# Biological Survey Report for the North University City Fire Station 50 Project, San Diego, California

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# Acronyms

| | |
|---|---|
| ADD | Assistant Deputy Director |
| AMSL | above mean sea level |
| APN | Assessor's Parcel Number |
| BCME | Biological Construction Mitigation/Monitoring Exhibit |
| BMPs | Best Management Practices |
| BMZ | Brush Management Zone |
| Cal-IPC | California Invasive Plant Council |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CFR | Code of Federal Regulations |
| City | City of San Diego |
| CNDDB | California Natural Diversity Database |
| CNPS | California Native Plant Society |
| CSVR | Consultant Site Visit Record |
| dB(A) | A-weighted decibels |
| ED | Environmental Designee |
| ESA | Endangered Species Act |
| ESL | Environmentally Sensitive Lands |
| GPS | Global Positioning System |
| I-805 | Interstate 805 |
| LDC | Land Development Code |
| MBTA | Migratory Bird Treaty Act |
| MHPA | Multi-Habitat Planning Area |
| MMC | Mitigation Monitoring Coordination |
| MSCP | Multiple Species Conservation Program |
| USACE | U.S. Army Corps of Engineers |
| USDA | U.S. Department of Agricultures |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | U.S. Geological Survey |

# 1.0 Summary

The City of San Diego (City) proposes to construct and operate the North University City Fire Station 50 (proposed project). The project site is located within the University City community within the City, west of Interstate 805 (I-805), immediately south of Nobel Drive, and immediately east of Shoreline Drive. The development footprint of the project would comprise a total of 0.92 acre. The three-story, 12,000-square-foot fire station would accommodate 10 personnel and equipment in order to provide emergency response times that meet national standards within the North University City area.

The proposed project would impact a total of 0.94 acre, including 0.79 acre within the Multi-Habitat Planning Area (MHPA) and 0.15 acre outside the MHPA. This impact footprint is larger than the development footprint because it includes small slivers of vegetation that occur between the grading footprint and existing developed areas. These isolated areas would no longer be viable and are considered impacted. Three sensitive vegetation communities would be impacted: valley needlegrass grassland, Diegan coastal sage scrub, and non-native grassland. These impacts would require 0.742 acre of mitigation within the MHPA, which would be achieved through (1) preservation of similar habitat within the MHPA, (2) restoration and preservation of habitat within the MHPA, and/or (3) contribution to the City's Habitat Acquisition Fund. The total project impact represents less than 1 percent to the total lot acreage (92 acres), which is far below the 30 percent allowed per Section II.A.2 and II.B of the City's Biology Guidelines (2012) for essential public facilities, such as the proposed fire station. Because total direct impacts are below this 30 percent threshold, an MHPA boundary line adjustment would not be required.

Two sensitive plant species were detected within the survey area: ashy spike-moss (*Selaginella cinerascens*) and San Diego county viguiera (*Bahiopsis laciniata*). The project would impact an approximately 6-square-foot patch of ashy spike-moss, but would avoid impacts to San Diego county viguiera. Impacts to ashy spike-moss would not be considered significant, due to the relatively small number of individuals affected and the low sensitivity status of the species.

Two sensitive wildlife species were detected within or adjacent to the survey area: Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*) and western bluebird (*Sialia Mexicana occidentalis*). Additionally, red diamond rattlesnake (*Crotalus ruber*), coast horned lizard (*Phrynosoma coronatum blainvillii*), Cooper's hawk (*Accipiter cooperii*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and San Diego desert woodrat (*Neotoma lepida intermedia*) have moderate to high potential to occur. Protocol surveys were conducted for coastal California gnatcatcher (*Polioptila californica californica*), as well as a directed search for southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), but neither species was detected. The project would cause direct impacts to Belding's orange-throated whiptail, red diamond rattlesnake, coast horned lizard, coast horned lizard, and San Diego desert woodrat. Impacts to these species would be mitigated with the 0.742 acre of habitat-based mitigation described above for impacts to vegetation communities.

In accordance with the federal Migratory Bird Treaty Act, the project would also address potential impacts to nesting migratory birds. A pre-grading survey would be conducted to determine the presence or absence of nesting migratory birds within the project site. If nesting birds are identified, mitigation measures would be implemented to avoid impact to these birds. No construction would be allowed within 300 feet of any identified coastal California gnatcatcher nests (or other distance consistent with the City's Multiple Species Conservation Program (MSCP) Subarea Plan and 2012 Biology Guidelines and Wildlife Agency requirements). Such construction setbacks shall remain in place until the fledglings are independent of the nest.

# 2.0 Introduction

## 2.1 Project Location

The project site is located within the University City community in the northern portion of the City (Figures 1, 2, and 3). The project site is situated in the southwest corner of Assessor's Parcel Number (APN) 345-01-124, which covers approximately 92 acres and extends north across the athletic fields north of Nobel Drive and east to I-805. The project site is within the U.S. Geological Survey (USGS) La Jolla quadrangle, Township 15 South, Range 3 West, on unsectioned lands within the Pueblo Lands of San Diego land grant (USGS 1996; see Figure 2). An aerial view of the project site and survey area is shown on Figure 4. The project site is within the City's MSCP Subarea Plan (City of San Diego 1997) boundary, and it lies largely within the MHPA (Figure 5).

A portion of the project site was identified in 1996 as a mitigation parcel for the Eastgate Technology Park development (see Figure 5). This parcel was designated "Conserved Lands" per Resolution No. R-287317 and Environmental Impact Report No. 35-0386.

## 2.2 Project Description

As previously detailed, the proposed project comprises the construction and operation of a three-story, 12,000-square-foot fire station. The fire station would include a workshop, vestibule, watch room, exterior patio, and associated components that would house 10 crew members at all times, with a shift change typically occurring at 7 a.m. The project also includes an apparatus bay with three "slots" for storage of the fire engines and ambulances. Other on-site components include a 14-space parking lot that would have a gated entry; a storage area for a fuel tank, generator, and transformer; and a trash enclosure. Three 75-foot-wide flow-through planters would be provided in the southern portion of the site that would treat and detain all storm water runoff on-site. Native landscaping would be provided throughout the project site.

Construction for the project would begin with clearing and grubbing of the site, followed by grading for the fire station building pad, parking lot, and driveways. Grading operations would entail 4,300 cubic yards of excavation, with a maximum cut depth of 10 feet. Fill quantities would be 1,600 cubic yards, with a maximum fill depth of 10 feet. Approximately 2,700 cubic yards would be exported.


Project Site

# FIGURE 1

Regional Location of the North University City Fire Station 50 Project

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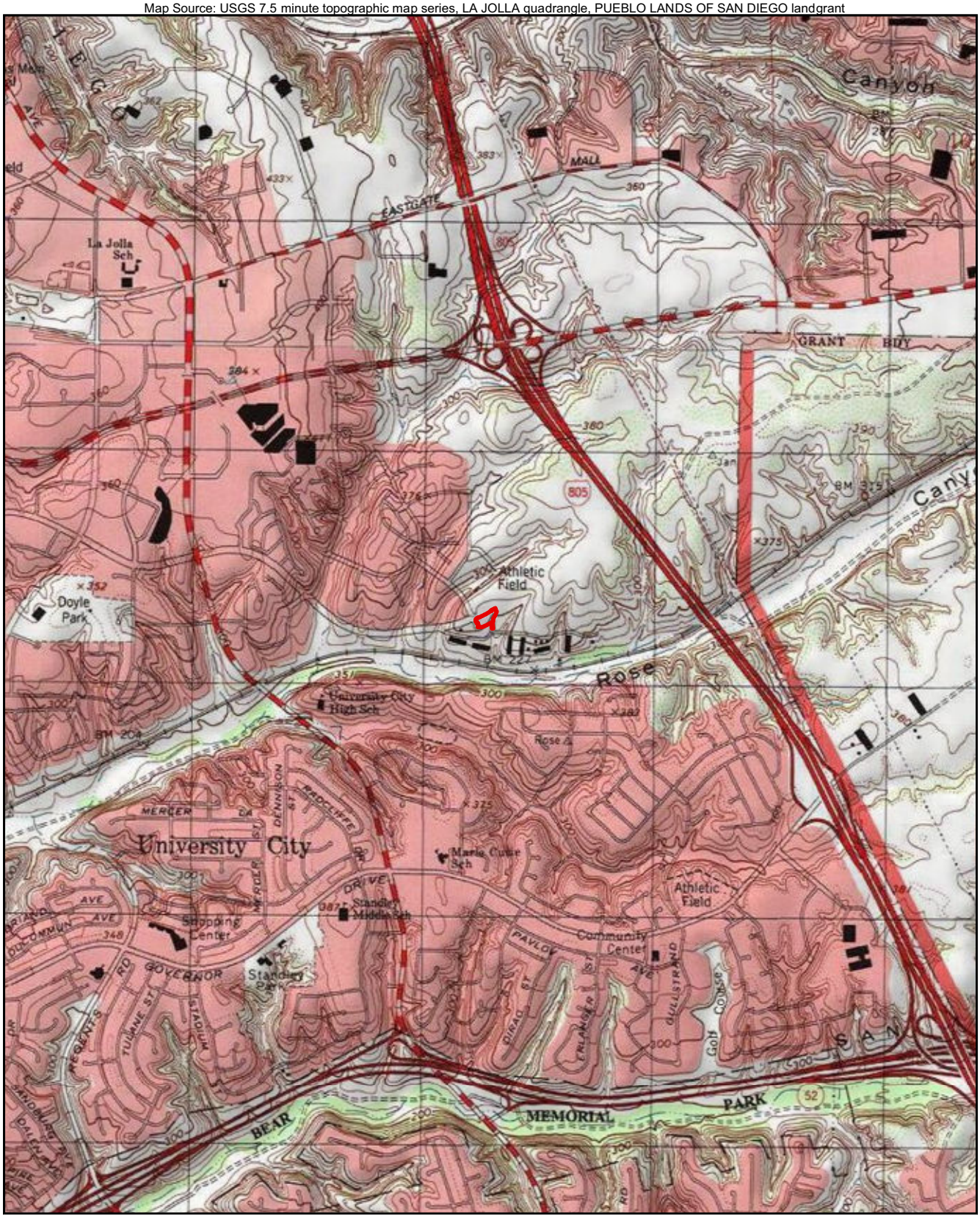
Map Source: USGS 7.5 minute topographic map series, LA JOLLA quadrangle, PUEBLO LANDS OF SAN DIEGO landgrant




Project Site

FIGURE 2

Project Site Location on USGS Map

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Map Source: City of San Diego, Engineering and Development Department, City 800' Maps, Number 250-1701

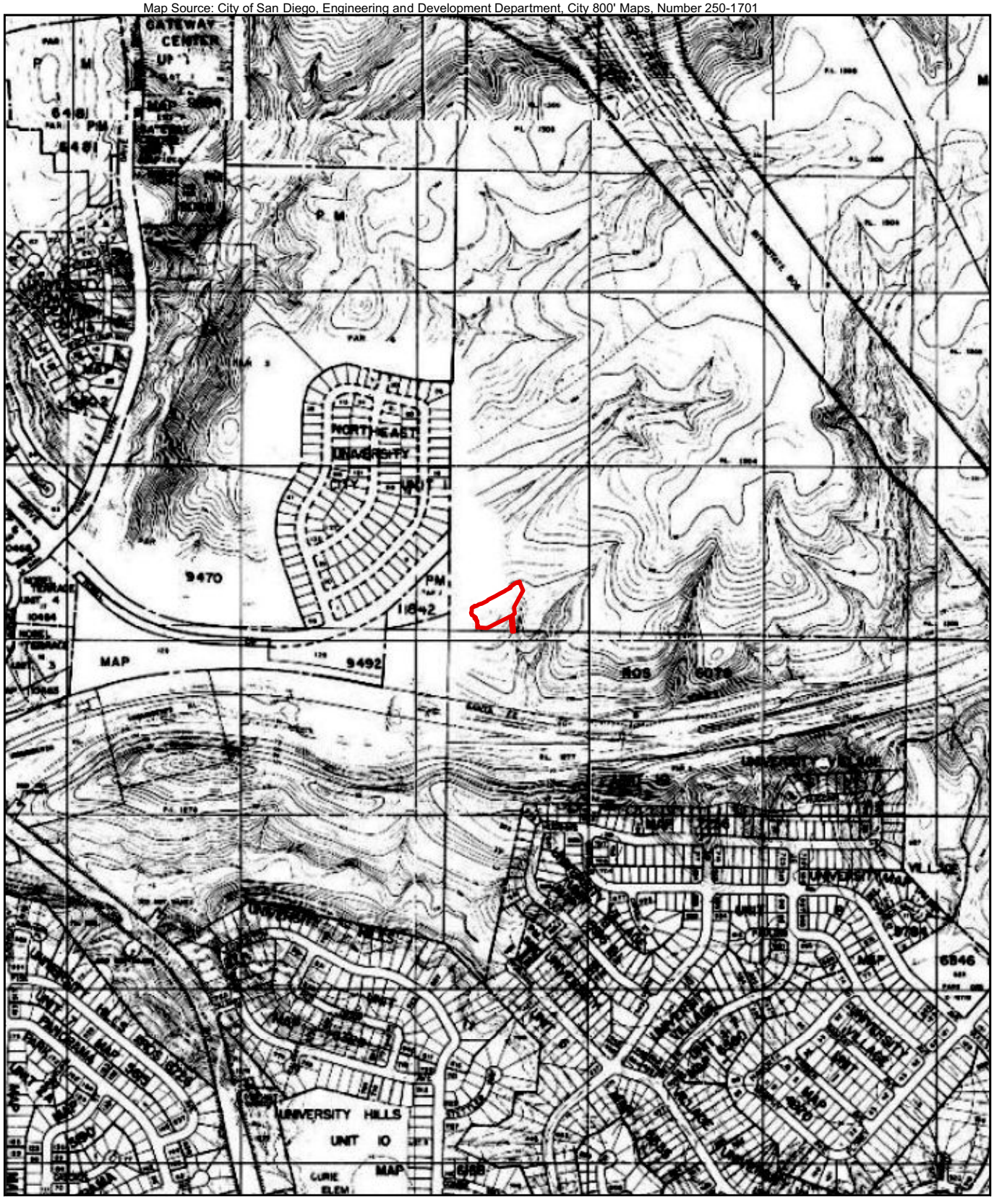


FIGURE 3

Project Location on City 800' Map

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Image Source: USDA FSA NAIP (flown June 2014)


0 Feet 80

Project Site

Site Plan

FIGURE 4

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Project Location on Aerial Photograph

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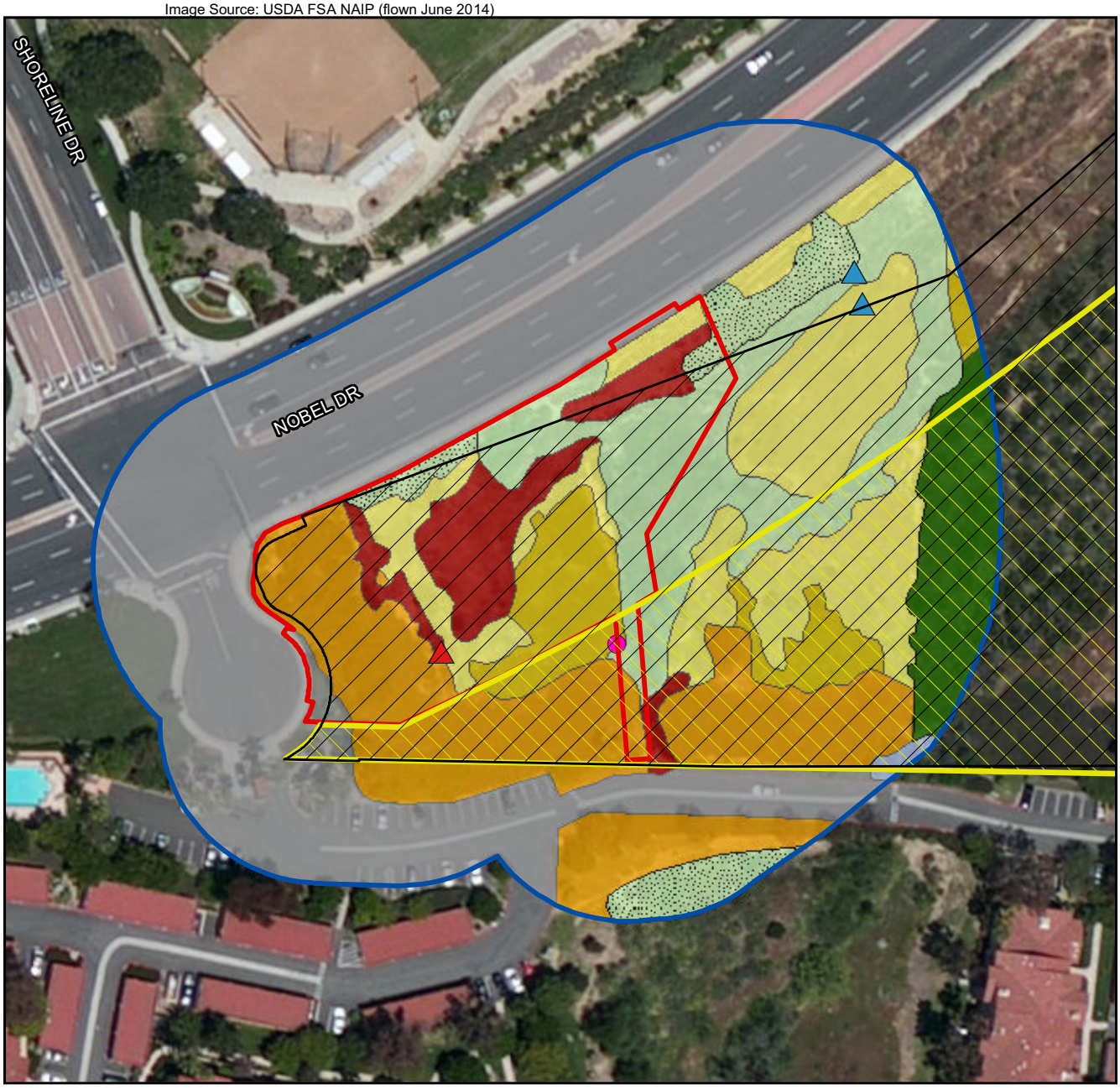
Image Source: USDA FSA NAIP (flown June 2014)




Project Site

Survey Area

City of San Diego MHPA

Eastgate Technology Park Mitigation Area

**Sensitive Species**

San Diego County Viguiera *(Bahiopsis laciniata)*

Ashy Spike-moss *(Selaginella cinerascens)*

Belding's Orange-throated Whiptail *(Aspidoscelis hyperythra beldingi)*

**Vegetation Communities**

Urban/Developed Land

Diegan Coastal Sage Scrub

Diegan Coastal Sage Scrub - Disturbed

Disturbed Land

Valley Needlegrass Grassland

Non-native Grassland

Ornamental Plantings

Southern Mixed Chaparral

Southern Willow Scrub

0 Feet 80

RECON

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FIGURE 5
Existing Biological Resources

The project would add an entry/exit point to the cul-de-sac on east side of Shoreline Drive and an exit point on Nobel Drive. The project would also require a break in the median on Nobel Drive for emergency responses in which the fire engine/truck would need to turn left heading westbound on Nobel Drive. The traffic signal at the intersection of Nobel Drive and Shoreline Drive would be retrofitted to allow for automatic pre-emption by emergency vehicles exiting the station. In accordance with San Diego Municipal Code Section 142.0412, the proposed project would include a total of 100 feet of brush management from all habitable structures. This includes 35 feet of brush management zone (BMZ) 1, where vegetation must be absent or regularly maintained by thinning and pruning of plants to below 4 feet in height, and must be permanently irrigated. BMZ 2 would extend the remaining 65 feet and would be maintained on a regular basis through weed and invasive species control, and selective thinning and pruning of shrubs to reduce fuel load. For purposes of impact analysis, BMZ 1 is considered a permanent impact, whereas BMZ 2 is considered impact-neutral because it is allowed to remain in a mostly natural state. Most of BMZ 1 lies within the grading footprint, though a small portion extends into Nobel Drive to the north. Similarly, most of BMZ 2 lies inside the grading footprint or in existing developed areas, but it also extends a small way into the adjacent habitat to the south.

