitable vegetation present.
Hordeum intercedens	vernal barley	None/None/ 3.2/None	Coastal dunes, coastal scrub, valley and foothill grassland (saline flats and depressions), vernal pools/ annual herb/ Mar–Jun/ 16–3,281 feet	Not expected to occur. There is no suitable vegetation present. This species is not known to occur in the vicinity <sup>1</sup> .
Horkelia truncata	Ramona horkelia	None/None/ 1B.3/None	Chaparral, cismontane woodland/clay, gabbroic/ perennial herb/ May–Jun/ 1,312– 4,265 feet	Not expected to occur. The site is outside of the species' known elevation range, and there is no suitable vegetation present.
Isocoma menziesii var. decumbens	decumbent goldenbush	None/None/ 1B.2/None	Chaparral, coastal scrub (sandy, often in disturbed areas)/ perennial shrub/ Apr–Nov/ 33–443 feet	Not expected to occur. There is no suitable habitat present. This perennial shrub would have been observed.
lva hayesiana	San Diego marsh- elder	None/None/ 2B.2/Covered	Marshes and swamps, playas/ perennial herb/Apr–Oct/ 33–1,640 feet	Not expected to occur. There is no suitable habitat present. This perennial species would have been observed if present.
Juncus acutus ssp. leopoldii	southwestern spiny rush	None/None/ 4.2/None	Coastal dunes (mesic), meadows and seeps (alkaline seeps), marshes and swamps (coastal salt)/ perennial rhizomatous herb/ (Mar),May–Jun/ 10– 2,953 feet	Not present. This perennial species would have been observed during site visits.
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	None/None/ 1B.1/None	Marshes and swamps (coastal salt), playas, vernal pools/ annual herb/ Feb–Jun/ 3– 4,003 feet	Not expected to occur. No suitable swamp, playa or vernal pool habitat or vegetation present.
Lepidium virginicum var. robinsonii	Robinson's pepper- grass	None/None/ 4.3/None	Chaparral, coastal scrub/ annual herb/ Jan- Jul/ 3–2,904 feet	Not expected to occur. There is no suitable habitat present. This species is known to occur in the vicinity <sup>1</sup> .
Leptosyne maritima	sea dahlia	None/None/ 2B.2	Coastal bluff scrub, coastal scrub/ perennial herb/ Mar–May/ 16–492 feet	Not expected to occur. This perennial herb would have been observed if present.

Scientific Name	Common Name	Status Federal/State/ CRPR/Local	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation	Status On Site or Potential to Occur	
Lycium californicum	California box-thorn	None/None/ 4.2/None	Coastal bluff scrub, Coastal scrub/ perennial shrub/ (Dec),Mar–Aug/ 16–492 feet	Not present. There is no suitable habitat present. This perennial species would have been observed during surveys.	
Microseris douglasii ssp. platycarpha	small-flowered microseris	None/None/ 4.2/None	Cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools/clay/ annual herb/ Mar–May/ 49– 3,510 feet	Not expected to occur. There is no suitable habitat present. This species is not known to occur in the vicinity <sup>1</sup> .	
Monardella hypoleuca ssp. lanata	felt-leaved monardella	None/None/1B.2/None	Chaparral, Cismontane woodland/perennial rhizomatous herb/June-Aug/980-5165 feet	Not expected to occur. The site is outside of the species' known elevation range.	
Myosurus minimus ssp. apus	little mouse tail	None/None/ 3.1/Covered, NE	Valley and foothill grassland, Vernal pools (alkaline)/ annual herb/ Mar–Jun/ 66–2,100 feet	Not expected to occur. No suitable vegetation or soils present on the site.	
Nama stenocarpa	mud nama	None/None/ 2B.2/None	Marshes and swamps (lake margins, riverbanks)/ annual/perennial herb/ Jan– Jul/ 16–1,640 feet	Not expected to occur. No suitable marsh or swamp vegetation present.	
Navarretia fossalis	spreading navarretia	FT/None/ 1B.1/Covered, NE	Chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, vernal pools/ annual herb/ Apr–Jun/ 98– 2,149 feet	Not expected to occur. No suitable marsh, swamp, playa, or vernal pool habitat or vegetation present.	
Nemacaulis denudata var. denudata	coast woolly-heads	None/None/ 1B.2/None	Coastal dunes/ annual herb/ Apr–Sep/ 0– 328 feet	Not expected to occur. No suitable dune vegetation present.	
Nemacaulis denudata var. gracilis	slender woolly- heads	None/None/ 2B.2/None	Coastal dunes, desert dunes, Sonoran desert scrub/ annual herb/ (Mar),Apr–May/ 164–1,312 feet	Not expected to occur. The site is outside of this species' known elevation range. There is no suitable dune or desert scrub habitat or vegetation present.	
Nolina cismontana	chaparral nolina	None/None/ 1B.2/None	Chaparral, coastal scrub/sandstone or gabbro/ perennial evergreen shrub/ (Mar),May–Jul/ 459–4,183 feet	Not expected to occur. There is no suitable habitat present. This perennial shrub would have been observed if present.	
Orcuttia californica	California Orcutt grass	FE/CE/ 1B.1/Covered, NE	Vernal pools/ annual herb/ Apr–Aug/ 49– 2,165 feet	Not expected to occur. No suitable vernal pool vegetation present.	

Scientific Name	cientific Name Common Name F		Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation	Status On Site or Potential to Occur
Orobanche parishii ssp. brachyloba	short-lobed broomrape	None/None/ 4.2/None	Coastal bluff scrub, coastal dunes, coastal scrub/sandy/ perennial herb (parasitic)/ Apr–Oct/10–1,001 feet	Not expected to occur. There is no suitable habitat or soils for this species on the site. This perennial herb would have been observed during site surveys.
Pentachaeta aurea ssp. aurea	golden-rayed pentachaeta	None/None/ 4.2/None	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, valley and foothill grassland/ annual herb/ Mar–Jul/ 262– 6,070 feet	Not expected to occur. The site is outside of the species' known elevation range.
Phacelia ramosissima var. austrolitoralis	south coast branching phacelia	None/None/ 3.2/None	Chaparral, coastal dunes, coastal scrub, marshes and swamps (coastal salt)/sandy, sometimes rocky/ perennial herb/ Mar–Aug/ 16–984 feet	Not expected to occur. There is no suitable habitat present.
Phacelia stellaris	Brand's phacelia	FC/None/ 1B.1/None	Coastal dunes, coastal scrub/ annual herb/ Mar–Jun/ 3–1,312 feet	Not expected to occur. There is no suitable habitat present. This species is not known to occur in the vicinity <sup>1</sup> .
Pinus torreyana spp. torreyana	Torrey pine	None/None/ 1B.2/None	Closed-cone coniferous forest, chaparral/sandstone/ perennial evergreen tree/ NA/246–525 feet	Not expected to occur. There is no suitable habitat present.
Pogogyne abramsii	San Diego mesa mint	FE/SE/1B.1/None	Vernal pools/annual herb/Mar–July/295– 655 feet	Not expected to occur. No suitable vernal pool vegetation present.
Polygala cornuta var. fishiae	Fish's milkwort	None/None/ 4.3/None	Chaparral, cismontane woodland, riparian woodland/ perennial deciduous shrub/ May–Aug/ 328–3,281 feet	Not expected to occur. There is no suitable habitat present.
Pseudognaphalium leucocephalum	white rabbit-tobacco	None/None/2B.2/None	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland; sandy, gravelly/perennial herb/(July)Aug– Nov(Dec)/0–6890 feet	Not expected to occur. There is no suitable habitat present.
Psilocarphus brevissimus var. multiflorus	Delta woolly- marbles	None/None/ 4.2/None	Vernal pools/ annual herb/ May–Jun/ 33– 1,640 feet	Not expected to occur. No suitable vernal pool habitat present.