This report provides the necessary biological data and background information required for an environmental analysis according to guidelines set forth in the MSCP Subarea Plan (City of San Diego 1997) and the City's Biology Guidelines (City of San Diego 2012).

# 3.0 Survey Methods

Baseline biological resource data for the project site was obtained from the North University City Fire Station Draft Biological Constraints Report prepared by Helix Environmental Planning (Helix; 2013). These data were updated during field reconnaissance visits conducted by RECON Environmental, Inc. (RECON) biologists. Additional biological resource surveys conducted for the project include updated protocol surveys for the coastal California gnatcatcher, rare plant surveys, and several site reconnaissance surveys. In addition to conducting on-site biological surveys, RECON conducted a review of the California Natural Diversity Database (CNDDB; State of California 2015e), the All Species Occurrences Database (U.S. Fish and Wildlife Service [USFWS] 2015), and the California Native Plant Society (CNPS) online database (CNPS 2015) for records of sensitive plant and animal species reported within one mile of the survey area.

For purposes of this report, the project site is defined as the area within the grading footprint of the proposed project. For vegetation mapping, rare plant surveys, and reconnaissance surveys, the survey area is defined generally as all land within 100 feet of the project site and was expanded to include habitat creation and restoration areas, as well as the immediately surrounding area. For protocol coastal California gnatcatcher surveys, this survey area was extended out to 300 feet, in accordance with the USFWS survey protocol for this species (USFWS 1997).

Determination of the potential occurrence for listed, sensitive, or noteworthy species is based upon site visits by RECON biologists, the Biological Constraints Report prepared by Helix (2013), as well as known ranges and habitat preferences for the species (Jennings and Hayes 1994; Unitt 2004; State of California 2015a–d; CNPS 2015; Reiser 2001), existing topography and soils within the survey area (USGS 1997; U.S. Department of Agriculture 1973), species occurrence records from the CNDDB (State of California 2015e) and the All Species Occurrences Database (USFWS 2015).

## 3.1 Biological Resources Survey

Initial vegetation mapping for the project was conducted by Helix on June 26, 2013. Based on changes to the project footprint and overall site conditions, vegetation mapping was updated by RECON biologists Brian Parker and Andrew Smisek on November 5, 2015. The entire survey area (the project site boundary plus 100 feet) was surveyed on foot and vegetation communities were mapped according to City guidelines (City of San Diego 2012). Vegetation community classifications follow Holland (1986) as modified by Oberbauer (2008).

Plant and animal inventories were compiled during the initial constraints survey (Helix 2013). These inventories were revised and updated during subsequent RECON surveys: the plant species inventory was updated during the rare plant surveys (see Section 3.2, below) and the animal species inventory was revised based on the protocol coastal California gnatcatcher surveys (see Section 3.3, below).

Animal species observed directly or detected from calls, tracks, scat, nests, or other sign were noted. The wildlife survey was limited by seasonal and temporal factors. Nocturnal animals were not observed directly, as all surveys were performed during the day. In addition, seasonally migratory species that are present within the area only at specified periods outside of survey timing may not have been detected. Zoological nomenclature for birds is in accordance with the American Ornithologists' Union Checklist (2015) and Unitt (2004); for mammals with Baker et al. (2003); for amphibians and reptiles with Crother et al. (2009); and for invertebrates with Opler and Wright (1999) and Evans (2007). Floral nomenclature for common plants follows Hickman (1993) as updated by the Jepson Online Interchange (Jepson Flora Project 2014) and for sensitive plants the State of California Special Vascular Plants, Bryophytes, and Lichens Lists (2015d).

## 3.2 Rare Plant Surveys

RECON botanist JR Sundberg conducted three rare plant surveys. Survey dates, times, and weather conditions are listed in Table 1, below. All portions of the survey area were traversed via meandering paths to map sensitive plant species. The surveyor recorded the location of all rare, listed, or special status plant species when encountered using a Trimble GeoXH global positioning system (GPS) unit with sub-meter accuracy and/or Samsung Tab4 tablet PCs running the ArcGIS Collector App by the Environmental Systems Research Institute.

During the rare plant surveys, all plant species observed within the survey area were noted, and plants that could not be identified in the field were identified later using taxonomic keys. Three surveys were conducted to offset potential limitations caused by the different blooming periods of different ephemeral annual species. The timing of the rare plant surveys allowed for most potentially-occurring rare plant species to be observable.

Plants are considered special status (sensitive) plant species if they are federally or California state listed as endangered or threatened or have CNPS Rank 1B (considered endangered throughout their range), Rank 2 (considered endangered in California but more common elsewhere), or Rank 4 (plants of limited distribution; CNPS 2015).

**Table 1**
**Survey Dates, Times, and Weather Conditions for Surveys at the North University City Fire Station 50 Project**

| Date | Surveyors | Survey Type | Survey Time | Survey Conditions[1] |
|---|---|---|---|---|
| 6/26/2013 | Stacy Nigro[1] | General biological survey, vegetation mapping | NA | NA |
| 4/13/2015 | J.R. Sundberg | Rare plant survey #1 | 14:00–16:30 | 68–70° F, 60% cc wind 2–5 mph |
| 5/4/2015 | Brenna Ogg Kayo Valenti | CAGN survey #1 Wildlife/RCSP survey | 07:15–09:00 | 62–65° F, 90–95% cc wind 0–3 mph |
| 5/12/2015 | Brenna Ogg | CAGN survey #2 Wildlife/RCSP survey | 08:15–10:00 | 66–69° F, 50% cc wind 0–7 mph |
| 5/20/2015 | Brenna Ogg | CAGN survey #3 Wildlife/RCSP survey | 09:25–11:25 | 63–65° F, 90% cc wind 2–8 mph |
| 5/21/2015 | J.R. Sundberg | Rare plant survey #2 | 12:00–15:00 | 65–67° F, 10% cc wind 2–8 mph |
| 6/9/2015 | J.R. Sundberg | Rare plant survey #3 | 08:30–12:00 | 73–79° F, 50% cc wind 0–5 mph |
| 11/5/2015 | Brian Parker Andy Smisek | Updated vegetation mapping | 12:45–13:50 | 70–71˚ F, 0% cc wind 2–6 mph |
| 4/25/2016 | Brian Parker | Updated botanical survey | 15:30–16:30 | N/A |
| 6/6/2016 | Wendy Loeffler | CAGN non-protocol survey | 10:00–14:00 | 65–68˚ F, 15–20% cc wind 1–7 mph |
| 7/19/2016 | Brian Parker | Nesting bird survey for geotechnical survey | 07:30–13:30 | N/A |

NOTE: CAGN= coastal California gnatcatcher; RCSP = southern California rufous-crowned sparrow; °F = degrees Fahrenheit; cc = cloud cover; mph = mile per hour; % = percent
[1] As referenced in the Draft Biological Constraints Report prepared by Helix (2013).

## 3.3 Coastal California Gnatcatcher Surveys

Protocol surveys for the federally threatened coastal California gnatcatcher were conducted during spring of 2015. RECON biologist Brenna Ogg conducted three site visits to survey all areas of habitat considered potentially suitable for coastal California gnatcatcher within

300 feet of the project site boundary according to USFWS survey protocol for this species (USFWS 1997).

The surveys were conducted on foot, and taped coastal California gnatcatcher vocalizations were used periodically to attract any potentially occurring coastal California gnatcatchers. The tape was played infrequently due to the prevalence of northern mockingbird (*Mimus polyglottos polyglottos*), western scrub-jay (*Aphelocoma californica*), and American crow (*Corvus brachyrhynchos hesperis*), which are potential coastal California gnatcatcher nest predators. A total of 5.55 hours of field effort was devoted to the survey.

During the protocol survey, all animal species detected were recorded. The location of any observed sensitive wildlife species were recorded using a handheld GPS device. Ms. Ogg is authorized to conduct coastal California gnatcatcher surveys under USFWS 10(a)(1)(A) permit TE-797665. RECON biologist Kayo Valenti assisted with one survey under supervision.

A single non-protocol survey for coastal California gnatcatchers was conducted on June 6, 2016 in support of the geotechnical survey. The survey was conducted on foot by RECON biologist Wendy Loeffler and included all suitable habitat within 500 feet of the project footprint. Ms. Loeffler walked slowly through the habitat pausing frequently to listen for gnatcatcher and other bird calls. As directed by City staff, the survey was conducted in a single 4-hour site visit.

## 3.4 Wildlife Surveys

Following each protocol coastal California gnatcatcher survey visit, RECON biologists conducted searches to focus on detection of any additional sensitive wildlife species within the survey area. Specific attention was paid to areas with potential to support southern California rufous-crowned sparrow, a species known to occupy habitat similar to that of the coastal California gnatcatcher. This survey was conducted on foot, independently of the protocol survey, and all animal species detected were recorded, and sensitive species were mapped using a handheld GPS device.

## 3.5 Jurisdictional Wetlands and Waters

A formal jurisdictional delineation of wetlands and waters within the survey area was not conducted; however, all areas of potential wetland vegetation or other jurisdictional features were investigated during surveys conducted as part of the Biological Constraints Report prepared by Helix (2013), and subsequent surveys conducted by RECON. All depressions, erosional features, potential drainage channels, and areas of potential wetland vegetation were investigated for the presence of potential wetlands and/or non-wetland Waters of the U.S., Waters of the State, and City of San Diego Wetlands.

A moderately-sized vernal pool complex occurs approximately 1,000 feet east of the project site, near the top of a gradual slope (see Figure 5). While no vernal pools were detected within the survey area, a small depression occurs within an unvegetated strip of disturbed

land in the western portion of the survey area, at the interface between an area of ornamental plants and the non-native grassland. This area is in a portion of the site that was graded in the year 2000 during construction of the Nobel Drive extension. The small depression is approximately 3 feet in diameter and less than 1 inch in depth.

This depression was noted to have somewhat moist and cracked soil during a survey on November 5, 2015. The survey occurred following three days of rain in the area, during which a total of 0.84 inch of rain fell on a nearby weather station (personal weather station [PWS] KCASANDI82; Weather Underground 2016). Previous rain events during the season were recorded at this PWS on September 15 and 16 (0.89 inch total), October 3, 4, and 5 (0.61 inch total), and October 28, and 29 (0.02 inch total) (Weather Underground 2016). Given the average to above-average rainfall in the months leading up to the November 5 survey, it is likely that there had been sufficient time for vernal pools to pond. Similarly, the depression was not noted to be ponded during three rare plant surveys conducted in 2015, two of which occurred within two weeks following moderate rainfall events in the area.

Similarly, no vernal pool indicator plants were observed within the depression during RECON site visits conducted during 2015 or 2016. Only one upland plant, Russian thistle (*Salsola tragus*), was found during a site visit on July 19, 2016. Rainfall in 2015 and 2016 were about normal (based on 1981 to 2010 average; National Weather Service 2016), and vernal pool species would have been expected to sprout if present. Thus, based on the small size, shallow depth, and lack of vernal pool indicator species, the depression does not meet the U.S. Army Corps of Engineers (USACE) or City definition of a vernal pool.

These same factors suggest that the depression is unlikely to hold water for a sufficient amount of time to support fairy shrimp.

# 4.0 Existing Conditions

## 4.1 Topography and Soils

The survey area is largely undeveloped and lies primarily within the City's MHPA in the Rose Canyon Open Space (see Figure 5). The survey area is surrounded on three sides by existing development (Nobel Drive, multi-family housing, and an athletic field to the north, and Shoreline Drive and multi-family housing to the west and south. The Rose Canyon Open Space extends the east from the site (see Figure 3).

Topography within the survey area generally slopes from a high of 312 feet above mean sea level (AMSL) in the northwest to approximately 292 feet AMSL in the southeast (USGS 1996). Soils within the survey area are identified in the USGS Soil Survey maps (USDA 1973) as Huerhuero loam, 15 to 30 percent slopes eroded (Figure 6). This characterization is consistent with the findings of the July 19, 2016 geotechnical survey conducted for the project by Ninyo & Moore (Ninyo & Moore 2016). The Huerhuero series consists of moderately well-drained loams that have a clay subsoil (USDA 1973) and is one of the soil types capable of supporting vernal pools.

## 4.2 Botany

A total of eight vegetation communities occur within the survey area: southern willow scrub, valley needlegrass grassland, Diegan coastal sage scrub (including disturbed), southern mixed chaparral, non-native grassland, disturbed land, ornamental vegetation, and urban/developed land. The acreage of each vegetation community and land cover type within the survey area are presented in Table 2 and shown in Figure 7. The tier for each vegetation community and land cover type is identified per the City's Biology Guidelines. A list of plant species observed is presented in Attachment 1.

**Table 2**
**Vegetation Communities/Land Cover Types within the Survey Area**

| Community or Type (Holland Code) | City of San Diego Tier | Acres* | | |
|---|---|---|---|---|
| | | Inside MHPA | Outside MHPA | Total |
| Southern willow scrub | Riparian | 0.01 | <0.01 | 0.01 |
| Valley needlegrass grassland (42110) | I | 0.24 | 0.00 | 0.24 |
| Diegan coastal sage scrub (32500) | II | 0.42 | 0.11 | 0.53 |
| Disturbed Diegan coastal sage scrub (32500) | II | 0.02 | 0.16 | 0.18 |
| Southern mixed chaparral (37120) | IIIA | 0.22 | 0.00 | 0.22 |
| Non-native grassland (42200) | IIIB | 0.57 | 0.09 | 0.66 |
| Disturbed land (11300) | IV | 0.19 | 0.03 | 0.22 |
| Ornamental plantings (11000) | IV | 0.56 | 0.22 | 0.78 |
| Urban/developed land (12000) | N/A | 0.02 | 1.82 | 1.84 |
| **Total** | | **2.24** | **2.43** | **4.68** |

* Survey area includes the project site (equivalent to the impact footprint shown in Table 3 below), plus all vegetation within 100-feet.

### 4.2.1 Southern Willow Scrub

Southern willow scrub is considered a sensitive wetland habitat by the City of San Diego Biology Guidelines (City of San Diego 2012). Southern willow scrub is a dense riparian community dominated by broad-leafed, winter-deciduous willow trees (*Salix* spp.).

This plant community is typically found along drainages, where the density of the willows typically prevents development of many smaller understory plants. The representative species typically grow in loose, sandy, or fine gravelly alluvium deposited near stream channels during flood flows. This community requires repeated flooding to prevent succession to a community dominated by sycamores and cottonwoods (Holland 1986).

A small area of southern willow scrub occurs at the extreme southeastern corner of the survey area, along the boundary of the undeveloped land and the adjacent residential complex to the south. The overall patch consists of several arroyo willow (*Salix lasiolepis*) shrubs, although only a portion of one shrub occurs within the survey area. In total 0.01 acre of southern willow scrub occurs within the survey area, including 0.01 acre within the MHPA and less than 0.01 acre outside the MHPA.

Image Source: USDA FSA NAIP (flown June 2014)


0 Feet 200

Project Site
Huerhuero Loam, 15 to 30% Slopes, Eroded
Riverwash

RECON

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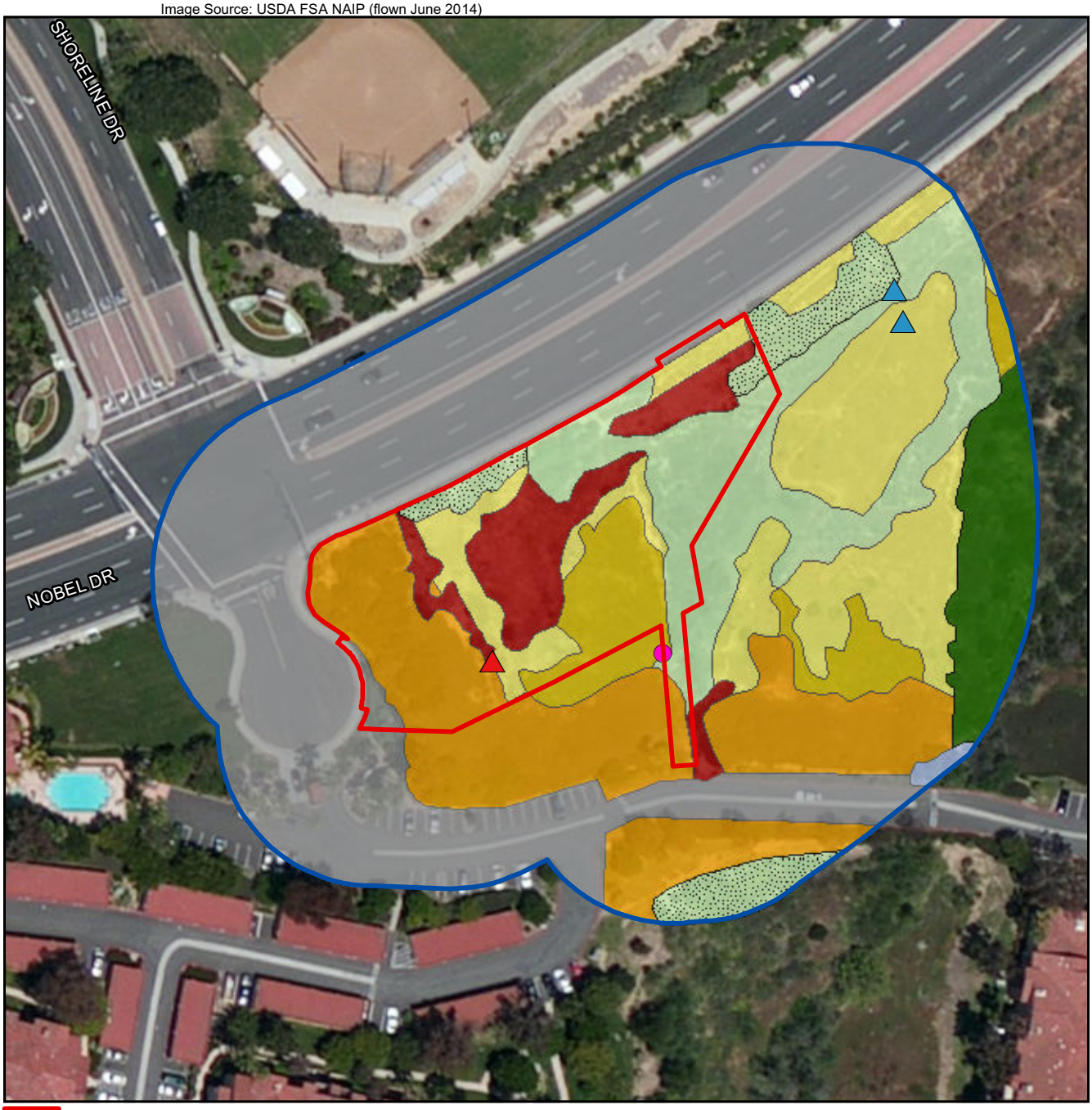
FIGURE 6
Soil Types

Image Source: USDA FSA NAIP (flown June 2014)




Project Site

Survey Area

**Sensitive Species**

San Diego County Viguiera *(Bahiopsis laciniata)*

Ashy Spike-moss *(Selaginella cinerascens)*

Belding's Orange-throated Whiptail *(Aspidoscelis hyperythra beldingi)*

**Vegetation Communities**

Urban/Developed Land

Diegan Coastal Sage Scrub

Diegan Coastal Sage Scrub - Disturbed

Disturbed Land

Valley Needlegrass Grassland

Non-native Grassland

Ornamental Plantings

Southern Mixed Chaparral

Southern Willow Scrub

0 Feet 100

RECON

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FIGURE 7
Existing Biological Resources

### 4.2.2 Valley Needlegrass Grassland

Valley needlegrass grassland is a native grassland and is considered a Tier I (rare uplands) by the City of San Diego Biology Guidelines (City of San Diego 2012). This plant community is composed of native perennial bunch grasses such as purple needle grass (*Stipa pulchra*). A mix of native and non-native annual plants often occurs between the perennial bunch grasses, and may exceed the bunch grasses in cover. Despite the large proportion of non-native grasses, valley needlegrass grasslands are distinguished as native grasslands if the percent cover by native grass species is 10 percent or greater. This vegetation community usually occurs on fine-textured (often clay) soils, moist or even waterlogged during winter, but very dry in summer. Much of the land historically covered by this and other native grassland communities have been converted to non-native annual grasslands due to the invasion of exotic annual grasses (Oberbauer et al. 2008).

A total of 0.24 acre of valley needlegrass grassland occurs within the survey area, entirely within the MHPA. It occurs primarily in the central portion of the survey area and an irregularly-shaped patch in the southeast portion of the survey area. This community is dominated by combination of purple needle grass and nodding needle grass (*Stipa cernua*). Other species that occur within valley needlegrass grassland include scattered golden tarplant (*Deinandra fasciculata*), California sagebrush (*Artemisia californica*), long-beak filaree (*Erodium botrys*), and various annual non-native grasses.

### 4.2.3 Diegan Coastal Sage Scrub

Diegan coastal sage scrub is considered a Tier II (uncommon upland) vegetation community by the City Biology Guidelines (City of San Diego 2012). It is the southern form of coastal sage scrub, a vegetation community that consists of low-growing, aromatic, drought-deciduous soft-woody shrubs that have an average height of approximately 3 to 4 feet. This community is typically found on sites with low moisture-availability, steep, xeric slopes or clay rich soils that are slow to release stored water. Diegan coastal sage scrub is found in coastal areas from Los Angeles County south into Baja California, Mexico (Oberbauer et al. 2008).

A total of 0.71 acre of Diegan coastal sage scrub occurs within the survey area, including 0.44 acre within the MHPA and 0.27 acre outside the MHPA. This community occurs primarily along the northern edge of the project site south of Nobel Drive, and in the eastern portion of the survey area. It is dominated by California sagebrush, laurel sumac (*Malosma laurina*), California buckwheat (*Eriogonum fasciculatum*), and broom baccharis (*Baccharis sarothroides*). Other common species within this habitat include deerweed (*Acmispon glaber*), golden tarplant, and non-native grasses. The portion of Diegan coastal sage scrub along the southeastern edge of the survey area, and extending off-site to the southeast is heavily dominated by lemonade berry (*Rhus integrifolia*).

The strip of Diegan coastal sage scrub immediately south of Nobel Drive is mapped as disturbed. This area of disturbed Diegan coastal sage scrub is more open and has a higher proportion of non-native grasses and annual forbs than areas of intact habitat. Several

native big saltbush (*Atriplex lentiformis*) shrubs are also present in this area. This disturbance is likely a function of proximity to a fairly busy road with a moderate amount of foot traffic.

### 4.2.4 Southern Mixed Chaparral

Southern mixed chaparral is considered a Tier III A (Common Upland) habitat by the City Biology Guidelines (City of San Diego 2012). It is typically dominated by tall (5–10 feet tall) broad-leaved sclerophyllous shrubs or small trees, and characteristically occupies protected north-facing and canyon slopes or ravines where more mesic conditions are present. The vegetation is usually dense, with little or no understory cover but may include patches of bare soil. This community typically is found in more mesic areas, such as along north-facing slopes. Many species in this community are adapted to repeated fires by their ability to stump sprout. Southern mixed chaparral is typically found in coastal foothills of San Diego County and Northern Baja California, usually at elevations below 3,000 feet (Holland 1986).

A total of 0.22 acre of southern mixed chaparral occurs within the survey area, entirely within the MHPA. It occurs in the southeastern portion of the survey area, in low draw between two hills. This area is dominated by lemonade berry, laurel sumac, and toyon (*Heteromeles arbutifolia*), with several large pampas grass (*Cortaderia jubata*).

### 4.2.5 Non-Native Grassland

Non-native grassland is considered a Tier IIIB (common upland) vegetation community by the City Biology Guidelines (City of San Diego 2012). It is characterized by a sparse to dense cover of annual grasses reaching up to 3 feet in height. Typically, non-native grasses occupy at least 50 percent of the entire herbaceous layer, although other plant species (native and non-native) may be intermixed (City of San Diego 2012). These annuals germinate with the onset of the rainy season and set seeds in the late winter or spring. With a few exceptions, the plants are dead through the summer–fall dry season, persisting as seeds. Non-native grasslands are usually found in areas that range from being moist or waterlogged in the winter to being very dry during the summer and fall (Oberbauer et al. 2008).

A total of 0.66 acre of non-native grassland occurs in the survey area, including 0.57 acre within the MHPA and 0.09 acre outside the MHPA. This vegetation community occurs in patches throughout the survey area and is dominated by invasive annual grasses such as wild oat (*Avena* sp.), purple falsebrome (*Brachypodium distachyon*), ripgut grass (*Bromus diandrus*), and red brome (*Bromus madritensis* ssp. *rubens*), as well as golden tarplant, long-beak filaree, and stinkwort (*Dittrichia graveolens*).

### 4.2.6 Disturbed Land

Disturbed land is considered a Tier IV (other uplands) by the City Biology Guidelines (2012). Disturbed land generally consists of areas altered by human activity,

such as areas where soil or other materials have been dumped, areas where foot or vehicular traffic have altered natural species composition, or areas dominated by non-native annual forbs. Such areas have little or no value to native wildlife. These areas typically occur in highly populated areas, and may receive water from precipitation or runoff (Oberbauer et al. 2008).

A total of 0.22 acre of disturbed land occurs within the survey area, including 0.19 acre within the MHPA and 0.03 acre outside the MHPA. Typical non-native species that are prevalent in the disturbed land within the survey area include black mustard (*Brassica nigra*), Russian thistle, tocalote (*Centaurea melitensis*), red brome, ripgut grass, and radish (*Raphanus sativus*).

### 4.2.7 Ornamental Plantings

Ornamental plantings are considered a Tier IV (other uplands) land cover by the City Biology Guidelines (2012). This land cover type is characterized by ornamental species that were historically installed for landscaping purposes and are not maintained or irrigated.

A total of 0.77 acre of ornamental plantings occur within the survey area, including 0.56 acre within the MHPA and 0.22 acre outside the MHPA. Ornamental plantings occur along Shoreline Drive and where the site abuts the adjacent residential complex to the south. The dominant plants in these areas are acacia shrubs (*Acacia cyclops* and *A. redolens*), with areas of Brisbane box (*Lophostemon confertus*), iceplant (*Mesembryanthemum nodiflorum*), and carrotwood (*Cupaniopsis anacardioides*).

### 4.2.8 Urban/developed Land

Urban/developed land includes areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. Urban/developed land is characterized by permanent or semi-permanent structures and pavement or hardscape where no natural land is evident. This land cover type is not considered a sensitive vegetation community by the City Biology Guidelines (2012).

A total of 1.84 acres of urban/developed land occurs within the survey area, including 0.02 acre within the MHPA and 1.82 acre outside the MHPA. Areas mapped as urban/developed land include roads (Nobel Drive and Shoreline Drive) and the Lucera apartment complex to the south.

## 4.3 Zoology

The wildlife species observed on site are typical of the vegetation communities present and of urban/disturbed areas in San Diego County as noted below in each subsection. A list of the wildlife species detected on-site is in Attachment 2.

### 4.3.1 Amphibians

Most amphibians require moisture for at least a portion of their lifecycle, with many requiring a permanent water source for habitat and reproduction. Terrestrial amphibians have adapted to more arid conditions and are not completely dependent on a perennial or standing source of water. These species avoid desiccation by burrowing beneath the soil or leaf litter during the day and during the dry season. No amphibians were detected during field surveys.

### 4.3.2 Reptiles

The reptile species observed in the survey area are typical of grasslands and scrub habitats in San Diego's urban open spaces. Western fence lizard (*Sceloporus occidentalis*), common side-blotched lizard (*Uta stansburiana*), Belding's orange-throated whiptail, and a rattlesnake (*Crotalus* sp.) were observed during the survey.

### 4.3.3 Birds

The diversity of bird species varies with respect to the character, quality, and diversity of vegetation communities present on a site. High-quality vegetation communities typically support a moderate to high variety of bird species. The grassland vegetation communities provide foraging opportunities and the scrub and ornamental plantings provide foraging and shelter opportunities for a wide variety of bird species. Disturbed and urban/developed lands are used by bird species adapted to urban settings.

The most commonly observed species within the survey area include mourning dove (*Zenaida macroura marginella*), house finch (*Haemorhous* [=*Carpodacus*] *mexicanus frontalis*), Cassin's kingbird (*Tyrannus vociferans vociferans*), song sparrow (*Melospiza melodia*), and lesser goldfinch (*Spinus* [=*Carduelis*] *psaltria hesperophilus*).

### 4.3.4 Mammals

Most mammal species are nocturnal, so their presence during daytime surveys is detected by observing their sign, such as tracks, scat, and burrows. A total of six mammal species were detected within the survey area: desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), coyote (*Canis latrans*), and striped skunk (*Mephitis mephitis*). These species are all common mammals found in urban open space areas. Additionally, one woodrat (*Neotoma* sp.) midden was observed during coastal California gnatcatcher surveys in a dense patch of lemonade berry outside the main survey area (greater than 100 feet from the project site boundary). No woodrat individuals were observed at the midden, so it was not possible to identify it to species level.

# 5.0 Sensitive Biological Resources

## 5.1 Regulatory Setting

The **Migratory Bird Treaty Act** (16 United States Code 703 et seq.), or MBTA, is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive, and is listed at 50 Code of Federal Regulations (CFR) 10.13. The regulatory definition of "migratory bird" is broad, and includes any mutation or hybrid of a listed species and any part, egg, or nest of such birds (50 CFR 10.12). Migratory birds are not necessarily federally listed endangered or threatened birds under the Endangered Species Act. The MBTA, which is enforced by USFWS, makes it unlawful "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird, or attempt such actions, except as permitted by regulation. The take, possession, import, export, transport, sale, purchase, barter, or offering of these activities is prohibited, except under a valid permit or as permitted in the implementing regulations (50 CFR 21.11).

Section 3503 from the **California Fish and Game Code** applies to projects in the State. This section states that it is "unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto," and Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird" unless authorized (CDFW 1991).

One of the primary objectives of the City's **MSCP Subarea Plan** is to identify and maintain a preserve system, which allows for animals and plants to exist at both the local and regional levels. The MSCP has identified large blocks of native habitat having the ability to support a diversity of plant and animal life known as "core biological resource areas." "Linkages" between these core areas provide for wildlife movement. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. Input from responsible agencies and other interested participants resulted in creation of the City's MHPA. The MHPA is the area within which the permanent MSCP preserve would be assembled and managed for its biological resources.

The **City of San Diego Biology Guidelines** (2012) were formulated to aid in the implementation and interpretation of the Environmentally Sensitive Lands Regulations (ESL), San Diego Land Development Code (LDC), Chapter 14, Division 1, Section 143.0101. Section III of the Guidelines (Biological Impact Analysis and Mitigation Procedures) also serve as standards for the determination of impacts and mitigation under California Environmental Quality Act (CEQA). The ESL defines sensitive biological resources as those lands included within the MHPA as identified in the City of San Diego's MSCP Subarea Plan (City of San Diego 1997), and other lands outside of the MHPA that contain wetlands; vegetation communities classifiable as Tier I, II, IIIA or IIIB; habitat for rare, endangered or threatened species; or narrow endemic species.

## 5.2 Sensitivity Criteria

For purposes of this report, species will be considered sensitive if they are: (1) listed by state or federal agencies as threatened or endangered or are proposed for listing; (2) designated by the City of San Diego as a narrow endemic species (City of San Diego 2012); (3) covered species under the City of San Diego MSCP; or (4) on California Rare Plant Rank 1B (considered endangered throughout its range) or California Rare Plant Rank 2 (considered endangered in California but more common elsewhere) of the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (2015). Noteworthy plant species are considered to be those that are on California Rare Plant Rank 3 (more information about the plant's distribution and rarity needed) and California Rare Plant Rank 4 (plants of limited distribution) of the CNPS *Inventory*. Sensitive vegetation communities are those identified by Holland (1986) or identified by the City of San Diego (2012).

## 5.3 Sensitive Vegetation Communities

Pursuant to the City's Biology Guidelines, three sensitive vegetation communities occur within the survey area: valley needlegrass grassland (Tier I habitat), Diegan coastal sage scrub (Tier II habitat), and non-native grassland (Tier III-B habitat). All three are considered upland habitats. No wetland habitats occur within the survey area.

## 5.4 Sensitive Plants

Attachment 3 assesses the potential for sensitive plant species to occur within the survey area based on their known ranges and habitat requirements. No MSCP-covered plant species, narrow endemic species, or federal or state listed species were detected within the survey area; however, two CNPS-listed plants were detected and are discussed below. Additionally, critical habitat for the federally threatened spreading navarretia (*Navarretia fossalis*) has been designated approximately 475 feet northeast of the project site (USFWS 2010). This species is also discussed in more detail below.

**Ashy spike-moss** is identified by the CNPS as a California Rare Plant Rank (CRPR) 4.1 species (CNPS 2015). This plant is a perennial, rhizomatous herb composed of a loose tangle of prostrate runners pale green in color and aging tan to white. This species is distributed mostly in San Diego County and northern Baja California below 1,800 feet in elevation (Baldwin et al. 2012). It is found at many sites in San Diego County, primarily south of Highway 78, on the periphery of the city of San Diego, and in the Marine Corps Air Station Miramar, where it can be the dominant ground cover (Reiser 2001). It occurs in sunny spots or under shrubs within chaparral and coastal sage scrub (Baldwin et al. 2012; CNPS 2015), and on many soil types (Reiser 2001). This species is a good indicator of site degradation, as it rarely inhabits disturbed soils.

An approximately 6-square-foot patch of ashy spike-moss was observed within the valley needlegrass grassland and coastal sage scrub in the southern portion of the project site.

**San Diego County viguiera** is a CRPR Rank 4.2 species (CNPS 2015). This shrub in the sunflower family (*Asteracae*) has shiny, resinous leaves and showy yellow flowers that bloom from February to June (Hickman 1993, Munz 1974). Its range extends from Sonora and Baja California, Mexico northward into San Diego and Orange County (CNPS 2015), although the population in Orange County may not be native (Reiser 2001). In San Diego County it is rare north of Highway 78 and becoming increasingly common to the south, until it is the dominant coastal sage shrub in non-coastal southern San Diego County (Reiser 2001). San Diego County viguiera occurs on dry, shrubby slopes in Diegan coastal sage scrub and chaparral habitats between 200 and 2500 feet.

Nine individuals were observed in Diegan coastal sage scrub and non-native grassland near the eastern edge of the survey area; however, none were observed within the project site. Several other San Diego viguiera were present just outside the survey area to the east.

**Spreading navarretia** is listed as threatened by the USFWS (1998), is a CRPR 1B.1 species (CNPS 2014) and is a narrow endemic species and a covered species under the MSCP. This low-growing annual herb in the phlox family (*Polemonicaeae*) grows about 5 inches tall and flowers from April to June. Its range includes northwestern Los Angeles County, western Riverside County, coastal San Diego County, and northwestern Baja California (USFWS 1998). This species occurs in vernal pools and ditches below 4300 feet (Hickman 1993). Numbers of spreading navarretia increase during wet years, and this species is seldom noted in shallow vernal pools. Two other species of navarretia occur in similar habitats: *N. intertexta* has ovate, rather than linear, corolla lobes and *N. prostrata* is prostrate, with its bluish flowers almost buried in its basal leaves.

No vernal pools occur within the survey area; although there is a vernal pool complex approximately 1,000 feet to the east of the site (City of San Diego 2008), and spreading navarretia critical habitat has been designated 475 feet to the east of the project site (USFWS 2010). Rare plant surveys were conducted during the growing season for this species, including two surveys conducted within two weeks of moderate rain events in the area. No spreading navarretia was detected in the on-site depression. Based on the lack of suitable vernal pool habitat and negative rare plant surveys, this species has no potential to occur within the survey area.

# 5.5 Sensitive Wildlife Species

Two sensitive wildlife species were detected within or adjacent to the survey area: Belding's orange-throated whiptail and western bluebird. These species are discussed in detail below.

## 5.5.1 Sensitive Wildlife Species Observed

**Belding's orange-throated whiptail** is a California Department of Fish and Wildlife (CDFW) species of special concern and an MSCP-covered species. This species ranges from the coast to the Peninsular mountain ranges from Orange and southwestern San Bernardino counties to the tip of Baja California, Mexico (Stebbins 2003). It occurs in a variety of habitats and is most common in sandy areas of low, open sage scrub or chaparral,

particularly where there is California buckwheat, sage (*Salvia* spp.), or chamise (Lemm 2006). It is active during spring and summer, but is largely dormant during the fall and winter, when temperatures drop (Jennings and Hayes 1994). Breeding occurs from May through July. Belding's orange-throated whiptails feed primarily on insects such as termites (*Reticulitermes* sp.). The decline of this species is attributed to habitat loss and fragmentation (McGurty 1980).

This species was detected within the survey area just south of the project site in the large patch of valley needlegrass grassland. Additionally, several individuals were observed in Diegan coastal sage scrub during protocol coastal California gnatcatcher surveys, outside the main survey area (greater than 100 feet from the project site boundary). Based on the presence of numerous individuals within the project site and in the vicinity, this species is considered present throughout the valley needlegrass grassland, Diegan coastal sage scrub, and non-native grassland in the project site.

**Western bluebird** is an MSCP-covered species (City of San Diego 1997). It occurs throughout the year in foothills and mountains of San Diego County and is also a resident of the inland parts of the coastal lowland (Unitt 2004). The western bluebird breeds in open woodlands of oaks, riparian deciduous trees, or conifers with herbaceous understory and, in winter, uses more open habitats (Unitt 2004). This bird generally requires trees and shrubs for cover and will nest and roost in cavities of trees or snags (Unitt 2004). Competition for nesting cavities from non-native European starlings (*Sturnus vulgaris*) and house sparrows (*Passer domesticus*) threaten this species (Zeiner et al. 1988-1990). A study conducted in 2003 (Truan) shows that brown-headed cowbirds (*Molothrus ater*) also brood parasitize cavity-nesters, including western bluebirds. This brood parasitism was once considered to be very rare, but as the brown-headed cowbird's distribution continues to increase, more western bluebird nests will be affected. Other threats to this species include loss of nesting habitat due to logging, fire suppression, and urbanization (Guinan et al. 2008).

One western bluebird was observed among the landscaping trees associated with the athletic fields north of Nobel Drive (greater than 100 feet from the project site boundary) during protocol coastal California gnatcatcher surveys (RECON 2015). This species has no potential to nest in the project site, but would be most likely to nest in the larger trees along Rose Canyon, which is approximately 750 feet south of the site, south of the Lucera apartment complex.

### 5.5.2 Sensitive Wildlife Species with Potential to Occur

A total of 27 sensitive wildlife species were assessed for potential to occur within the project site (Attachment 4). This assessment is based on the ranges and habitat requirements of these species. Of these, five species were determined to have moderate or high potential to occur: red diamond rattlesnake, coast horned lizard, Cooper's hawk (*Accipiter cooperii*), San Diego black-tailed jackrabbit, and San Diego desert woodrat (*Neotoma lepida intermedia*). Protocol surveys for coastal California gnatcatcher and directed searches for southern California rufous-crowned sparrow were also conducted, so these species are included in the discussion below.

**Red diamond rattlesnake** is a CDFW species of special concern. This species occurs from sea level to about 4,000 to 5,000 feet on both sides of the Peninsular Ranges from southern San Bernardino County south through western Riverside and San Diego counties to Baja California, Mexico (Jennings and Hayes 1994). It inhabits coastal sage scrub, chaparral, and pinyon–juniper woodland particularly where there are abundant rock outcrops (Jennings and Hayes 1994; Lemm 2006). This species is active year round with peak activity occurring in April and May, and breeding from February through September (Jennings and Hayes 1994). Its diet consists principally of small mammals, lizards, birds, and other snakes. Population declines of the red diamond rattlesnake are generally attributable to a reduction of habitat in the snake's restricted range due to urbanization and agriculture.

One unidentified rattlesnake was observed beneath a lemonade berry shrub within Diegan coastal sage scrub outside the survey area (greater than 100 feet from the project site boundary) during protocol coastal California gnatcatcher surveys. Although this snake was not positively identified to be red diamond rattlesnake and was located outside the project site, based on the presence of suitable coastal sage scrub, there is high potential for this species to occur in Diegan coastal sage scrub, valley needlegrass grassland, and non-native grassland within the project site.