Scientific Name	Scientific Name Common Name Fee		Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation	Status On Site or Potential to Occur	
Quercus dumosa	Nuttall's scrub oak	None/None/ 1B.1/None	Closed-cone coniferous forest, chaparral, coastal scrub/sandy, clay loam/ perennial evergreen shrub/ Feb–Apr(Aug)/ 49–1,312 feet	Not expected to occur. There is no suitable habitat present. This perennial species would have been observed during surveys.	
Quercus engelmannii	Engelmann oak	None/None/ 4.2/None	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland/ perennial deciduous tree/ Mar–Jun/ 164– 4,265 feet	Not expected to occur. There is no suitable habitat present. This perennial species would have been observed during surveys.	
Salvia munzii	Munz's sage	None/None/2B.2/None	Chaparral, Coastal scrub/perennial evergreen shrub/Feb–Apr/375–3495 feet	Not expected to occur. There is no suitable habitat present.	
Selaginella cinerascens	ashy spike-moss	None/None/ 4.1/None	Chaparral, coastal scrub/ perennial rhizomatous herb/ NA/ 66–2,100 feet	Not expected to occur. There is no suitable habitat present.	
Senecio aphanactis	chaparral ragwort	None/None/ 2B.2/None	Chaparral, cismontane woodland, coastal scrub/sometimes alkaline/ annual herb/ Jan–Apr/ 49–2,625 feet	Not expected to occur. There is no suitable habitat present.	
Sidalcea neomexicana	salt spring checkerbloom	None/None/2B.2/None	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; alkaline, mesic/perennial herb/Mar– June/45–5020 feet	Not expected to occur. There is no suitable habitat present.	
Stemodia durantifolia	purple stemodia	None/None/2B.1/None	Sonoran desert scrub (often mesic, sandy)/perennial herb/(Jan) Apr,June,Aug,Sep,Oct,Dec/ 590–985 feet	Not expected to occur. The site is outside of the species' known elevation range.	
Stipa diegoensis	San Diego County needle grass	None/None/ 4.2/None	Chaparral, coastal scrub/rocky, often mesic/ perennial herb/ Feb–Jun/ 33–2,625 feet	Not expected to occur. There is no suitable habitat present. This species is not known to occur in the vicinity <sup>1</sup> .	
Suaeda esteroa	estuary seablite	None/None/ 1B.2/None	Marshes and swamps (coastal salt)/ perennial herb/ May–Oct(Jan)/ 0–16 feet	Not expected to occur. There is no suitable habitat present.	

#### Table C-1

#### Special-Status Plant Species and the Potential to Occur in the Project Corridor

Scientific Name	Common Name	Status Federal/State/ CRPR/Local	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation	Status On Site or Potential to Occur
Tetracoccus dioicus	Parry's tetracoccus	None/None/ 1B.2/None	Chaparral, coastal scrub/ perennial deciduous shrub/ Apr-May/ 541-3,281 feet	Not expected to occur. There is no suitable habitat present. This perennial species would have been observed during site visits.
Viguiera laciniata	San Diego County viguiera	None/None/ 4.2/None	Chaparral, coastal scrub/ perennial shrub/ Feb–Jun(Aug)/ 197–2,461 feet	Not expected to occur. There is no suitable habitat present. This perennial species would have been observed during site visits.

<sup>1</sup> Vicinity" refers to species recorded in the USGS 7.5-minute San Luis Rey quadrangle (CDFW 2018).

Note: This table includes all Covered Species from the City of Oceanside's Subarea Plan (City of Oceanside 2010) and Rare Plant Rank 1–4 species reported by the California Department of Fish and Wildlife (2018) in the San Luis Rey 7.5-minute topographic quadrangles and surrounding seven quadrangles: Oceanside, Las Pulgas Canyon, Morro Hill, Bonsall, San Marcos, Rancho Santa Fe, and Encinitas.