**Coast horned lizard** is a CDFW species of special concern and an MSCP-covered species. This lizard ranges from coastal southern California to the desert foothills and into Baja California. In San Diego County, it has a wide range but spotty distribution. It is often associated with coastal sage scrub, especially in areas of level to gently sloping ground and with well-drained loose or sandy soil, but can also be found in annual grasslands, chaparral, oak woodland, riparian woodland, and coniferous forest between 30 and 7,030 feet (Mills 1991; Jennings and Hayes 1994). This animal usually avoids dense vegetation, preferring 20 to 40 percent bare ground in its habitat. Where it can be found, the coast horned lizard can be locally abundant, with densities near 20 adults per acre. Adults are active from late March to late August; young are active from August to November or December. They are largely dependent upon native harvester ants (*Pogonomyrmex* sp.) for food. Populations along the coast and inland have been severely reduced by loss of habitat.

The coast horned lizard was not detected within the survey area; however, there is suitable coastal sage scrub habitat both within the project site in and in the vicinity. The coastal sage scrub within the survey area is of low to moderate quality due to historical disturbance and frequent human access; however, it has connectivity with higher quality coastal sage scrub off site to the east. Therefore, this species is considered to have moderate potential to occur in the project site.

**Coastal California gnatcatcher** is federally listed as threatened, is a CDFW species of special concern, and is an MSCP covered species. The coastal California gnatcatcher is a non-migratory, resident species found on the coastal slopes of southern California, ranging from Ventura County southward through Los Angeles, Orange, Riverside, and San Diego counties into Baja California, Mexico (Atwood and Bontrager 2001). This species typically occurs in or near sage scrub habitat, although chaparral, grassland, and riparian woodland

habitats are used where they occur adjacent to sage scrub. Breeding occurs from February through August, and nests are constructed most often in California sagebrush. The coastal California gnatcatcher diet consists mainly of sessile small arthropods, such as leafhoppers, spiders, beetles, and true bugs (Atwood and Bontrager 2001). The primary cause of decline in the coastal California gnatcatcher population is due to habitat loss and degradation.

The Diegan coastal sage scrub within the survey area is relatively low quality for coastal California gnatcatchers because it is patchy and interspersed with grasslands and disturbed land. However, a larger area of more diverse, higher quality habitat occurs off site to the east. Based on the presence of marginally suitable habitat on-site and higher quality habitat adjacent within the MHPA, USFWS protocol coastal California gnatcatcher surveys (USFWS 1997) were conducted by RECON (2015). Although no coastal California gnatcatchers were detected during protocol surveys or during the non-protocol survey conducted prior to the geotechnical survey, there is still a moderate potential for this species to occur adjacent to the project site.

**Southern California rufous-crowned sparrow** is a CDFW watch list species, an MSCP-covered species (City of San Diego 1997). This subspecies of rufous-crowned sparrow is a San Diego County resident and ranges throughout southern California from Los Angeles County to Baja California, Mexico (Collins 1999). Southern California rufous-crowned sparrows are found in sage scrub, broken or burned chaparral habitats, and grasslands with scattered shrubs. The species exhibits a strong preference for moderate to steep, south-facing, dry, rocky slopes with a 50 percent cover of low shrubs (Unitt 2004; Collins 1999). Breeding occurs from March through June, and pair bonds are formed that may last year-round (Collins 1999). Loss of habitat due to urbanization and habitat fragmentation has decreased the amount of suitable habitat for southern California rufous-crowned sparrows (Unitt 2004).

Based on the presence of potentially suitable habitat in the vicinity, time was allocated at following each protocol coastal California gnatcatcher survey to look for southern California rufous-crowned sparrow and other sensitive wildlife species. Although this species was not detected during these surveys, suitable habitat is present. Therefore, there is moderate potential for this species to occur within the project site.

**Cooper's hawk** is a CDFW watch list and is a MSCP-covered species. The Cooper's hawk ranges year-round throughout most of the United States; its wintering range extends south to Central America and its breeding range extends north to southern Canada (Rosenfeld and Bielefeldt 1993). Breeding birds are widespread over San Diego County's coastal slope and most abundant in lowland and foothill canyons and in urban areas. It is common breeder in both oak and willow riparian woodlands and urban environments, with eucalyptus trees used nearly as often as oaks (Unitt 2004). Additionally, this species has been known to nest within planted trees including pine, redwood, and avocado (Unitt 2004). Breeding occurs from March to June and nests are typically located high in the tree, but under the canopy. This hawk forages primarily on medium-sized birds but is also known to eat small mammals such as chipmunks and other rodents (Rosenfeld and Bielefeldt 1993). Although urbanization and loss of habitat have contributed to the decline of this species,

the Cooper's hawk adaptation to city living over the last 20 years have generously increased their numbers (Unitt 2004).

Cooper's hawk was not detected in the project vicinity during surveys. It has no potential to nest within the survey area; however, it has high potential to forage in the survey area, including in the project site. There are a number of moderate-sized landscaping trees associated with the athletic fields approximately 200 feet to the north of the survey area. These trees would be potentially suitable for nesting Cooper's hawks; however, the high level of vehicular traffic along Nobel and Shoreline Drives, as well as recreational activity at the athletic fields makes these trees low quality for Cooper's hawks. Therefore, this species has low potential to nest in this area. The trees along Rose Creek, approximately 750 feet to the south of the project site, are of much higher quality due to reduced human intrusion and increased distance from vehicular activity, and have moderate to high potential to support nesting Cooper's hawks and other raptors.

**San Diego black-tailed jackrabbit** is a CDFW species of special concern. It ranges from near the Kern-Ventura county line southward and west of the Peninsular Range into Baja California (Hall 1981). This species can be found throughout southern California, with the exception of the high-altitude mountains. It occupies open or semi-open habitats, such as coastal sage scrub and open chaparral areas. Forested and thick chaparral regions are not suitable (Bond 1977). The San Diego black-tailed jackrabbit breeds throughout the year, with the greatest number of births occurring from April through May. The black-tailed jackrabbit is strictly herbivorous, preferring habitat with ample forage such as grasses and forbs. Declines in San Diego black-tailed jackrabbit populations are due to a decline in suitable habitat as a result of urban development.

Although San Diego black-tailed jackrabbit was not detected during surveys of the site, the coastal sage scrub and adjacent native and non-native grasslands provide suitable habitat for this species. Thus, there is moderate potential for this species to occur in the project site.

**San Diego desert woodrat** is a CDFW species of special concern. Its range extends through coastal areas from San Luis Obispo well into Baja California, inland to the San Bernardino Mountains and Julian (Hall 1981). The San Diego desert woodrat occurs west of the mountains in San Diego County within chaparral areas with a preference for rock outcrops (Bond 1977). The middens (nests) of this species can be occupied by multiple generations and have been documented as old as 200 to 400 years of age. The breeding season for the San Diego desert woodrat is from October to May. Their diet consists of a variety of plant species and many parts of the plant including buds, fruits, seeds, bark, leaves, and young shoots (Brylski 1983). Threats to this species include habitat degradation and loss of habitat.

One woodrat midden was observed within dense coastal sage scrub vegetation outside the survey area (greater than 100 feet from the project site boundary) during coastal California gnatcatcher surveys. No woodrat individuals were observed, so it was not possible to determine if it belonged to the sensitive San Diego desert woodrat or the more common dusky-footed woodrat (*Neotoma fuscipes*). Although the coastal sage scrub within the survey area is much less dense than that where the midden was found, it and the adjacent

native and non-native grasslands within the survey area and project site are potentially suitable for this species. Based on the presence of suitable habitat, mitigated by the lack of middens found in the survey area and uncertainty of the woodrat species that created the midden off site, this species is considered to have low potential to nest and moderate potential to forage in the project site.

## 5.6 Jurisdictional Waters/Wetlands

As previously detailed in Section 3.0, the survey area was previously investigated for potential jurisdictional features, including wetlands and waters of the U.S. and waters of the state during the 2013 constraints survey. Additionally, RECON biologist JR Sundberg examined the survey area in 2015 for potential wetlands and waters during rare plant surveys of the site. Although a small area of southern willow scrub occurs in the extreme southeast of the site, no potential jurisdictional wetlands or waters were identified within 150 feet of the project boundary. A formal wetland delineation was not necessary.

## 5.7 Multi-Habitat Planning Area

As mentioned above, the MHPA has been designated as the permanent MSCP preserve and is managed to conserve its biological resources. MHPA lands are considered by the City to be sensitive biological resources. As shown in Figure 4 and Tables 2 and 3, a portion of the survey area (2.04 acre), and most of the project site (0.79 acre), occurs within the MHPA. The site lies at the western edge of a large segment of the MHPA that extends east to I-805 and has connectivity with the Rose Canyon Open Space.

The MSCP identifies land use adjacency guidelines to minimize direct and indirect impacts and maintain the function of the MHPA (City of San Diego 1997). These adjacency guidelines address drainage, toxins, lighting, noise, barriers, invasive species, brush management requirements, and placement of grading footprints relative to the MHPA. Each of these issues will be discussed in detail in Section 6.2.2, below.

## 5.8 Wildlife Movement Corridors

Wildlife movement corridors are defined as areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetation cover provide corridors for wildlife travel. Wildlife movement corridors are important, because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas; and facilitate the exchange of genetic traits between populations (Beier and Loe 1992). Wildlife movement corridors are considered sensitive by resource and conservation agencies.

The survey area is bounded to the north, west, and south by existing roads or developments, but is located at the western edge of a relatively large swath of habitat within the MHPA and has connectivity with the Rose Canyon Open Space to the south.

Because the project site is situated at a terminal pocket of this open space area and contains a large proportion of disturbed land, ornamental, and urban/developed land, which are non-sensitive cover types, the site contributes little value to the open space as a whole and virtually no value for wildlife movement.

# 6.0 Impact Analysis

Construction of the proposed project would cause impacts to biological resources. Direct and indirect impacts to vegetation/land cover types, MHPA, conserved lands, and sensitive biological resources are discussed below. The proposed project would impact a total of 0.94 acre within the overall 92-acre lot.

The geotechnical survey for the proposed project was conducted in July 2016 and required digging five test pits within the project footprint. The test pits were dug with a truck-mounted auger; therefore, it was necessary to clear vegetation in some areas to reduce fire risk from vehicular access to the test pit locations. A biologist was present to help the crew minimize removal of habitat and to monitor crew activities. Vegetation clearing was restricted to non-native grassland and disturbed land to the degree possible, but it was also necessary to clear several shrubs from within disturbed Diegan coastal sage scrub. As previously stated, all clearing and digging occurred within the project footprint, so the impacts are included in the overall impact acreage presented above, in Table 3, and in Figure 8.

## 6.1 Direct Impacts

### 6.1.1 Vegetation Communities/Land Cover Types

The proposed project would result in permanent impacts to a total of 0.94 acre, including 0.79 acre inside the MHPA (0.02 within the Mitigation Parcel) and 0.15 acre outside the MHPA (Table 3 and Figure 8). BMZ 2, which is considered impact-neutral, extends beyond the grading footprint to the south and would occur on 0.30 acre, including 0.25 acre inside the MHPA (including 0.21 acre within the Mitigation Parcel) and 0.05 acre outside the MHPA (see Table 3 and Figure 8). The City Fire Department would be responsible for maintaining BMZ 2 on a regular basis through weed and invasive species control, and selective thinning and pruning of shrubs to reduce fuel load. The impact footprint is greater than the 0.92-acre development footprint identified in project plans because it includes small slivers of vegetation that currently lay between the grading footprint and existing developed areas. These slivers would be isolated and no longer considered viable.

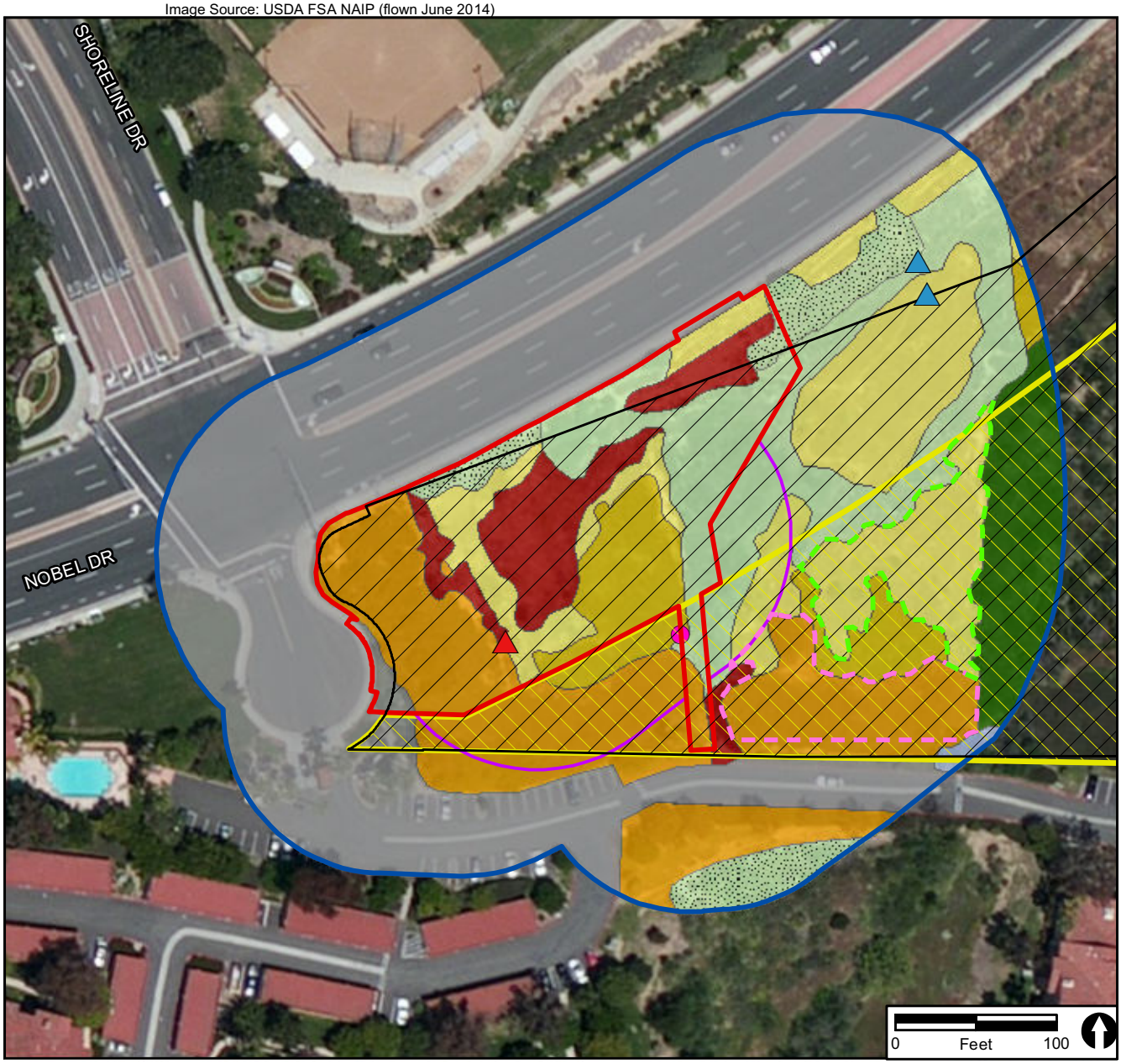
Valley needlegrass grassland, Diegan coastal sage scrub, and non-native grassland are considered sensitive vegetation communities pursuant to the City's Biology Guidelines. The project would result in direct impacts to 0.50 acre of sensitive vegetation communities.

**Table 3**
**Impacts to Vegetation Communities/Land Cover Types**
**(Acres)**

| Vegetation Community | City of San Diego Tier* | Existing in Survey Area | | | Direct Impacts | | | | Impact Neutral (BMZ 2)[1] | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Within MHPA[2] | | | | Within MHPA[2] | | | |
| | | Within MHPA[2] | Outside MHPA | **Total** | Outside Mitigation Parcel | Within Mitigation Parcel | Outside MHPA | **Total** | Outside Mitigation Parcel | Within Mitigation Parcel | Outside MHPA | **Total** |
| Southern willow scrub | Riparian | 0.01 | <0.01 | **0.01** | 0.00 | 0.00 | 0.00 | **0.00** | 0.00 | 0.00 | 0.00 | **0.00** |
| Valley needlegrass grassland | I | 0.24 | 0.00 | **0.24** | 0.12 | <0.01[3] | 0.00 | **0.12** | 0.01 | 0.02 | 0.00 | **0.03** |
| Diegan coastal sage scrub | II | 0.42 | 0.11 | **0.53** | 0.16 | 0.01 | 0.03 | **0.20** | 0.05 | 0.03 | 0.00 | **0.08** |
| Disturbed Diegan coastal sage scrub | II | 0.02 | 0.16 | **0.18** | 0.02 | 0.00 | 0.02 | **0.04** | 0.00 | 0.00 | 0.00 | **0.00** |
| Southern mixed chaparral | IIIA | 0.22 | 0.00 | **0.22** | 0.00 | 0.00 | 0.00 | **0.00** | 0.00 | 0.00 | 0.00 | **0.00** |
| Non-native grassland | IIIB | 0.57 | 0.09 | **0.66** | 0.11 | 0.00 | 0.03 | **0.14** | 0.01 | 0.03 | 0.00 | **0.04** |
| Disturbed land | IV | 0.19 | 0.03 | **0.22** | 0.17 | <0.01[3] | 0.03 | **0.20** | 0.00 | 0.00 | 0.00 | **0.00** |
| Ornamental plantings | IV | 0.56 | 0.22 | **0.78** | 0.19 | 0.01 | 0.02 | **0.22** | 0.01 | 0.13 | 0.02 | **0.16** |
| Urban/developed land | N/A | 0.02 | 1.82 | **1.84** | 0.00 | 0.00 | 0.02 | **0.02** | 0.00 | 0.00 | 0.00 | **0.00** |
| **Total** | | **2.24** | **2.43** | **4.68** | **0.77** | **0.02** | **0.15** | **0.94** | **0.08** | **0.21** | **0.02** | **0.31** |

[1] The acreage for BMZ 2 reflects only those areas outside the project grading footprint.
[2] Within the project site, the MHPA coincides with the boundary of the existing mitigation area.
[3] Actual impact is 76 square feet for valley needlegrass grassland and 110 square feet for disturbed land.

Image Source: USDA FSA NAIP (flown June 2014)




Project Site and Impact Boundary*

Survey Area

Brush Management Zone 2

**Revegetation Areas**

Native Grassland Creation

Native Grassland Restoration

*Brush management zone 1 is entirely within project impact footprint.

City of San Diego MHPA

Eastgate Technology Park Mitigation Area

**Sensitive Species**

San Diego County Viguiera *(Bahiopsis laciniata)*

Ashy Spike-moss *(Selaginella cinerascens)*

Belding's Orange-throated Whiptail *(Aspidoscelis hyperythra beldingi)*

**Vegetation Communities**

Urban/Developed Land

Diegan Coastal Sage Scrub

Diegan Coastal Sage Scrub - Disturbed

Disturbed Land

Valley Needlegrass Grassland

Non-native Grassland

Ornamental Plantings

Southern Mixed Chaparral

Southern Willow Scrub

RECON

M:\JOBS4\7617\common_gis\fig8_biotec.mxd 12/21/2016 fmm

# FIGURE 8
## Impacts and Mitigation

Therefore, impacts to 0.12 acre of valley needlegrass grassland, 0.24 acre of Diegan coastal sage scrub (including disturbed), and 0.14 acre of non-native grassland would be considered significant and mitigation would be required. Impacts to disturbed land, ornamental plantings, and urban/developed lands would be less than significant as these are not considered sensitive by the City or other resource agencies. Per the City's Significance Determination Thresholds, impacts to valley needlegrass grassland would be considered a significant cumulative impact and would require additional mitigation.

BMZ 2 would extend in several areas beyond the grading footprint and into undeveloped areas. Most of this area lies within existing ornamental vegetation (0.16 acre, including 0.14 acre within the MHPA). However, a portion of the BMZ 2 area would intersect Tiers 1 through IIIB vegetation, including 0.03 acre of valley needlegrass grassland (all within the MHPA including 0.02 acre within the Mitigation Parcel), 0.08 acre of Diegan coastal sage scrub (all within the MHPA including 0.03 acre within the Mitigation Parcel), and 0.04 acre of non-native grassland (all within the MHPA including 0.03 acre within the Mitigation Parcel). Pursuant to the City's Biology Guidelines, effects from BMZ 2 outside the grading footprint are considered impact neutral and would not require mitigation.

### 6.1.2 MHPA

As described in Section 6.1.1 and Table 3, the proposed project would cause direct impacts to 0.79 acre within the MHPA. A full discussion of the project's consistency with the MSCP is presented as Section 6.4.

### 6.1.3 Conserved Lands

As previously discussed, the Mitigation Parcel in the southern portion of the project site was designated as conserved lands in 1996 to mitigate impacts caused by development of the Eastgate Technology Park. These impacts are discussed in Section 6.1.1 and quantified in Table 3.

### 6.1.4 Direct Impacts to Sensitive Plant Species

The proposed project would impact an approximately 6-square-foot patch of ashy spike-moss within the project site but would avoid impacts to the nine San Diego County viguiera observed within the survey area. Impacts to ashy spike-moss would not be considered significant due to the relatively small area affected and the low sensitivity status of the species. Neither spreading navarretia nor its critical habitat would be impacted.

### 6.1.5 Direct Impacts to Wildlife

This section discusses potential impacts to sensitive wildlife observed or with moderate to high potential to occur in the project site.

### 6.1.5.1 Sensitive Species

**Belding's orange-throated whiptail** was observed during surveys and is considered present throughout the Diegan coastal sage scrub, valley needlegrass grassland, and non-native grassland within the project site. Thus, a total of 0.50 acre of occupied Belding's orange-throated whiptail habitat would be directly impacted (including 0.42 acre within the MHPA and 0.08 acre outside the MHPA). Impacts to Belding's orange-throated whiptail would be considered significant and would require mitigation.

The MSCP conditions for coverage for Belding's orange-throated whiptail require development projects to address edge effects. Unauthorized trails and other signs of frequent human recreational access were present throughout the undeveloped areas within and surrounding the survey area, including within the MHPA. Furthermore, as the site is located along a busy road and across the street from an athletic field, there is currently no barrier to such access. As a fire station with a relatively low level of public access, the proposed project would not increase unauthorized human access into the MHPA, and would include landscaping and other facilities that would deter further access from the fire station itself.

**Red diamond rattlesnake** is a CDFW species of special concern. It was determined to have moderate potential to occur in Diegan coastal sage scrub, valley needlegrass grassland, and non-native grassland within the project site and survey area. Therefore, potential direct impacts to this species would total of 0.50 acre (including 0.42 acre within the MHPA and 0.08 acre outside the MHPA). This direct impact to suitable red diamond rattlesnake habitat would be considered significant and would require mitigation.

**Coast horned lizard** is a CDFW species of special concern and an MSCP-covered species. It was not detected within the survey area; however, it was determined to have moderate potential to occur within the coastal sage scrub in the survey area. Therefore potential direct impacts to this species would total 0.24 acre (including 0.19 acre within the MHPA and 0.05 acre outside the MHPA). This direct impact to suitable coast horned lizard habitat would be considered significant and would require mitigation.

The MSCP conditions for coverage for coast horned lizard require projects to include specific measures to maintain native ant species, discourage the Argentine ant (*Linepithema humile*), and protect against detrimental edge effects to this species. Argentine ants were detected on-site within Diegan coastal sage scrub and urban/developed land (see Attachment 2), and their presence will continue to be supported by irrigation associated with the large multi-family residential developments and the athletic field in the area. Even so, project landscaping will consist of native species, which are drought-tolerant and require less irrigation than typical landscaping plants. All container plant stock will be required to be inspected by the project biologist (preferably off-site prior to shipment to the site). The biologist shall reject any plants that show evidence of non-native ants.

**Coastal California gnatcatcher** was not detected during protocol gnatcatcher surveys conducted in 2015; however, it has moderate potential to occur within the project site.

Potential impacts to this species, if present, would be considered significant and would require mitigation.

The MSCP conditions for coverage for the coastal California gnatcatcher require measures to reduce edge effects and minimize disturbance during the nesting period, fire protection measures to reduce the potential for habitat degradation due to unplanned fire, and management measures to maintain or improve habitat quality indulging vegetation structure. No clearing of occupied habitat within the City's MHPAs and within the County's Biological Resource Core Areas may occur between March 1 and August 15. As mentioned above, the proposed project is not expected increase unauthorized human access into the MHPA, and would include landscaping and other facilities that would deter further access from the fire station itself.

**Southern California rufous-crowned sparrow** was not detected within the project site during directed searches in 2015. Nonetheless, it has moderate potential to occur in the project site. Impacts to this species would be considered significant and would require mitigation.

The MSCP conditions for coverage of southern California rufous-crowned sparrow include maintenance of dynamic processes, such as fire, to perpetuate some open phases of coastal sage scrub with herbaceous components. As mentioned above, the proposed project is not expected increase unauthorized human access into the MHPA, and would include landscaping and other facilities that would deter further access from the fire station itself.

**Cooper's hawk** is a CDFW Watch List species and is an MSCP-covered species. It has no potential to nest within the survey area; however, due to the presence of potential nesting trees in Rose Canyon to the south and at the athletic fields to the north, it has high potential to forage in the project site and survey area. Because no nesting is expected, no direct impacts to Cooper's hawk would occur.

The MSCP conditions for coverage for Cooper's hawk include a 300-foot impact avoidance area around active nests, and minimization of disturbance in oak woodlands and oak riparian forests. As discussed in Section 5.4.2, Cooper's hawks have high potential to occur in trees along Rose Creek approximately 750 feet south of the project site. These trees are relatively far from the project site and separated by an existing apartment complex. As a result, any Cooper's hawks or other raptors nesting in these trees would not be impacted by the project. Cooper's hawks have low potential to occur in the landscaping trees within 300 feet of the project site, as these are situated adjacent to an active athletic field along a busy roadway. Thus, project construction is not expected to affect Cooper's hawks or other nesting raptors.

**Western bluebird** was observed in the vicinity of the athletic fields over 100 feet from the project site. No suitable habitat for this species occurs within the project site. Therefore no significant impact to western bluebird would occur.

**San Diego black-tailed jackrabbit** was not detected during surveys; however, this species was determined to have moderate potential to occur in the valley needlegrass

grassland, Diegan coastal sage scrub, and non-native grassland within the survey area. Therefore, potential direct impacts to this species would total of 0.50 acre (including 0.42 acre within the MHPA and 0.08 acre outside the MHPA). Impacts to San Diego black-tailed jackrabbit would be considered significant and would require mitigation.

**San Diego desert woodrat** was determined to have low potential to nest but moderate potential to forage in the survey area. Such foraging would likely occur in the valley needlegrass grassland, Diegan coastal sage scrub, and non-native grassland within the survey area. Woodrats would be expected to be in their middens (which were not found in the project site and would not be directly impacted) during the day, and any active foraging woodrats would be expected to retreat to the middens during clearing, grading, and grubbing. Thus, San Diego desert woodrat would not be directly impacted by the proposed project, but 0.50 acre (including 0.42 acre within the MHPA and 0.08 acre outside the MHPA) of suitable foraging habitat be impacted. Impacts to San Diego desert woodrat foraging habitat would be considered significant and would require mitigation.

#### 6.1.5.2 General Wildlife

Direct impacts are anticipated to occur to small burrowing mammals and reptiles during grading of the project site. Such species have low mobility and may be expected to retreat to burrows within the grading footprint during construction. Any birds that are not nesting are highly mobile and are expected to avoid being impacted. Impacts to general wildlife are, therefore, considered less than significant and would not require mitigation.

#### 6.1.5.3 Nesting Birds

The proposed project has potential to directly impact nesting and migratory birds nesting covered by the MBTA during vegetation clearing. Species covered by the MBTA that may potentially nest in the project area include (but are not limited to) common sage scrub species such as black phoebe (*Sayornis nigricans semiatra*), western scrub-jay (*Aphelocoma californica*), bushtit (*Psaltriparus minimus minimus*), wrentit (*Chamaea fasciata henshawi*), and California towhee (*Pipilo crissalis*). Direct impacts to nesting migratory birds would be considered significant and require mitigation.

## 6.2 Indirect Impacts

The project has the potential to inadvertently indirectly impact sensitive native and non-native habitats that may also be occupied by sensitive species. For this reason, biological monitoring during construction is outlined in the mitigation section.

### 6.2.1 Indirect Impacts to Nesting Birds

The proposed project has potential to cause indirect impacts to nesting birds, including Cooper's hawk (which may nest in large trees to the north of the project site) and migratory bird species within Diegan coastal sage scrub and grassland habitats within the MHPA adjacent to the project site. Such potential indirect impacts could occur due to dust or noise

levels generated during project construction and vegetation removal. Impacts to Cooper's hawk and migratory or nesting birds would be considered significant and require mitigation, including biological monitoring and avoidance of typical nesting periods. Further details are outlined in the Mitigation section (Section 7.0). Noise from the operations phase of the project would primarily occur as a result of sirens from emergency vehicles. As discussed in the noise report (RECON 2016), sirens are anticipated to be used for less than 30 seconds approximately 11 times per day. This frequency and duration is not expected to result in a significant impact to breeding migratory birds potentially breeding in the nearby habitat.

Protocol coastal California gnatcatcher surveys conducted in 2015 were negative. However, there is suitable habitat within 300 feet of the project site. Therefore there is a moderate potential for this species to be indirectly impacted due to the proposed project. Indirect impacts to coastal California gnatcatcher would be considered significant and would require mitigation.

### 6.2.2 MHPA

In addition to direct impacts to biological resources both outside and inside the MHPA, the project has potential to cause indirect impacts to biological resources in the MHPA along the eastern and southern boundaries. As stated in the MSCP Section 1.4.3 (City of San Diego 1997), land uses adjacent to the MHPA are to be managed to ensure minimal impacts to the MHPA. The MSCP establishes adjacency guidelines to be addressed on a project-by-project basis to minimize direct and indirect impacts and maintain the function of the MHPA. A discussion of project actions to reduce impacts within the MHPA is presented in Section 6.4, and Land Use Adjacency Guidelines are specifically addressed in Section 6.4.3.

### 6.2.3 Applicable Area Specific Management Directives

The MSCP identifies general and specific management directives, which are intended to preclude impacts, particularly those related to urban edge effects which include (but are not limited to) trampling, dumping, vehicular traffic, competition with invasive species (i.e., parasitism or predation from invasive animal species and habitat degradation from introduction of non-native plant species), predation by domestic animals, noise, collecting, recreational activities, and other human intrusion (City of San Diego 1997). The MSCP, Appendix A (1997), also outlines species specific conditions of coverage for all covered species. As discussed in Section 5.4, no covered species were detected within the survey area. Ashy spike-moss and San Diego viguiera are ranked as sensitive by the CNPS, but the MSCP does not identify Area Specific Management Directives for either species.

Critical habitat for spreading navarretia, an MSCP-covered species, occurs to the east of the site but not within the survey area. Conditions for coverage for this species state:

> Area specific management directives must include specific measures to protect against detrimental edge effects to this species, and must incorporate measures to conserve and maintain surrounding habitat for 1) pollinators and 2) as part of the hydrological system for the vernal pools.

As spreading navarretia was not detected in the survey area, it therefore would not be directly impacted by the project. The project itself would be fenced and would not be expected to contribute to detrimental edge effects to this species, its critical habitat, or any vernal pools. Thus, it is expected to be consistent with the conditions for coverage for this species.

Conditions of coverage for covered wildlife species were outlined in Section 6.1.5.1.

# 6.3 Jurisdictional Waters/Wetland Impacts

No jurisdictional features occur within the survey area, and none would be directly or indirectly impacted by the proposed project.

# 6.4 MSCP Consistency Analysis

This section discusses project consistency with the MHPA and Land Use Considerations per Section 1.4 of the MSCP (City of San Diego 1997).

## 6.4.1 Compatible Land Uses

As described in Section 6.1.2 and Table 3, the proposed project would cause direct impacts to 0.79 acre within the MHPA (including 0.02 acre within the Mitigation Parcel). According to Section II.A.2 and II.B.1 of the City's Biology Guidelines (2012), essential public facilities are allowed to impact up to 30 percent of a parcel. As the project is a fire station that will serve the public interest and provide an essential service to the surrounding community, it qualifies as an essential public facility and is therefore a compatible land use within the MHPA per Section 1.4.1 of the MSCP (City of San Diego 1997), The total project impact represents less than 1 percent to the total lot acreage (92 acres), which is far below the 30 percent allowed for essential public facilities. Because total direct impacts are below this 30 percent threshold, an MHPA boundary line adjustment would not be required.

## 6.4.2 General Planning Policies and Design Guidelines.

Section 1.4.2 of the MSCP provides general planning and design guidelines for utility projects as they relate to the MHPA. The relevant guidelines are summarized and addressed as follows.

## Roads and Utilities- Construction and Maintenance Policies

1. **All proposed utility lines should be designed to avoid or minimize intrusion into the MHPA**. The project is not a utility line; however it was designed to be situated in the northwest corner of the lot, along two existing roadways, and in such a way that minimized intrusion into the MHPA.

2. **All new development for utilities and facilities within or crossing the MHPA shall be planned, designed, located and constructed to minimize environmental impacts**. The project was designed to be situated in the northwest corner of the lot, along two existing roadways, and in such a way that minimized intrusion into the MHPA.

3. **Temporary construction areas and roads, staging areas, or permanent access roads must not disturb existing habitat unless determined to be unavoidable.** The project does not include any temporary roads or staging areas outside the assessed permanent impact footprint. Thus it would impact the minimum area feasible.

4. **Construction and maintenance activities in wildlife corridors must avoid significant disruption of corridor usage.** A discussion of wildlife corridors is presented in Section 5.8. The project is largely located outside any substantial wildlife corridors and therefore would not disrupt corridor usage.

5. **Roads in the MHPA will be limited to those identified in Community Plan Circulation Elements, collector streets essential for area circulation, and necessary maintenance/emergency access roads.** The project is located at the intersection of Shoreline Drive and Nobel Drive and proposes driveway access to both, and therefore does not propose any additional roads.

6. **Development of roads in canyon bottoms should be avoided whenever feasible.** The project is not situated in a canyon bottom and therefore avoids development of such roads.

7. **Where possible, roads within the MHPA should be narrowed from existing design standards to minimize habitat fragmentation and disruption of wildlife movement and breeding areas.** The project does not propose any new roads, but rather includes short driveways to two existing roads.

8. **For the most part, existing roads and utility lines are considered a compatible use within the MAP and therefore will be maintained.** The project does not propose any additional roads or utility lines; however as an essential public facility, it would be maintained in accordance with current standards.

### Fencing, Lighting, and Signage

1. **Fencing or other barriers will be used where it is determined to be the best method to achieve conservation goals and adjacent land uses compatible with the MHPA.** The proposed fire station would be fenced to provide protection for the equipment and facilities within the station, but also to provide a barrier to unauthorized access to the habitat within the surrounding MHPA.

2. **Lighting shall be designed to avoid intrusion into the MHPA and effects on wildlife.** Project lighting would be shielded and/or directed away from the MHPA. Placement and use of project lighting will accommodate the habits of nocturnal species that prefer to move and forage in darkness.

3. **Signage will be limited to access and litter control and educational purposes.** The project would include only minimal signage. Signage for the fire station would be used to identify the fire station and any regulations associated with it. Signage may also be used to limit access to the restoration area proposed in Section 7.2 and described in the native grassland restoration plan (RECON 2016).

### Materials Storage

**Prohibit storage of materials (e.g. hazardous or toxic, chemicals, equipment, etc.) within the MHPA and ensure appropriate storage per applicable regulations in any area that may impact the MHPA, especially do to potential leakage.** The proposed fire station will store large equipment and potentially hazardous materials; however these equipment and materials would be maintained and controlled in accordance with current safety regulations. No hazardous materials or equipment would be stored allowed to reach the habitat in the surrounding MHPA.

## 6.4.3 MHPA Land Use Adjacency Guidelines

Projects that impact or potentially impact land within the MHPA are required to address Land Use Adjacency Guidelines as described in Section 1.4.3 of the MSCP (City of San Diego 1997). These Land Use Adjacency Guidelines are designed to minimize direct and indirect impacts within the MHPA associated with drainage, toxics, lighting, noise, barriers, invasive, brush management, and grading/land development. A discussion of the project's consistency with the Land Use Adjacency Guidelines, as well as corresponding project actions, is presented below.

### Drainage

All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials, and other elements

that might degrade or harm the natural environment or ecosystem processes within the MHPA.

The project has been designed so that runoff would be entirely treated and detained on-site via flow-through planters and rip rap, and therefore would not drain into the MHPA. The drainage facilities would be required to be maintained by the City in association with ongoing fire station facility maintenance.

## Toxics

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

The project would incorporate measures to reduce impacts caused by the application and/or drainage of chemicals or project generated by-products such as pesticides, herbicides, animal waste, and other substances that are potentially toxic or impactive to native habitats/flora/fauna (including water) into the MHPA. All construction-related activity that may have potential for leakage or intrusion shall be monitored by the Qualified Biologist/Owner's Representative or Resident Engineer to ensure there is no impact to the MHPA. The project has been designed to limit post-development storm water runoff discharge rates and velocities and to maintain or reduce potential erosion and to reduce nutrients, organic compounds, oxygen-demanding substances, oil and grease, bacteria and viruses, and pesticides by applying best management practices (BMPs).

Construction BMPs, such as monitoring, flagging, staking, or silt/bio fencing around sensitive areas would be used to ensure toxins from construction and project implementation would not impact the MHPA.

## Lighting

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

Project lighting would be shielded and/or directed away from the MHPA. As some species rely on darkness for shelter, feeding patterns, migration, etc., the areas adjacent to any MHPA will be especially sensitive to light exposure. Placement and use of project lighting will accommodate the habits of nocturnal species that prefer to move and forage in darkness.

## Noise

Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and other

uses that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.

### Construction Noise

Although coastal California gnatcatchers were not observed in or adjacent to the project site during protocol surveys in 2015 or during the non-protocol survey conducted in 2016, this species has moderate potential to occur there. Therefore, construction noise that exceeds the maximum levels allowed shall be avoided during the gnatcatcher breeding season (March 1 – August 15). If construction is proposed during the above breeding season for the species, USFWS protocol surveys shall be required in order to determine species presence/absence. If protocol surveys are not conducted in suitable habitat for the aforementioned listed species, presence shall be assumed and noise attenuation measures and biological monitoring shall be implemented.

### Operational Noise

Noise from fire engine and ambulance sirens would generate a maximum instantaneous noise level of 120 A-weighted decibels dB(A) with an average duration of less than 30 seconds approximately 11 times per day. This duration is below a level that is expected to interfere with wildlife breeding behavior. Therefore no indirect impacts to wildlife are anticipated from the sirens. In addition, the sirens are associated with emergency response and are, therefore, exempt from noise standards in the Noise Ordinance (Municipal Code Section 59.5.0402[b]). Other operational noise, such as garage bay door operation, generator testing and operation, and recharge of the self-contained breathing apparatuses would not be exempt. According to the modeling discussed in the noise report, these non-exempt operational noise sources are not expected to generate noise in excess of 60 dB(A) hourly average within the surrounding MHPA (RECON 2016).

## Barriers/Access

New development within or adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation. Access to the MHPA, if any, should be directed to minimize impacts and reduce impacts associated with domestic pet predation.

At present, the MHPA in the vicinity of the proposed project is situated adjacent to a moderately busy road and across the street from an athletic field. No fences or other barriers are in place along Nobel Drive and a moderate level of recreational activity currently occurs in these adjacent areas. As a fire station, the proposed project is not expected to contribute to potential unauthorized access to the adjacent MHPA. On the contrary, the presence of the fire station and its facilities would be expected to reduce potential encroachment.

## Invasive Plants

No invasive plant species shall be introduced into areas adjacent to the MHPA.