#### Legend:

FE: Federally listed as endangered

FT: Federally listed as threatened

FC: Federal Candidate for listing

CE: State listed as endangered

CT: State listed as threatened

CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere

CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere

CRPR 3: Plants about which more information is needed – a review list

CRPR 4: Plants of limited distribution - a watch list

1: Seriously threatened in California (over 80% 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 (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

Covered: Final Oceanside Subarea Plan considered for coverage (City of Oceanside 2010)

NE: Final Oceanside Subarea Plan narrow endemic species (City of Oceanside 2010)

NA: Not applicable

#### INTENTIONALLY LEFT BLANK

## **APPENDIX D**

## Special-Status Wildlife Species and the Potential to Occur in the Project Corridor

### APPENDIX D Special-Status Wildlife Species and the Potential to Occur in the Project Corridor

Species	Common Name	Status (Federal/ State)	San Diego MHCP Oceanside Subarea	Habitat	Potential to Occur
			Amphibians		
Anaxyrus californicus	arroyo toad	FE/SSC	Covered	Semiarid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically 3rd order); adjacent stream terraces and uplands for foraging and wintering	Not expected to occur as the site is outside of the species' known geographic range and there is no suitable habitat present.
Spea hammondii	western spadefoot	None/SSC	Covered	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley-foothill woodlands, pastures, and other agriculture	Not expected to occur as there is no suitable habitat present.
			Reptiles		
Actinemys marmorata	western pond turtle	None/SSC	Covered	Slow-moving permanent or intermittent streams, ponds, small lakes, reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur as there is no suitable habitat present.
Anniella stebbinsi	southern California legless lizard	None/SSC	None	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	Not expected to occur as there is no suitable habitat present.
Arizona elegans occidentalis	California glossy snake	None/SSC	None	Commonly occurs in desert regions throughout southern California. Prefers open sandy areas with scattered brush. Also found in rocky areas.	Not expected to occur as there is no suitable habitat present.

Species	Common Name	Status (Federal/ State)	San Diego MHCP Oceanside Subarea	Habitat	Potential to Occur
Aspidoscelis hyperythra	orangethroat whiptail	None/SSC	Covered	Low-elevation coastal scrub, chaparral, and valley-foothill hardwood	Low potential to occur as the project area is extensively disturbed/developed and confined to an existing, heavily travelled roadway with limited connectivity to adjacent open space areas.
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC	None	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	Low potential to occur as the project area is extensively disturbed/developed and confined to an existing, heavily travelled roadway with limited connectivity to adjacent open space areas.
Crotalus ruber	red diamond rattlesnake	None/SSC	None	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	Low potential to occur as the project area is extensively disturbed/developed and confined to an existing, heavily travelled roadway with limited connectivity to adjacent open space areas.
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	None	Open areas of sandy soil in valleys, foothills and semiarid mountains including coastal scrub, chaparral, valley- foothill hardwood, conifer, riparian, pine- cypress, juniper, and annual grassland	Low potential to occur as the project area is extensively disturbed/developed and confined to an existing, heavily travelled roadway with limited connectivity to adjacent open space areas.
Plestiodon skiltonianus interparietalis	Coronado Island skink	None/SSC	None	Woodlands, grasslands, pine forests, chaparral; rocky areas near water	Not expected to occur as there is no suitable habitat present.

Species	Common Name	Status (Federal/ State)	San Diego MHCP Oceanside Subarea	Habitat	Potential to Occur
Salvadora hexalepis virgultea	coast patch-nosed snake	None/SSC	None	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Little to no potential to occur as the project area is extensively developed, disturbed and fragmented due to surrounding residential and commercial development.
Thamnophis hammondii	two-striped gartersnake	None/SSC	None	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	No potential to occur in project area. No suitable habitat or vegetation present. Low potential to occur in portions of Loma Alta Creek just adjacent and west of the project area.
	1	r	Birds		
Accipiter cooperii (nesting)	Cooper's hawk	None/WL	Covered	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water	Low potential to occur. The reach of College Boulevard within the project area is lined with tall eucalyptus, western sycamore, sweetgum, and assorted ornamental trees that could provide potential roosting habitat for the species; however, there is no suitable nesting habitat in the project area.
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/PSE, SSC	None	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberrry; forages in grasslands, woodland, and agriculture	No potential to occur as there is no suitable habitat or vegetation present in the project area.

Species	Common Name	Status (Federal/ State)	San Diego MHCP Oceanside Subarea	Habitat	Potential to Occur
Aimophila ruficeps canescens	Southern California rufous- crowned sparrow	None/WL	Covered	Nests and forages open coastal scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches	No potential to occur as there is no suitable habitat or vegetation present.
Aquila chrysaetos (nesting and wintering)	golden eagle	BCC/FP, WL	Covered	Nests and winters in hilly, open/semi- open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Not expected to occur due to the extensive urban environment surrounding the site and small site size.
Artemisiospiza belli belli	Bell's sage sparrow	BCC/WL	Covered	Nests and forages in coastal scrub and dry chaparral; typically in large, unfragmented patches dominated by chamise; nests in more dense patches but uses more open habitat in winter	Not expected to occur. Unlikely to nest and/or forage on site due to the extensively developed, disturbed and fragmented nature of the project area.
Buteo swainsoni (nesting)	Swainson's hawk	BCC/ST	None	Nests in open woodland and savanna, riparian and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	Not expected to occur. The site is outside of the species' known geographic range for nesting and there is limited suitable habitat present in the project area.
Campylorhynchus brunneicapillus sandiegensis (San Diego and Orange Counties only)	coastal cactus wren	BCC/SSC	Covered	Southern cactus scrub patches	Not expected to occur as there is no suitable cactus scrub patches present in the project area.
Charadrius nivosus nivosus (nesting)	western snowy plover	FT, BCC/ SSC	Covered	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren, or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds	Not expected to occur as the project area is outside of the species' known geographic range for nesting and there is no suitable marine or estuarine habitats present in the project area.

Species	Common Name	Status (Federal/ State)	San Diego MHCP Oceanside Subarea	Habitat	Potential to Occur
Circus cyaneus (nesting)	northern harrier	None/SSC	None	Nests in open wetlands including marshy meadows, wet lightly grazed pastures, old fields, freshwater and brackish marshes, but also in drier habitats such as grassland and grain fields; forages in variety of habitats, including grassland, scrubs, rangelands, emergent wetlands, and other open habitats	Not expected to occur due to the developed/fragmented character of the project area and the surrounding urban development. Foraging opportunities are limited due to the extent of developed lands in the project area.
Elanus leucurus (nesting)	white-tailed kite	None/FP	None	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	Low potential to occur due to the developed/fragmented character of the project area and the surrounding urban development. Foraging opportunities are limited due to the extent of developed lands in the project area.
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE	Covered	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	Not expected to occur as there is no suitable habitat present.
Eremophila alpestris actia	California horned lark	None/WL	None	Nests and forages in grasslands disturbed lands, agriculture, and beaches; nests in alpine fell fields of the high Sierra	Not expected to occur as there is no suitable nesting or foraging habitat present in the project area. The project area is largely dominated by developed lands with disturbed and/or ornamentally landscaped slopes.