The planting palette for project landscaping will not include any invasive plant species adjacent to the MHPA area that are identified on the California Invasive Plant Council (Cal-IPC) Invasive Plant Inventory Database (Cal-IPC 2016). A list of non-native invasive species observed within the survey area is included below. This list includes species on the Cal-IPC list as well as other species recommended for inclusion by City staff (City of San Diego 2016). Should these or other Cal-IPC listed species occur within the development and landscaped areas within or adjacent to the MHPA, they would be removed or controlled to the degree feasible:

| **Species** | **Cal-IPC Rating** |
|---|---|
| western coastal wattle (*Acacia cyclops*) | Not listed |
| vanilla scented wattle (*Acacia redolens*) | Not listed |
| Australian saltbush (*Atriplex semibaccata*) | Moderate |
| wild oat (*Avena* sp.) | Limited |
| purple falsebrome (*Brachypodium distachyon*) | Moderate |
| black mustard (*Brassica nigra*) | Moderate |
| ripgut grass (*Bromus diandrus*) | Moderate |
| soft chess (*Bromus hordeaceus*) | Limited |
| red brome (*Bromus madritensis* ssp. *rubens*) | High |
| Italian thistle (*Carduus pycnocephalus*) | Moderate |
| tocalote (*Centaurea melitensis*) | Moderate |
| iceplant (*Delosperma* sp.) | Not listed |
| stinkwort (*Dittrichia graveolens*) | Moderate |
| rattail sixweeks grass (*Festuca myuros*) | Moderate |
| fennel (*Foeniculum vulgare*) | High |
| garland daisy (*Glebionis coronaria*) | Moderate |
| bristly ox-tongue (*Helminthotheca echioides*) | Limited |
| short-pod mustard (*Hirschfeldia incana*) | Moderate |
| horehound (*Marrubium vulgare*) | Limited |
| slender-leaved iceplant (*Mesembryanthemum nodiflorum*) | Moderate |
| radish (*Raphanus sativus*) | Limited |
| curly dock (*Rumex crispus*) | Limited |
| Russian thistle (*Salsola tragus*) | Limited |
| Brazilian pepper tree (*Schinus terebinthifolius*) | Limited |
| Mediterranean schismus (*Schismus barbatus*) | Limited |
| London rocket (*Sisymbrium irio*) | Moderate |
| smilo grass (*Stipa miliacea*) | Limited |

Any individuals of these species would be removed from the premises during the construction process and would not be included in the landscaping plant palette. Additionally, according to City standards for brush management, Zone 2 will include only native plants.

**Brush Management**

New development located adjacent to the MHPA must be set back to incorporate Zone 1 brush management areas on the development pad and outside of the MHPA. Zone 2 may be located in the MHPA except where narrow wildlife corridors require it to be located outside the MHPA. Vegetation clearing shall be done consistent with City standards and shall avoid/minimize impacts to covered species to the maximum extent possible.

The proposed project has been designed with the fire station building positioned in the northern portion of the project site and as far west (away from the MHPA) as possible. With this placement, all BMZ 1 would lie within the existing development footprint where or within existing developed areas. BMZ 2 extends into the MHPA to the south of the project site as allowed by the MSCP.

**Grading/Land Development**

Manufactured slopes associated with site development shall be included with the development footprint for projects within or adjacent to the MHPA. All grading for the proposed project would occur within the project site and associated impacts are assessed in this report.

# 7.0 Mitigation

Mitigation is required for project impacts that are considered significant under CEQA (City 2011), including impacts to sensitive vegetation communities (habitats) and species. All impacts to sensitive biological resources should be avoided to the maximum extent feasible, and minimized prior to proposing mitigation whenever possible. Mitigation measures typically include resource avoidance or dedication/acquisition of habitat, and restoration, creation, or enhancement. Mitigation is intended to reduce the impacts to below a level of significant.

Impacts to biological resources would be mitigated, in part via biological protections during construction, (includes monitoring, preconstruction meetings, and development of a Biological Condition Monitoring Exhibit, etc.) and standard MSCP Land Use adjacency mitigation.

# 7.1 General Mitigation Measures During Construction

The following City standard mitigation would be included in the environmental document:

BIOLOGICAL RESOURCE PROTECTION DURING CONSTRUCTION

**I. Prior to Construction**

**Biologist Verification** - The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist) as defined in the City of San Diego's Biological Guidelines (2012), has been retained to implement the project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project.

A. **Preconstruction Meeting** - The Qualified Biologist shall attend the preconstruction meeting, discuss the project's biological monitoring program, and arrange to perform any follow up mitigation measures and reporting including site-specific monitoring, habitat creation and restoration, and additional fauna/flora surveys/salvage.

B. **Biological Documents** - The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports including but not limited to, maps, plans, surveys, survey timelines, or buffers are completed or scheduled per City Biology Guidelines, MSCP, Environmentally Sensitive Lands Ordinance, project permit conditions; CEQA; endangered species acts (ESAs); and/or other local, state or federal requirements.

C. **Biological Construction Mitigation/Monitoring Exhibit** - The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME) which includes the biological documents in C above. In addition, include: restoration plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions, etc.), avian or other wildlife surveys/survey schedules (including general avian nesting and USFWS protocol), timing of surveys, wetland buffers, avian construction avoidance areas/noise buffers/ barriers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City Administrator Deputy Director/MMC. The BCME shall include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.

D. **Avian Protection Requirements** - To avoid any direct impacts to coastal California gnatcatcher, raptors, and migratory birds, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (March 1 to August 15 for gnatcatchers; February 1 to September 15 for raptors). If removal of habitat in the proposed area of

disturbance must occur during the breeding season, the Qualified Biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The pre-construction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The applicant shall submit the results of the pre-construction survey to City DSD for review and approval prior to initiating any construction activities. If nesting birds are detected, a letter report or mitigation plan in conformance with the City's Biology Guidelines and applicable State and Federal Law (i.e. appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC Section or Resident Engineer, and Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

F. **Resource Delineation** - Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora & fauna species, including nesting birds) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site.

G. **Education -** Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for removal of invasive species or retention of sensitive plants, and clarify acceptable access routes/methods and staging areas, etc.).

## II. During Construction

A. **Monitoring** - All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on "Exhibit A" and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the pre-construction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR shall be e-mailed to MMC on the 1st day of monitoring, the 1st week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery.

B. **Subsequent Resource Identification** - The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna onsite (e.g., flag plant specimens for avoidance during access, etc.). If active nests or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species specific local, state or federal regulations have been determined and applied by the Qualified Biologist.

**III. Post Construction Measures**

A. In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL and MSCP, CEQA, and other applicable local, state and federal law. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City ADD/MMC within 30 days of construction completion.

# 7.2 Mitigation for Impacts to Vegetation/ Land Cover Types

Mitigation to offset impacts to sensitive vegetation communities may occur through one of three options: (1) acquisition and preservation of existing habitat, (2) restoration and preservation of degraded habitat in the project vicinity, or (3) contribution to the City's Habitat Acquisition Fund. Mitigation will be required to comply with the City's Biological Impacts and Monitoring MMRP Conditions. A copy of these conditions is included as Attachment 5.

The mitigation ratios used to offset impacts to sensitive vegetation communities in this report assume mitigation will occur within the MHPA (Table 4). Impacts within the Mitigation Parcel would need to be replaced as part of the mitigation program for the proposed project. Thus, these impacted areas would require an additional 1:1 mitigation ratio, on top of that required per the City's Biology Guidelines (City of San Diego 2012).

## 7.2.1 Valley Needlegrass Grassland

Direct impacts to 0.12 acre of valley needlegrass grassland would be considered a significant direct impact as well as a cumulatively significant impact. In addition, all direct impacts to valley needlegrass grassland would occur within the MHPA, less than 0.01 acre (76 square feet) of which would occur within the Mitigation Parcel. The impact would require mitigation (see Table 4), as follows:

- 3:1 mitigation ratio for direct impacts within the MHPA (outside the Mitigation Parcel), to be met with native grassland creation or restoration in the project vicinity,

- 4:1 mitigation ratio for impacts to the Mitigation Parcel, to be met with native grassland creation or restoration in the project vicinity.

**Table 4 [NEW TABLE]**
**Mitigation For Impacts to Vegetation Communities/Land Cover Types**
**(Acres)**

| Vegetation Community | City of San Diego Tier | Impacts | | | | Total Mitigation |
|---|---|---|---|---|---|---|
| | | Impact Location | Impacts | Mitigation Ratio[1] | Mitigation | |
| Valley needlegrass grassland | I | Inside MHPA, Outside Mit. Parcel | 0.12 | 3:1[2] | 0.36 | 0.367 |
| | | Inside MHPA, Inside Mit. Parcel | <0.01 (76 sf) | 4:1[3] | 0.007 (304 sf) | |
| Diegan coastal sage scrub | II | Inside MHPA, Outside Mit. Parcel | 0.16 | 1:1 | 0.16 | 0.21 |
| | | Inside MHPA, Inside Mit. Parcel | 0.01 | 2:1[3] | 0.02 | |
| | | Outside MHPA | 0.03 | 1:1 | 0.03 | |
| Disturbed Diegan coastal sage scrub | II | Inside MHPA, Outside Mit. Parcel | 0.02 | 1:1 | 0.02 | 0.04 |
| | | Outside MHPA | 0.02 | 1:1 | 0.02 | |
| Non-native grassland | IIIB | Inside MHPA, Outside Mit. Parcel | 0.11 | 1:1 | 0.11 | 0.125 |
| | | Outside MHPA | 0.03 | 0.5:1 | 0.015 | |
| **Total** | | | **0.42** | | | **0.742** |

[1] Mitigation ratios assume all mitigation will occur within the MHPA.
[2] Includes 2:1 mitigation ratio for direct impacts, plus 1:1 ratio for cumulative impacts. Cumulative impacts would require mitigation via native grassland creation.
[3] Includes an additional 1:1 mitigation ratio for impacts to mitigation area. Cumulative impacts require mitigation via native grassland creation.

Thus, impacts within the Mitigation Parcel would require mitigation at a total 4:1 ratio, while impacts outside the Mitigation Parcel (but still inside the MHPA) would require mitigation at a total 3:1 ratio. In total, the mitigation program will include a total of 0.367 acre of native grassland restoration. These measures would be implemented as described in the native grassland restoration plan (RECON 2016). The restoration areas would be located within areas of non-native vegetation communities (non-native grassland, ornamental plantings, and disturbed land) just east of the proposed fire station (see Figure 8). This area was chosen because it is close to the project site, within the MHPA, and adjacent to an existing small patch of valley needlegrass grassland.

### 7.2.2 Diegan Coastal Sage Scrub

Impacts to 0.20 acre of Diegan coastal sage scrub, including disturbed Diegan coastal sage scrub, within the MHPA would require mitigation as follows:

- 1:1 mitigation ratio for direct impacts within the MHPA (outside the Mitigation Parcel).
- 2:1 mitigation ratio for direct impacts within the Mitigation Parcel.
- 1:1 mitigation ratio for impacts outside the MHPA.

Thus, the mitigation program would require a total of 0.25 acre of in-kind preservation (see Table 4).

### 7.2.3 Non-native Grassland

Impacts to 0.11 acre of non-native grassland within the MHPA would require mitigation as follows:

- 1:1 mitigation ratio for direct impacts within the MHPA (outside the Mitigation Parcel),
- 0.5:1 mitigation ratio for impacts outside the MHPA.

Therefore, the mitigation program would require a total of 0.125 acre of in-kind preservation.

To the degree feasible, areas of cryptogamic soils should be carefully excavated prior to project grading. Care should be taken to keep the crust intact during excavation, and the salvaged soil should be stored off-site to be used in the native grassland creation and restoration areas.

## 7.3 Mitigation for Impacts to Wildlife Species

Mitigation for potential impacts to sensitive wildlife species would include the general mitigation measures during construction described in Section 7.1. Additionally mitigation for impacted sensitive species would include the following specific measures:

**Belding's orange-throated whiptail:** Direct impacts to Belding's orange-throated whiptail would be offset through the proposed 0.742 acre of habitat-based mitigation described in Section 7.2.

**Red diamond rattlesnake:** Potential impacts to red diamond rattlesnake would be offset with the restoration and preservation of 0.742 acre of suitable valley needlegrass grassland, Diegan coastal sage scrub, and non-native grassland inside the MHPA, as described in Section 7.2 above.

**Coast horned lizard:** The project would be required to include measures to maintain native ant species, discourage the Argentine ant, and protect against detrimental edge effects to this species. To accomplish this, during initial landscaping, container plant stock should be inspected by the project biologist (preferably off-site prior to shipment to the site). The biologist shall reject any plants that show evidence of non-native ants.

**Coastal California gnatcatcher:** If construction activities are to occur during the breeding season of the coastal California gnatcatcher (March 1 – August 15), the project shall be conditioned to comply with the City's standard Land Use Adjacency Guidelines mitigation monitoring and reporting measures as described in Section 7.4, below, in order to avoid or reduce potential indirect and construction impacts to this species.

**Southern California rufous-crowned sparrow:** Direct impacts to southern California rufous-crowned sparrow would be offset with the with restoration and preservation of 0.742 acre of suitable valley needlegrass grassland, Diegan coastal sage scrub, and non-native grassland inside the MHPA, as described in Section 7.2 above.

**San Diego black-tailed jackrabbit:** Potential impacts to San Diego black-tailed jackrabbit would be offset with restoration and preservation of 0.742 acre of suitable valley needlegrass grassland, Diegan coastal sage scrub, and non-native grassland inside the MHPA, as described in Section 7.2 above.

**San Diego desert woodrat:** Potential impacts to San Diego desert woodrat would be offset with restoration and preservation of 0.742 acre of suitable valley needlegrass grassland, Diegan coastal sage scrub, and non-native grassland inside the MHPA, as described in Section 7.2 above.

**Nesting raptors and birds:** To avoid impacts to raptors, including Cooper's hawk, no grading activities shall occur during the raptor breeding season of February 1 through September 15. If construction activities are anticipated to occur during the breeding season, then pre-grading nest surveys should be conducted to determine if raptors are nesting in trees on the site. If active nests are present, appropriate construction setbacks of a minimum of 300 feet would be required until young are completely independent of the nest. If no nesting raptors are detected during the pre-construction survey, no mitigation is required.

Nesting bird mitigation is outlined above in Section 7.1.

## 7.4 Land Use Adjacency Guidelines Mitigation Monitoring Measures

As the project occurs within and adjacent to the MHPA, the project would be required to comply with the following Land Use Adjacency Guidelines standard mitigation monitoring and reporting measures would apply:

> Prior to issuance of any construction permit or notice to proceed, DSD/ LDR, and/or MSCP staff shall verify the Applicant has accurately represented the project's design in or on the Construction Documents (CD's/CD's consist of Construction Plan Sets for Private Projects and Contract Specifications for Public Projects) are in conformance with the associated discretionary permit conditions and Exhibit "A," and also the City's Multi-Species Conservation Program (MSCP) Multi-Habitat Planning Area (MHPA) Land Use Adjacency Guidelines. The applicant shall provide an implementing plan and include references on/in CD's of the following:
>
> A. **Grading/Land Development/MHPA Boundaries** – MHPA boundaries on-site and adjacent properties shall be delineated on the CDs. DSD Planning and/or MSCP staff shall ensure that all grading is included within the development footprint, specifically manufactured slopes, disturbance, and

development within or adjacent to the MHPA. For projects within or adjacent to the MHPA, all manufactured slopes associated with site development shall be included within the development footprint.

B. **Drainage** – All new and proposed parking lots and developed areas in and adjacent to the MHPA shall be designed so they do not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials prior to release by incorporating the use of filtration devices, planted swales and/or planted detention/desiltation basins, or other approved permanent methods that are designed to minimize negative impacts, such as excessive water and toxins into the ecosystems of the MHPA.

C. **Toxics/Project Staging Areas/Equipment Storage** – Projects that use chemicals or generate by-products such as pesticides, herbicides, and animal waste, and other substances that are potentially toxic or impactive to native habitats/flora/fauna (including water) shall incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. No trash, oil, parking, or other construction/development-related material/activities shall be allowed outside any approved construction limits. Where applicable, this requirement shall incorporated into leases on publicly-owned property when applications for renewal occur. Provide a note in/on the CD's that states: "All construction related activity that may have potential for leakage or intrusion shall be monitored by the Qualified Biologist/Owners Representative or Resident Engineer to ensure there is no impact to the MHPA."

D. **Lighting** – Lighting within or adjacent to the MHPA shall be directed away/shielded from the MHPA and be subject to City Outdoor Lighting Regulations per LDC Section 142.0740.

E. **Barriers** – New development within or adjacent to the MHPA shall be required to provide barriers (e.g., non-invasive vegetation; rocks/boulders; 6-foot high, vinyl-coated chain link or equivalent fences/walls; and/or signage) along the MHPA boundaries to direct public access to appropriate locations, reduce domestic animal predation, protect wildlife in the preserve, and provide adequate noise reduction where needed.

F. **Invasives** – No invasive non-native plant species shall be introduced into areas within or adjacent to the MHPA.

The planting palette for project landscaping will not include any invasive plant species adjacent to the MHPA area that are identified on the Cal-IPC Invasive Plant Inventory Database (Cal-IPC 2016). A list of non-native invasive species observed within the survey area is included below. This list includes species on the Cal-IPC list as well as other species recommended for inclusion by City staff (City of San Diego 2016). Should these or other Cal-

IPC listed species occur within the development and landscaped areas within or adjacent to the MHPA, they would be removed or controlled to the degree feasible:

| **Species** | **Cal-IPC Rating** |
|---|---|
| western coastal wattle (*Acacia cyclops*) | Not listed |
| vanilla scented wattle (*Acacia redolens*) | Not listed |
| Australian saltbush (*Atriplex semibaccata*) | Moderate |
| wild oat (*Avena* sp.) | Limited |
| purple falsebrome (*Brachypodium distachyon*) | Moderate |
| black mustard (*Brassica nigra*) | Moderate |
| ripgut grass (*Bromus diandrus*) | Moderate |
| soft chess (*Bromus hordeaceus*) | Limited |
| red brome (*Bromus madritensis* ssp. *rubens*) | High |
| Italian thistle (*Carduus pycnocephalus*) | Moderate |
| tocalote (*Centaurea melitensis*) | Moderate |
| iceplant (*Delosperma* sp.) | Not listed |
| stinkwort (*Dittrichia graveolens*) | Moderate |
| rattail sixweeks grass (*Festuca myuros*) | Moderate |
| fennel (*Foeniculum vulgare*) | High |
| garland daisy (*Glebionis coronaria*) | Moderate |
| bristly ox-tongue (*Helminthotheca echioides*) | Limited |
| short-pod mustard (*Hirschfeldia incana*) | Moderate |
| horehound (*Marrubium vulgare*) | Limited |
| slender-leaved iceplant (*Mesembryanthemum nodiflorum*) | Moderate |
| radish (*Raphanus sativus*) | Limited |
| curly dock (*Rumex crispus*) | Limited |
| Russian thistle (*Salsola tragus*) | Limited |
| Brazilian pepper tree (*Schinus terebinthifolius*) | Limited |
| Mediterranean schismus (*Schismus barbatus*) | Limited |
| London rocket (*Sisymbrium irio*) | Moderate |
| smilo grass (*Stipa miliacea*) | Limited |

Any individuals of these species would be removed from the premises during the construction process and would not be included in the landscaping plant palette. Additionally, according to City standards for brush management, Zone 2 will include only native plants.

G. **Brush Management** – New development adjacent to the MHPA shall be set back from the MHPA to provide required Brush Management Zone 1 area on the building pad outside of the MHPA. Zone 2 may be located within the MHPA provided the Zone 2 management will be the responsibility of an HOA or other private entity except where narrow wildlife corridors require it to be located outside of the MHPA. Brush management zones will not be greater in size than currently required by the City's regulations, the amount of woody vegetation clearing shall not exceed 50 percent of the vegetation existing

when the initial clearing is done and vegetation clearing shall be prohibited within native coastal sage scrub and chaparral habitats from March 1-August 15 except where the City ADD/MMC has documented the thinning would be consist with the City's MSCP Subarea Plan. Existing and approved projects are subject to current requirements of Municipal Code Section 142.0412.