Species	Common Name	Status (Federal/ State)	San Diego MHCP Oceanside Subarea	Habitat	Potential to Occur
Falco peregrinus anatum (nesting)	American peregrine falcon	FDL/SDL, FP	Covered	Nests on cliffs, buildings, and bridges; forages in wetlands, riparian, meadows, croplands, especially where waterfowl are present	Not expected to occur due to the lack of suitable wetland or riparian habitat as well as the fragmented nature of the project area due to the surrounding urban development. There is no suitable nesting habitat in the project area.
Icteria virens (nesting)	yellow-breasted chat	None/SSC	Covered	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	Not expected to occur as there is no suitable riparian habitat present in the project area.
Ixobrychus exilis (nesting)	least bittern	BCC/SSC	None	Nests in freshwater and brackish marshes with dense, tall growths of aquatic and semiaquatic vegetation	Not expected to occur as there is no suitable marsh habitat or vegetation present in the project area.
Laterallus jamaicensis coturniculus	California black rail	BCC/ST, FP	None	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra foothill populations	Not expected to occur in the project area as the site is outside of the species' known geographic range and there is no suitable marshland habitat or vegetation present in the project area.
Pandion haliaetus (nesting)	osprey	None/WL	Covered	Large waters (lakes, reservoirs, rivers) supporting fish; usually near forest habitats, but widely observed along the coast	Not expected to occur as there is no suitable vegetation or open aquatic habitat present in the project area.
Passerculus sandwichensis beldingi	Belding's savannah sparrow	None/SE	Covered	Nests and forages in coastal saltmarsh dominated by pickleweed	Not expected to occur as there is no suitable saltmarsh habitat or vegetation present in the project area.
Passerculus sandwichensis rostratus (wintering)	large-billed savannah sparrow	None/SSC	Covered	Nests and forages in open, low saltmarsh vegetation including low halophytic scrub	Not expected to occur as there is no suitable saltmarsh habitat or vegetation present in the project area.

Species	Common Name	Status (Federal/ State)	San Diego MHCP Oceanside Subarea	Habitat	Potential to Occur
Pelecanus occidentalis californicus (nesting colonies and communal roosts)	California brown pelican	FDL/SDL, FP	Covered	Forage in warm coastal marine and estuarine environments; in California, nests on dry, rocky offshore islands	Not expected to occur as there is no suitable marine or estuarine habitat or vegetation present in the project area.
Plegadis chihi (nesting colony)	white-faced ibis	None/WL	Covered	Nests in shallow marshes with areas of emergent vegetation; winter foraging in shallow lacustrine waters, flooded agricultural fields, muddy ground of wet meadows, marshes, ponds, lakes, rivers, flooded fields, and estuaries	Not expected to occur as there is no suitable marshland habitat or vegetation present in the project area.
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Covered	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet in elevation	No potential to occur within the project area. Low potential to occur in disturbed areas adjacent to the project just south of Loma Alta Creek due to limited suitable habitat and the level of site disturbance.
Rallus obsoletus levipes	Ridgway's rail	FE/SE, FP	Covered	Coastal wetlands, brackish areas, coastal saline emergent wetlands	Not expected to occur as there is no suitable wetland or brackish habitat or vegetation present in the project area.
<i>Riparia riparia</i> (nesting)	bank swallow	None/ST	Non	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration	Not expected to occur as there is no suitable vegetation present in the project area.
Setophaga petechia (nesting)	yellow warbler	BCC/SSC	None	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed conifer habitats	Not expected to occur as there is no suitable habitat or vegetation present in the project area.

Species	Common Name	Status (Federal/ State)	San Diego MHCP Oceanside Subarea	Habitat	Potential to Occur
Sialia mexicana	western bluebird	None/ None	Covered	Nests in old-growth red fir, mixed conifer, lodegpole pine habitats near wet meadows used for foraging	Low potential to occur. Although there are documented occurrences of this species throughout the City of Oceanside there is no suitable nesting and/or foraging habitat in the project area.
Sternula antillarum browni (nesting colony)	California least tern	FE/SE, FP	Covered	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flat	Not expected to occur as there is no suitable lagoon or estuarine habitat or vegetation present.
Thalasseus elegans (nesting colony)	elegant tern	None/WL	Covered	Inshore coastal waters, bays, estuaries and harbors; forages over open water	Not expected to occur as there is no suitable habitat or natural vegetation present in the project area.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/ SE	Covered	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Not expected to occur as there is no suitable riparian vegetation present in the project area.
		•	Fish		
Eucyclogobius newberryi	tidewater goby	FE/SSC	None	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County, to the mouth of the Smith River	Not expected to occur as there is no suitable aquatic habitat present in the project area.
Gila orcuttii	arroyo chub	None/SSC	None	Warm, fluctuating streams with slow- moving or backwater sections of warm to cool streams at depths greater than 40 centimeters; substrates of sand or mud	Not expected to occur as the site is outside of the species' known geographic range and there is no suitable aquatic habitat present in the project area.

Table D-1
Special-Status Wildlife Species and the Potential to Occur in the Project Corridor

Species	Common Name	Status (Federal/ State)	San Diego MHCP Oceanside Subarea	Habitat	Potential to Occur
	•		Mammals	•	
Antrozous pallidus	pallid bat	None/SSC	None	Grasslands, shrublands, woodlands, forests; most common in open dry habitats with rocky outcrops for roosting, but also roosts in built structures and trees	Low potential to forage in the project area; low potential to roost in the project area due to existing active residential and commercial development and surrounding urban environment.
Chaetodipus californicus femoralis	Dulzura pocket mouse	None/SSC	None	Open habitat, coastal scrub, chaparral, oak woodland, chamise chaparral, mixed conifer habitats; disturbance specialist; 0 to 3,000 feet	Low potential to occur in the project area due to the extent of developed and disturbed lands and the lack of vegetation in the project area.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None/SSC	Covered	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland	Low potential to occur in the project area due to limited suitable habitat, amount of site disturbance, and the extent of disturbed and developed lands in the project area.
Choeronycteris mexicana	Mexican long- tongued bat	None/SSC	None	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon-juniper woodland; roosts in caves, mines, and buildings	Not expected to occur as there is no suitable desert or montane habitat or vegetation present and no suitable roosting habitat in the project area.
Corynorhinus townsendii	Townsend's big- eared bat	None/SC, SSC	None	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, as well as built structures and tunnels	Low potential to occur as there is no suitable habitats present and no suitable roosting habitat in the project area.

Species	Common Name	Status (Federal/ State)	San Diego MHCP Oceanside Subarea	Habitat	Potential to Occur
Dipodomys stephensi	Stephens' kangaroo rat	FE/ST	Covered	Annual and perennial grassland habitats, coastal scrub, or sagebrush with sparse canopy cover or in disturbed areas	Low potential to occur as the site is outside of the species' known geographic range and there is no suitable habitat present in the project area.
Eumops perotis californicus	western mastiff bat	None/SSC	None	Chaparral, coastal and desert scrub, coniferous, and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels.	Low potential to roost in the project area due to lack of suitable habitat; however, this species may forage over the project area.
Lasiurus xanthinus	western yellow bat	None/SSC	None	Valley foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet; roost in riparian and palms	Not expected to occur as there is no suitable habitat present in the project area.
Leptonycteris yerbabuenae	lesser long-nosed bat	FE/None	None	Sonoran desert scrub, semi-desert grasslands, lower oak woodlands	Not expected to occur as there is no suitable habitat present.
Lepus californicus bennettii	San Diego black- tailed jackrabbit	None/SSC	Covered	Arid habitats with open ground; grasslands, coastal scrub, agriculture, disturbed areas, and rangelands	Low potential to occur in the project area due to the extent of existing development, the disturbed and developed character of the site, and the lack of connectivity between the site and any surrounding open space areas.
Myotis yumanensis	Yuma myotis	None/None	None	Riparian, arid scrublands and deserts, and forests associated with water (streams, rivers, tinajas); roosts in bridges, buildings, cliff crevices, caves, mines, and trees	Not expected to occur as there is no suitable habitat or roosting habitat present in the project area. The project is centered solely on College Boulevard, a heavily travelled roadway.