H. **Noise** – Due to the site's location adjacent to or within the MHPA where the Qualified Biologist has identified potential nesting habitat for listed avian species, construction noise that exceeds the maximum levels allowed shall be avoided during the breeding seasons for the coastal California gnatcatcher (March 1 to August 15). If construction is proposed during the breeding season for the species, U.S. Fish and Wildlife Service protocol surveys shall be required in order to determine species presence/absence. If protocol surveys are not conducted in suitable habitat during the breeding season for the aforementioned listed species, presence shall be assumed and implementation of noise attenuation measures and biological monitoring shall be required.

If habitat is occupied or if presence of the covered species is assumed, adequate noise reduction measures shall be incorporated such that construction noise levels at the MHPA boundary do not exceed 60 dB(A) $L_{eq(1)}$.

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# ATTACHMENTS

# ATTACHMENT 1

## Plant Species Observed on the North University City Fire Station Project Site

| Attachment 1<br>Plant Species Observed on the North University City Fire Station 50 Project Site | | | |
|---|---|---|---|
| Scientific Name | Common Name | Habitat | Origin |
| **LYCOPODS** | | | |
| **SELAGINELLACEAE** | **SPIKE-MOSS FAMILY** | | |
| *Selaginella cinerascens* A.A. Eaton | ashy spike-moss | DCSS, VNG | N |
| **ANGIOSPERMS: MONOCOTS** | | | |
| **AGAVACEAE** | **AGAVE FAMILY** | | |
| *Hesperoyucca [=Yucca] whipplei* (Torr.) Trel. | chaparral candle | DCSS, DCSS-D, DH | N |
| **ALLIACEAE** | **ONION FAMILY** | | |
| *Allium* sp. | onion | VNG | N |
| **POACEAE (GRAMINEAE)** | **GRASS FAMILY** | | |
| *Avena* sp. | wild oat | NNG, DCSS | I |
| *Brachypodium distachyon* (L.) P. Beauv. | purple falsebrome | NNG, DCSS, NG | I |
| *Bromus diandrus* Roth | ripgut grass | NNG, DCSS, DH | I |
| *Bromus hordeaceus* L. | soft chess | NNG, DCSS, DH | I |
| *Bromus madritensis* L. ssp. *rubens* (L.) Husn. | red brome | NNG, DCSS, DCSS-D, DH, VNG | I |
| *Cortaderia jubata* | pampas grass | SMC | I |
| *Festuca* [=*Vulpia*] *myuros* L. | rattail sixweeks grass | NNG, DCSS, DH | I |
| *Gastridium ventricosum* (Gouan) Schinz & Thell. | nit grass | VNG, DH | I |
| *Schimus barbatus* (L.) Thell. | Mediterranean schismus | VNG, DCSS, DH | I |
| *Stipa cernua* | nodding needle grass | VNG, DCSS | N |
| *Stipa miliacea* | smilo grass | NNG, ORN | I |
| *Stipa pulchra* | purple needle grass | VNG | N |
| **ANGIOSPERMS: DICOTS** | | | |
| **AIZOACEAE** | **FIG-MARIGOLD FAMILY** | | |
| *Delosperma* sp. | iceplant | ORN | I |
| *Mesembryanthemum nodiflorum* L. | slender-leaved iceplant | ORN | I |
| **ANACARDIACEAE** | **SUMAC OR CASHEW FAMILY** | | |
| *Cupaniopsis anacardioides* (A. Rich) Radlk. | carrotwood | ORN | I |
| *Malosma laurina* Nutt. ex Abrams | laurel sumac | DCSS, SMC | N |
| *Rhus integrifolia* (Nutt.) Benth. & Hook. f. ex Rothr. | lemonadeberry | DCSS, SMC | N |
| *Schinus terebinthifolius* Raddi | Brazilian pepper tree | ORN | I |

| Attachment 1<br>Plant Species Observed on the North University City Fire Station 50 Project Site | | | |
|---|---|---|---|
| Scientific Name | Common Name | Habitat | Origin |
| **APIACEAE (UMBELLIFERAE)** | **CARROT FAMILY** | | |
| *Daucus pusilus* | rattlesnake weed | VNG, DCSS | N |
| *Foeniculum vulgare* Mill. | fennel | DH, NNG | I |
| **ASTERACEAE** | **SUNFLOWER FAMILY** | | |
| *Artemisia californica* Less. | California sagebrush | DCSS, DCSS-D, VNG, NNG | N |
| *Baccharis pilularis* DC. | coyote brush | DCSS, VNG, NNG | N |
| *Baccharis salicifolia* (Ruiz & Pav.) Pers. | mule fat, seep-willow | DCSS | N |
| *Baccharis sarothroides* A. Gray | broom baccharis | DCSS, DCSS-D, VNG, NNG | N |
| *Bahiopsis* [=*Viguiera*] *laciniata* (A. Gray) E.E. Schilling & Panero | San Diego viguiera | DCSS, DCSS-D | N |
| *Carduus pycnocephalus* | Italian thistle | DH | I |
| *Centaurea melitensis* L. | tocalote, Maltese star-thistle | DH, NNG | I |
| *Deinandra* [=*Hemizonia*] *fasciculata* (DC.) Greene | golden tarplant | VNG, DCSS, NNG | N |
| *Dittrichia graveolens* | stinkwort | NNG | I |
| *Encelia californica* Nutt. | common encelia | DCSS | N |
| *Glebionis coronaria* (L.) Spach [=*Chrysanthemum coronarium*] | garland, crown daisy | DH, DCSS | I |
| *Hedypnois cretica* (L.) Dum. Cours. | crete weed | NNG, DH | I |
| *Helminthotheca echioides* | bristly ox-tongue | NNG, DH | I |
| *Isocoma menziesii* (Hook. & Arn.) G.L. Nesom | coastal goldenbush | DCSS, DCSS-D | N |
| *Laennecia coulteri* | Coulter's horseweed | VNG, NNG | N |
| *Lactuca serriola* L. | prickly lettuce | DH, NNG | I |
| *Logfia gallica* | daggerleaf cottonrose | DCSS, VNG | I |
| *Osmadenia tenella* | osmadenia | DCSS, VNG | N |
| *Pseudognaphalium biolettii* Anderb. [=*Gnaphalium bicolor*] | bicolor cudweed | DCSS | N |
| *Pseudognaphalium californicum* | California everlasting, green everlasting | DCSS | N |
| *Sonchus asper* (L.) Hill ssp. *asper* | prickly sow thistle | DH | I |
| **BRASSICACEAE (CRUCIFERAE)** | **MUSTARD FAMILY** | | |
| *Brassica nigra* | black mustard | DH | I |
| *Hirschfeldia incana* (L.) Lagr.-Fossat | short-pod mustard | DH, NNG, DCSS-D | I |
| *Raphanus sativus* L. | radish | DH, NNG | I |
| *Sisymbrium irio* L. | London rocket | DH, NNG | I |

| Attachment 1<br>Plant Species Observed on the North University City Fire Station 50 Project Site | | | |
|---|---|---|---|
| Scientific Name | Common Name | Habitat | Origin |
| **CACTACEAE** | **CACTUS FAMILY** | | |
| *Opuntia littoralis* (Engelm.) Cockerell. | coast prickly-pear, shore cactus | DCSS | N |
| **CAPRIFOLIACEAE** | **HONEYSUCKLE FAMILY** | | |
| *Lonicera subspicata* Hook. & Arn. | southern honeysuckle | DCSS | N |
| **CARYOPHYLLACEAE** | **PINK FAMILY** | | |
| *Silene gallica* L. | small-flower catchfly, windmill pink | NNG, DCSS, VNG | I |
| **CHENOPODIACEAE** | **GOOSEFOOT FAMILY** | | |
| *Atriplex lentiformis* | big saltbush | DCSS-D | N |
| *Atriplex semibaccata* R. Br. | Australian saltbush | DCSS-D, NNG | I |
| *Chenopodium murale* | nettle-leaf goosefoot | DH, NNG | I |
| *Salsola tragus* L. | Russian thistle, tumbleweed | NNG, DCSS | I |
| **CLEOMACEAE** | **SPIDERFLOWER FAMILY** | | |
| *Peritoma* [=*Isomeris*] *arborea* (Nutt.) H. H. Iltis | bladderpod | DCSS | N |
| **CONVOLVULACEAE** | **MORNING-GLORY FAMILY** | | |
| *Calystegia macrostegia* (Greene) Brummitt | morning-glory | DCSS, VNG | N |
| **CRASSULACEAE** | **STONECROP FAMILY** | | |
| *Crassula connata* | pygmy-weed | VNG | I |
| **CUCURBITACEAE** | **GOURD FAMILY** | | |
| *Marah macrocarpa* (Greene) Greene | wild cucumber, chilicothe | DCSS | N |
| **EUPHORBIACEAE** | **SPURGE FAMILY** | | |
| *Croton setiger* | turkey-mullein, dove weed | NNG, DCSS | N |
| **FABACEAE (LEGUMINOSAE)** | **LEGUME FAMILY** | | |
| *Acacia cyclops* A. Cunn. ex G. Don | western coastal wattle | ORN | I |
| *Acacia redolens* | vanilla-scented wattle | ORN, DH | I |
| *Acmispon glaber* (Vogel) Brouillet [=*Lotus scoparius*] | deerweed | DCSS, NNG, VNG | N |
| *Melilotus indica* | sweetclover | DCSS, NNG | I |
| **GERANIACEAE** | **GERANIUM FAMILY** | | |
| *Erodium botrys* | long-beak filaree | DCSS, NNG, VNG | I |
| **LAMIACEAE** | **MINT FAMILY** | | |
| *Marrubium vulgare* L. | horehound | DCSS | I |
| *Salvia mellifera* Greene | black sage | DCSS | N |

| Attachment 1<br>Plant Species Observed on the North University City Fire Station 50 Project Site | | | |
|---|---|---|---|
| Scientific Name | Common Name | Habitat | Origin |
| **MALVACEAE** | **MALLOW FAMILY** | | |
| *Malacothamnus fasciculatus* (Nutt. ex Torr. & A. Gray) Greene | chaparral mallow | DCSS | N |
| *Malva parviflora* L. | cheeseweed, little mallow | NNG | I |
| **MYRTACEAE** | **MYRTLE FAMILY** | | |
| *Lophostemon confertus* | Brisbane box tree | ORN | I |
| **MYRSINACEAE** | **MYRSINE FAMILY** | | |
| *Anagallis arvensis* L. | scarlet pimpernel, poor-man's weatherglass | VNG, DCSS | I |
| **PHRYMACEAE [=SCROPHULARIACEAE]** | **HOPSEED FAMILY** | | |
| *Mimulus aurantiacus* Curtis | bush monkey-flower | DCSS | N |
| **PLANTAGINACEAE** | **PLANTAIN FAMILY** | | |
| *Nuttallanthus texanus* (Scheele) D.A. Sutton [= *Linaria canadensis*] | blue toadflax | VNG | N |
| **POLEMONIACEAE** | **PHLOX FAMILY** | | |
| *Navarretia hamata* Greene | hooked navarretia | VNG | N |
| **POLYGONACEAE** | **BUCKWHEAT FAMILY** | | |
| *Eriogonum fasciculatum* Benth. var. *fasciculatum* | coast California buckwheat | DCSS, DCSS-D, NNG | N |
| *Rumex crispus* L. | curly dock | NNG | I |
| **ROSACEAE** | **ROSE FAMILY** | | |
| *Heteromeles arbutifolia* (Lindl.) M. Roem. | toyon, Christmas berry | DCSS, SMC | N |
| **SALICACEAE** | **WILLOW FAMILY** | | |
| *Salix lasiolepis* | arroyo willow | SWS | N |
| **SOLANACEAE** | **NIGHTSHADE FAMILY** | | |
| *Solanum americanum* | white nightshade | NNG | N |
| **URTICACEAE** | **NETTLE FAMILY** | | |
| *Urtica urens L.* | dwarf nettle | NNG | I |

**Attachment 1**
**Plant Species Observed on the North University City Fire Station 50 Project Site**

Notes: Scientific and common names were primarily derived from the Jepson Online Interchange (University of California 2013). In instances where common names were not provided in this resource, common names were obtained from Rebman and Simpson (2006). Additional common names were obtained from the USDA maintained database (USDA 2013) or the Sunset Western Garden Book (Brenzel 2001) for ornamental/horticultural plants. Common names denoted with * are from County of San Diego 2010.

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HABITATS

| | | |
|---|---|---|
| DCSS | = | Diegan coastal sage scrub |
| DCSS-D | = | Diegan coastal sage scrub, disturbed |
| DH | = | Disturbed land |
| NNG | = | Non-native grassland |
| VNG | = | Valley needlegrass grassland |
| ORN | = | Ornamental plantings |
| SMC | = | Southern mixed chaparral |
| SWS | = | Southern willow scrub |

ORIGIN

N = Native to locality
I = Introduced species from outside locality

# ATTACHMENT 2

## Wildlife Species Observed/Detected on the North University City Fire Station Project Site

| Attachment 2<br>Wildlife Species Observed/Detected on the North University City Fire Station 50 Project Site | | | | |
|---|---|---|---|---|
| Scientific Name | Common Name | Occupied Habitat | On-site Abundance/ Seasonality (Birds Only) | Evidence of Occurrence |
| **INVERTEBRATES** (Nomenclature from Milne and Milne 1980; Mattoni 1990; and Opler and Wright 1999) | | | | |
| **AGELENIDAE** | **FUNNEL WEAVERS** | | | |
| *Agelenidae* sp. | Grass spider | DCSS, DH, VNG | | O |
| **CTENIZIDAE** | **TRAPDOOR SPIDERS** | | | |
| *Aphonopelma chalcodes* | California trapdoor spider | DCSS, VNG | | B |
| **APIDAE** | **BEES** | | | |
| *Apis mellifera* | honeybee (I) | DCSS, VNG, DH | | O |
| **HESPERIIDAE** | **SKIPPERS** | | | |
| *Pyrgus communis* | common checkered skipper | VNG | | O |
| **FORMICIDAE** | **ANTS** | | | |
| *Linepithema humile* | Argentine ant | DCSS, DCSS-D, UDL | | O |
| **PIERIDAE** | **WHITES & SULPHURS** | | | |
| *Pieris rapae* | cabbage white | DH | | O |
| **LYCAENIDAE** | **BLUES, COPPERS, & HAIRSTREAKS** | | | |
| *Brephidium exile* | western pygmy blue | DCSS | | O |
| *Icaricia acmon acmon* | Acmon blue | DCSS, DCSS-D | | O |
| *Euphilotes bernardino* | Bernardino dotted-blue | DCSS | | O |
| **RIODINIDAE** | **METALMARKS** | | | |
| *Apodemia virgulti* | Behr's metalmark | DCSS | | O |
| **TENEBRIONIDAE** | **BARK, DARKLING AND BLISTER BEETLES** | | | |
| *Eleodes* sp. | stink beetle | DH, VNG | | O |
| **REPTILES** (Nomenclature from Crother 2008) | | | | |
| **PHRYNOSOMATIDAE** | **SPINY LIZARDS** | | | |
| *Sceloporus occidentalis* | western fence lizard | DCSS | | O |
| *Uta stansburiana* | common side-blotched lizard | DCSS | | O |
| **TEIIDAE** | **WHIPTAIL LIZARDS** | | | |
| *Aspidoscelis hyperythra beldingi* | Belding's orange-throated whiptail | DCSS, VNG | | O |

| Attachment 2<br>Wildlife Species Observed/Detected on the North University City Fire Station 50 Project Site | | | | |
|---|---|---|---|---|
| Scientific Name | Common Name | Occupied Habitat | On-site Abundance/ Seasonality (Birds Only) | Evidence of Occurrence |
| **CROTALIDAE** | **RATTLESNAKES** | | | |
| *Crotalus* sp. | rattlesnake | DCSS | | O |
| **BIRDS** (Nomenclature from American Ornithologists' Union 1998 and Unitt 2004) | | | | |
| **ANATIDAE** | **DUCKS, GEESE, & SWANS** | | | |
| *Anas platyrhynchos platyrhynchos* | mallard | FO | C / Y | O, V |
| **ACCIPITRIDAE** | **HAWKS, KITES, & EAGLES** | | | |
| *Buteo jamaicensis* | red-tailed hawk | FO, UDL | F / Y | O |
| **COLUMBIDAE** | **PIGEONS & DOVES** | | | |
| *Columba livia* | rock dove (I) | UDL | C / Y | O |
| *Zenaida macroura marginella* | mourning dove | UDL, DCSS, FO | C / Y | O, V |
| **TROCHILIDAE** | **HUMMINGBIRDS** | | | |
| *Calypte anna* | Anna's hummingbird | UDL, DCSS | C / Y | O, V |
| **TYRANNIDAE** | **TYRANT FLYCATCHERS** | | | |
| *Empidonax difficilis* | Pacific slope flycatcher | DCSS | F / S | O, V |
| *Myiarchus cinerascens cinerascens* | ash-throated flycatcher | DCSS | F / S | V |
| *Sayornis nigricans semiatra* | black phoebe | UDL | C / Y | O, V |
| *Sayornis saya* | Say's phoebe | DCSS, UDL | F / W | O |
| *Tyrannus vociferans vociferans* | Cassin's kingbird | UDL | C / Y | O, V |
| **CORVIDAE** | **CROWS, JAYS, & MAGPIES** | | | |
| *Aphelocoma californica* | western scrub-jay | DCSS, FO | C / Y | O, V |
| *Corvus brachyrhynchos hesperis* | American crow | UDL | C / Y | O, V |
| *Corvus corax clarionensis* | common raven | FO | C / Y | O, V |
| **HIRUNDINIDAE** | **SWALLOWS** | | | |
| *Petrochelidon pyrrhonota tachina* | cliff swallow | UDL, FO | F / S | O, V |
| **AEGITHALIDAE** | **BUSHTIT** | | | |
| *Psaltriparus minimus minimus* | bushtit | DCSS, DCSS-D UDL | C / Y | O, V |
| **TROGLODYTIDAE** | **WRENS** | | | |
| *Troglodytes aedon parkmanii* | house wren | DCSS, DCSS-D | C / Y | O, V |

| Attachment 2<br>Wildlife Species Observed/Detected on the North University City Fire Station 50 Project Site | | | | |
|---|---|---|---|---|
| Scientific Name | Common Name | Occupied Habitat | On-site Abundance/ Seasonality (Birds Only) | Evidence of Occurrence |
| **TURDIDAE** | **THRUSHES** | | | |
| *Sialia mexicana occidentalis* | western bluebird | *UDL | U / W | O |
| **TIMALIIDAE** | **BABBLERS** | | | |
| *Chamaea fasciata henshawi* | wrentit | DCSS, UDL | C / Y | O, V |
| **MIMIDAE** | **MOCKINGBIRDS & THRASHERS** | | | |
| *Mimus polyglottos polyglottos* | northern mockingbird | UDL, DCSS | C / Y | O, V |
| *Toxostoma redivivum redivivum* | California thrasher | DCSS | F / Y | O, V |
| **STURNIDAE** | **STARLINGS & MYNAS** | | | |
| *Sturnus vulgaris* | European starling (I) | UDL | C / Y | O, V |
| **PARULIDAE** | **WOOD WARBLERS** | | | |
| *Vermivora celata* | orange-crowned warbler | UDL | C / Y | O, V |
| **EMBERIZIDAE** | **EMBERIZIDS** | | | |
| *Melospiza melodia* | song sparrow | DCSS, UDL | C / Y | V |
| *Pipilo crissalis* | California towhee | DCSS, UDL, VNG | C / Y | O, V |
| *Pipilo maculatus* | spotted towhee | DCSS, UDL | C / Y | O, V |
| **ICTERIDAE** | **BLACKBIRDS & NEW WORLD ORIOLES** | | | |
| *Icterus cucullatus nelsoni* | hooded oriole | UDL, DCSS | C / S | O, V |
| **FRINGILLIDAE** | **FINCHES** | | | |
| *Carduelis psaltria hesperophilus* | lesser goldfinch | DCSS, UDL | C / Y | O, V |
| *Carpodacus mexicanus frontalis* | house finch | UDL | C / Y | O, V |
| **MAMMALS** (Nomenclature from Baker et al. 2003) | | | | |
| **LEPORIDAE** | **RABBITS & HARES** | | | |
| *Sylvilagus audubonii* | desert cottontail | UDL, DCSS | | O |
| **SCIURIDAE** | **SQUIRRELS & CHIPMUNKS** | | | |
| *Spermophilus beecheyi* | California ground squirrel | UDL, DCSS | | O, V |
| **GEOMYIDAE** | **POCKET GOPHERS** | | | |
| *Thomomys bottae* | Botta's pocket gopher | DH, DCSS | | B |
| **MURIDAE** | **OLD WORLD MICE & RATS** | | | |
| *Neotoma* sp. | woodrat | DCSS* | | D |

| Attachment 2<br>Wildlife Species Observed/Detected on the North University City Fire Station 50 Project Site | | | | |
|---|---|---|---|---|
| Scientific Name | Common Name | Occupied Habitat | On-site Abundance/ Seasonality (Birds Only) | Evidence of Occurrence |
| **CANIDAE** | **CANIDS** | | | |
| *Canis latrans* | coyote | DCSS | | T, S |
| **MEPHITIDAE** | **SKUNKS** | | | |
| *Mephitis mephitis* | striped skunk | DCSS | | T |