Species	Common Name	Status (Federal/ State)	San Diego MHCP Oceanside Subarea	Habitat	Potential to Occur
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC	None	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Low potential to occur in the project area due to the extent of existing development, the disturbed and developed character of the site, and the lack of connectivity between the site and any surrounding open space areas.
Nyctinomops femorosaccus	pocketed free- tailed bat	None/SSC	None	Pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, palm oases; roosts in high cliffs or rock outcrops with dropoffs, caverns, buildings	Not expected to occur as there is no suitable habitat or vegetation present in the project area.
Odocoileus hemionus	mule deer	None/None	Covered	Coastal sage scrub, chaparral, riparian, woodlands, forest; often browses in open area adjacent to cover throughout California, except deserts and intensely farmed area.	Not expected to occur due to the extent of existing development, the disturbed and developed character of the site, and the lack of connectivity between the site and any surrounding open space areas.
Perognathus Iongimembris internationalis	Jacumba pocket mouse	None/SSC	Covered	Desert scrub and sparse sage scrub in areas with fine sandy soils	Not expected to occur as the site is outside of the species' known geographic range and there is no suitable habitat present in the project area.
Perognathus longimembris pacificus	Pacific pocket mouse	FE/SSC	None	Fine-grain sandy substrates in open coastal strand, coastal dunes, and river alluvium	Low potential to occur in the project area due to the extent of existing development, the disturbed and developed character of the site, and the lack of connectivity between the site and any surrounding open space areas.

Species	Common Name	Status (Federal/ State)	San Diego MHCP Oceanside Subarea	Habitat	Potential to Occur
Puma concolor	cougar	None/None	Covered	Scrubs, chaparral, riparian, woodland, forest; rests in rocky area, and on cliffs and ledges that provide cover; most abundant in riparian area and brushy stages of most habitats throughout California, except deserts	Not expected to occur in the project area due to the extent of existing development, the disturbed and developed character of the site, and the lack of connectivity between the site and any surrounding open space areas.
Taxidea taxus	American badger	None/SSC	None	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, pastures, especially with friable soils	Not expected to occur in the project area due to the extent of existing development, the disturbed and developed character of the site, and the lack of connectivity between the site and any surrounding open space areas.
			Invertebrates		
Branchinecta sandiegonensis	San Diego fairy shrimp	FE/None	Covered	Vernal pools, non-vegetated ephemeral pools	Not expected to occur in the project area due to the lack of vernal pool habitat and the extent of disturbed and developed lands.
Euphydryas editha quino	quino checkerspot	FE/None	Covered	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include <i>Plantago erecta</i> (dwarf plantain), <i>Antirrhinum</i> <i>coulterianum</i> (white snapdragon), and <i>Plantago patagonica</i> (woolly plantain) (Silverado Occurrence Complex)	Not expected to occur in the project area due to the lack of suitable microhabitat in the project area.
Panoquina errans	wandering skipper	None/None	Covered	Salt marsh	Not expected to occur in the project area due to the lack of suitable habitat and the extent of disturbed and developed lands.

#### Table D-1

#### Special-Status Wildlife Species and the Potential to Occur in the Project Corridor

Species	Common Name	Status (Federal/ State)	San Diego MHCP Oceanside Subarea	Habitat	Potential to Occur
Streptocephalus wootton	Riverside fairy shrimp	FE/None	Covered	Vernal pools, non-vegetated ephemeral pools	Not expected to occur in the project area due to the lack of vernal pool habitat and the extent of disturbed and developed lands.

Note: This table includes all special-status species reported by the California Department of Fish and Wildlife (2018) in the San Luis Rey 7.5-minute \Quadrangles and surrounding seven quadrangles: Oceanside, Las Pulgas Canyon, Morro Hill, Bonsall, San Marcos, Rancho Santa Fe, and Encinitas.

#### Legend:

FE: Federally Endangered FT: Federally Threatened FDL: Federally Delisted BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern SSC: California Species of Special Concern FP: California Fully Protected Species WL: California Watch List Species SE: State Endangered ST: State Threatened SC: State Candidate SDL: State Delisted Covered: Final Oceanside Subarea Plan Considered for Coverage (City of Oceanside 2010) None: No status designation

#### INTENTIONALLY LEFT BLANK