(I) = Introduced species

* = Observed off-site (more than 100 feet from project site)

**HABITATS**

DCSS = Diegan Coastal Sage Scrub
DH = Disturbed Habitat
FO = Flying overhead

NNG = Non-native Grassland
SWS = Southern Willow Scrub
UDL = Urban/Developed (Landscaped)
VNG = Valley Needlegrass Grassland

**ABUNDANCE** (based on Garrett and Dunn 1981)

C = Common to abundant; almost always encountered in proper habitat, usually in moderate to large numbers
F = Fairly common; usually encountered in proper habitat, generally not in large numbers
U = Uncommon; occurs in small numbers or only locally

**EVIDENCE OF OCCURRENCE**

B = Burrow
D = Den site
O = Observed
S = Scat
T = Track
V = Vocalization

**SEASONALITY** (birds only)

S = Spring/summer resident; probable breeder on-site or in vicinity
W = Winter visitor; does not breed locally
Y = Year-round resident; probable breeder on-site or in vicinity

# ATTACHMENT 3

## Sensitive Plant Species Observed or with Potential for Occurrence on the North University City Fire Station Project Site

| Attachment 3<br>Sensitive Plant Species Observed or with the Potential for Occurrence on the<br>North University City Fire Station 50 Project Site | | | | | |
|---|---|---|---|---|---|
| Species | State/Federal Status | CRPR Rank | City of San Diego | Habitat/Blooming Period | Comments |
| **LYCOPODS** | | | | | |
| **SELAGINELLACEAE SPIKE-MOSS FAMILY** | | | | | |
| *Selaginella cinerascens*<br>ashy spike-moss | –/– | 4.1 | – | Perennial rhizomatous herb; chaparral, coastal scrub; elevation 65–2,100 feet. | **Observed** a population of approximately 50 individuals in the southwest portion of the project site within non-native grassland. |
| **ANGIOSPERMS: DICOTS** | | | | | |
| **APIACEAE CARROT FAMILY** | | | | | |
| *Eryngium aristulatum* var. *parishii*<br>San Diego button-celery | CE/FE | 1B.1 | NE, MSCP | Biennial/perennial herb; vernal pools, mesic areas of coastal sage scrub and grasslands, blooms April–June; elevation less than 2,000 feet. Known from San Diego and Riverside counties. Additional populations occur in Baja California, Mexico. | No potential to occur in the project site. No suitable vernal pool habitat present. Not observed during rare plant surveys, which were conducted during this species blooming period. . |
| **ASTERACEAE SUNFLOWER FAMILY** | | | | | |
| *Ambrosia pumila*<br>San Diego ambrosia | –/FE | 1B.1 | NE, MSCP | Perennial herb (rhizomatous); chaparral, coastal sage scrub, valley and foothill grasslands, creek beds, vernal pools, often in disturbed areas; blooms May–September; elevation less than 1,400 feet. Many occurrences extirpated in San Diego County. | No potential to occur in the project site. This is a conspicuous perennial and would have been detected during rare plant surveys if present. No occurrences recorded within 10 miles of project area (State of California 2015e). |
| *Artemisia palmeri*<br>San Diego sagewort | –/– | 4.2 | – | Perennial deciduous shrub; coastal sage scrub, chaparral, riparian, mesic, sandy areas; blooms May–September; elevation less than 3,000 feet. | Not expected to occur in the project site. This is a conspicuous perennial and would have been detected during rare plant surveys if present. No suitable mesic or riparian areas present within the project site. |

| Attachment 3<br>Sensitive Plant Species Observed or with the Potential for Occurrence on the<br>North University City Fire Station 50 Project Site | | | | | |
|---|---|---|---|---|---|
| Species | State/Federal Status | CRPR Rank | City of San Diego | Habitat/Blooming Period | Comments |
| *Baccharis vanessae*<br>Encinitas baccharis [=Encinitas coyote brush] | CE/FT | 1B.1 | NE, MSCP | Perennial deciduous shrub; chaparral; maritime; sandstone; blooms August–November; elevation less than 2,500 feet. San Diego County endemic. Known from fewer than 20 occurrences. Extirpated from Encinitas area. | Not expected to occur in the project site, which lies outside the range of this species. |
| *Bahiopsis* [=*Viguiera*] *laciniata*<br>San Diego viguiera [=San Diego County viguiera] | –/– | 4.2 | – | Perennial shrub; chaparral, coastal sage scrub; blooms February–June; elevation less than 2,500 feet. | Nine 9 individuals were **observed** near the eastern edge of the survey area; however, none were observed within the project site. |
| *Deinandra* [=*Hemizonia*] *conjugens*<br>Otay tarplant | CE/FT | 1B.1 | NE, MSCP | Annual; blooms May–June, elevation less than 1,000 feet. | No potential to occur in the project site. Project site lies outside this species' range. |
| *Isocoma menziesii* var. *decumbens*<br>decumbent goldenbush | –/– | 1B.2 | – | Perennial shrub; chaparral, coastal sage scrub; sandy soils, often in disturbed areas; blooms April–November; elevation less than 500 feet. | Not expected to occur. This is a moderately-sized perennial and would likely have been detected during rare plant surveys if present. |
| *Microseris douglasii* ssp. *platycarpha*<br>small-flowered microseris | –/– | 4.2 | – | Annual herb; Clay lenses on perennial grasslands, vernal pools, openings in coastal sage scrub; blooms March–May; elevation 50–3,500 feet. | Low potential to occur. This species was not observed during rare plant surveys, which were conducted at appropriate time of the season. Grassland habitat on-site is patchy and interspersed with disturbed areas. No vernal pools present. |

| Attachment 3<br>Sensitive Plant Species Observed or with the Potential for Occurrence on the<br>North University City Fire Station 50 Project Site | | | | | |
|---|---|---|---|---|---|
| Species | State/Federal Status | CRPR Rank | City of San Diego | Habitat/Blooming Period | Comments |
| *Pentachaeta aurea* ssp. *aurea*<br>golden-ray pentachaeta | –/– | 4.2 | – | Annual herb; cismontane woodland, coastal sage scrub, lower montane coniferous forest, perennial grasslands; blooms March–July; elevation 260–6,100 feet. | Low potential to occur. This species was not observed during rare plant surveys, which were conducted at appropriate time of the season. Coastal sage scrub and grasslands on-site are patchy and interspersed with disturbed areas, making them only marginal quality for this species. |
| **BORAGINACEAE BORAGE FAMILY** | | | | | |
| *Harpagonella palmeri*<br>Palmer's grapplinghook | –/– | 4.2 | – | Annual herb; chaparral, coastal sage scrub, valley and foothill grasslands; clay soils; blooms March–May; elevation less than 3,200 feet. Inconspicuous and easily overlooked. | Low potential to occur. This species was not observed during rare plant surveys, which were conducted at appropriate time of the season. |
| **BRASSICACEAE MUSTARD FAMILY** | | | | | |
| *Lepidium virginicum* var. *robinsonii*<br>Robinson's peppergrass | –/– | 4.3 | – | Annual herb; coastal sage scrub, chaparral; blooms January–July; elevation less than 2,900 feet. | Low potential to occur. This species was not observed during rare plant surveys, which were conducted at appropriate time of the season. |
| **CACTACEAE CACTUS FAMILY** | | | | | |
| *Cylindropuntia californica* var. *californica* [=*Opuntia parryi* var. *serpentina*]<br>snake cholla | –/– | 1B.1 | NE, MSCP | Perennial stem succulent; chaparral, coastal sage scrub; blooms April–May; elevation 100–500 feet. | Not expected to occur. This is a conspicuous perennial and would likely have been detected during rare plant surveys if present. |
| *Ferocactus viridescens*<br>San Diego barrel cactus | –/– | 2B.1 | MSCP | Perennial stem succulent; chaparral, coastal sage scrub, valley and foothill grasslands, vernal pools; blooms May–June; elevation less than 1,500 feet. | Not expected to occur. This is a conspicuous perennial and would likely have been detected during rare plant surveys if present. |

| Attachment 3<br>Sensitive Plant Species Observed or with the Potential for Occurrence on the<br>North University City Fire Station 50 Project Site | | | | | |
|---|---|---|---|---|---|
| Species | State/Federal Status | CRPR Rank | City of San Diego | Habitat/Blooming Period | Comments |
| **CHENOPODIACEAE GOOSEFOOT FAMILY** | | | | | |
| *Aphanisma blitoides* aphanisma | –/– | 1B.2 | NE, MSCP | Annual herb; coastal bluff scrub, coastal sage scrub; sandy soils; blooms March–June; elevation less than 1,000 feet. | Not expected to occur. Project site lies outside this species' range. Appropriate sandy soil not present. |
| **CRASSULACEAE STONECROP FAMILY** | | | | | |
| *Dudleya blochmaniae* ssp. *blochmaniae* Blochman's dudleya | –/– | 1B.1 | – | Perennial herb; coastal sage scrub, coastal bluff scrub, chaparral, grasslands; blooms April–June; elevation less than 1,500 feet. | Not expected to occur. Project site does not support coastal bluff scrub, and is subject to frequent human disturbance, reducing its quality for this species.. |
| *Dudleya variegata* variegated dudleya | –/– | 1B.2 | NE, MSCP | Perennial herb; openings in chaparral, coastal sage scrub, grasslands, vernal pools; blooms May–June; elevation less than 1,900 feet. | Low potential to occur. This species was not observed during rare plant surveys, which were conducted at appropriate time of the season. |
| **ERICACEAE HEATH FAMILY** | | | | | |
| *Comarostaphylis diversifolia* ssp. *diversifolia* summer holly | –/– | 1B.2 | – | Perennial evergreen shrub; chaparral; blooms April–June; elevation 100–2,600 feet. | Not expected to occur. This is a very conspicuous perennial and would have been detected during rare plant surveys if present. |
| **FABACEAE LEGUME FAMILY** | | | | | |
| *Astragalus tener* var. *titi* coastal dunes milkvetch | CE/FE | 1B.1 | NE, MSCP | Annual herb; coastal bluff scrub, coastal dunes, sandy soils, mesic coastal prairie; blooms March–May; elevation less than 200 feet. California endemic. Known from fewer than 10 occurrences in San Diego (presumed extirpated), Los Angeles (presumed extirpated), and Monterey counties. | Not expected to occur. No suitable sandy coastal scrub or dune habitat occurs on the project site. |

| Attachment 3<br>Sensitive Plant Species Observed or with the Potential for Occurrence on the<br>North University City Fire Station 50 Project Site | | | | | |
|---|---|---|---|---|---|
| Species | State/Federal Status | CRPR Rank | City of San Diego | Habitat/Blooming Period | Comments |
| **FAGACEAE** **OAK FAMILY** | | | | | |
| *Quercus dumosa*<br>Nuttall's scrub oak | –/– | 1B.1 | – | Perennial evergreen shrub; closed-cone coniferous forest, coastal chaparral, coastal sage scrub; sandy and clay loam soils; blooms February–March; elevation less than 1,300 feet. | Not expected to occur. This is a conspicuous perennial and would likely have been detected during rare plant surveys if present. |
| **LAMIACEAE** **MINT FAMILY** | | | | | |
| *Acanthomintha ilicifolia*<br>San Diego thornmint | CE/FT | 1B.1 | NE, MSCP | Annual herb; chaparral, coastal sage scrub, and grasslands; friable or broken clay soils; blooms April–June; elevation less than 3,200 feet. | Low potential to occur. This species was not observed during rare plant surveys, which were conducted at the appropriate time of the season. Suitable cracked clay soils not present on-site. |
| *Pogogyne abramsii*<br>San Diego mesa mint | CE/FE | 1B.1 | NE, MSCP | Annual herb; vernal pools; blooms April–July; elevation 300–700 feet. San Diego County endemic. | Not expected to occur. Although vernal pools are present in the project vicinity, none occur on the project site. |
| *Pogogyne nudiuscula*<br>Otay mesa mint | CE/FE | 1B.1 | NE, MSCP | Annual herb; vernal pools; blooms May–July; elevation 300–820 feet. In California, known from approximately 10 occurrences in Otay Mesa in San Diego County. Additional populations occur in Baja California, Mexico. | Not expected to occur. Although vernal pools are present in the project vicinity, none occur on the project site. The project site lies outside this species' range. |
| **MONTIACEAE** **MONTIA FAMILY** | | | | | |
| *Calandrinia breweri*<br>Brewer's calandrinia | –/– | 4.2 | – | Annual herb; chaparral and coastal sage scrub; sandy or loamy soils, disturbed sites and burns; blooms March–June; elevation less than 4,000 feet. | Low potential to occur. No suitable open sandy soils present within the project site. |

| Attachment 3<br>Sensitive Plant Species Observed or with the Potential for Occurrence on the<br>North University City Fire Station 50 Project Site | | | | | |
|---|---|---|---|---|---|
| Species | State/Federal Status | CRPR Rank | City of San Diego | Habitat/Blooming Period | Comments |
| **OROBANCHACEAE BROOM-RAPE FAMILY** | | | | | |
| *Dicranostegia orcuttiana* [=*Cordylanthus orcuttianus*] Orcutt's bird's-beak | –/– | 2B.1 | MSCP | Annual herb (hemiparasitic); coastal sage scrub; blooms March–September; elevation less than 1,200 feet. | Not expected to occur. No occurrences recorded within 20 miles of project site. This species was not observed during rare plant surveys, which were conducted at the appropriate time of the season. |
| **POLEMONIACEAE PHLOX FAMILY** | | | | | |
| *Navarretia fossalis* spreading navarretia [=prostrate navarretia] | –/FT | 1B.1 | NE, MSCP | Annual herb; vernal pools, marshes and swamps, chenopod scrub; blooms April–June; elevation 100–4,300 feet. | Not expected to occur. Critical habitat for this species is present to the east of the project site, but no vernal pools are present on the project site. This species was not detected during rare plant surveys, which were conducted during this species' blooming period. |
| **RHAMNACEAE BUCKTHORN FAMILY** | | | | | |
| *Ceanothus verrucosus* wart-stemmed ceanothus | –/– | 2B.2 | MSCP | Perennial evergreen shrub; chaparral; blooms December–April; elevation less than 1,300 feet. | Not expected to occur. This is a large, conspicuous shrub that would have been detected if present on-site. This species is generally associated with southern maritime chaparral, which does not occur on the site. |
| **ANGIOSPERMS: MONOCOTS** | | | | | |
| **AGAVACEAE AGAVE FAMILY** | | | | | |
| *Agave shawii* var. *shawii* Shaw's agave | –/– | 2B.1 | NE, MSCP | Perennial leaf succulent; coastal bluff scrub, coastal sage scrub, maritime succulent scrub; blooms September–May; elevation less than 400 feet. | Not expected to occur. Project site does not support suitable habitat. This is a conspicuous plant that would likely have been detected if present. |

| Attachment 3<br>Sensitive Plant Species Observed or with the Potential for Occurrence on the<br>North University City Fire Station 50 Project Site | | | | | |
|---|---|---|---|---|---|
| Species | State/Federal Status | CRPR Rank | City of San Diego | Habitat/Blooming Period | Comments |
| **ORCHIDACEAE ORCHID FAMILY** | | | | | |
| *Piperia cooperi*<br>chaparral rein-orchid | –/– | 4.2 | – | Perennial herb; chaparral, cismontane woodland, perennial grassland; blooms March–June; elevation less than 5,200 feet. | Low potential to occur. Although valley needlegrass grassland, a perennial grassland, does occur on-site, this area was inspected thoroughly during rare plant surveys, which were conducted at the appropriate time of the season for this species. |
| **POACEAE GRASS FAMILY** | | | | | |
| *Orcuttia californica*<br>California Orcutt grass | CE/FE | 1B.1 | NE, MSCP | Annual herb; vernal pools; blooms April–August; elevation 50–2,200 feet. | Not expected to occur. Although vernal pools are present in the vicinity, none occur on the project site. Suitable habitat is not present. |
| **THEMIDACEAE BRODIAEA FAMILY** | | | | | |
| *Bloomeria* [=*Muilla*] *clevelandii*<br>San Diego goldenstar | –/– | 1B.1 | MSCP | Perennial herb (bulbiferous); chaparral, coastal sage scrub, valley and foothill grassland, vernal pools; clay soils; blooms May; elevation 170–1,500 feet. | Low potential to occur. This annual plant species is conspicuous and would have been detected within the native and non-native grasslands if present.. |
| *Brodiaea orcuttii*<br>Orcutt's brodiaea | –/– | 1B.1 | MSCP | Perennial herb (bulbiferous); closed cone coniferous forest, chaparral, meadows and seeps, valley and foothill grassland, vernal pools; mesic, clay soil; blooms May–July; elevation less than 5,600 feet. | Low potential to occur. The grassland habitat on-site is largely too disturbed for this species. Additionally, this species was not detected during rare plant surveys, which were conducted during this species' blooming period, |

**FEDERAL CANDIDATES AND LISTED PLANTS**
FE = Federally listed endangered
FT = Federally listed threatened
FC = Federal candidate for listing as endangered or threatened

**STATE LISTED PLANTS**
CE = State listed endangered
CR = State listed rare
CT = State listed threatened

**Attachment 3**
**Sensitive Plant Species Observed or with the Potential for Occurrence on the North University City Fire Station 50 Project Site**

**CALIFORNIA NATIVE PLANT SOCIETY RARE PLANT RANKING**

1A = Species presumed extinct.
1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.
2A = Plants presumed extirpated in California, but more common elsewhere.
2B = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.
3 = Species for which more information is needed. Distribution, endangerment, and/or taxonomic information is needed.
4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.
.1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat).
.2 = Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat).
.3 = Species not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known).
CBR = Considered but rejected

**CITY OF SAN DIEGO**

NE = Narrow endemic
MSCP = Multiple Species Conservation Program covered species

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# ATTACHMENT 4

## Sensitive Wildlife Species Occurring or with the Potential to Occur on the North University City Fire Station Project Site

| Attachment 4<br>Sensitive Wildlife Species Occurring or with the Potential to Occur<br>on the North University City Fire Station 50 Project Site | | | |
|---|---|---|---|
| Species | Status | Habitat | Occurrence/Comments |
| **INVERTEBRATES** (Nomenclature from Eriksen and Belk 1999) | | | |
| **ANOSTRACA** **FAIRY SHRIMP** | | | |
| San Diego fairy shrimp<br>*Branchinecta sandiegonensis* | FE, MSCP, * | Vernal pools. | This species is not expected to occur within the project site due to a lack of vernal pools. |
| **AMPHIBIANS** (Nomenclature from Crother 2001 and Crother et al. 2003) | | | |
| **PELOBATIDAE** **SPADEFOOT TOADS** | | | |
| Western spadefoot<br>*Spea hammondii* | CSC | Vernal pools, floodplains, and alkali flats within areas of open vegetation. | This species has low potential to occur on the project site. No suitable vernal pools or other wet ponded areas occur on site. Coastal sage scrub on site is only marginally suitable as upland, non-breeding habitat for this species, but it is small, patchy, and interspersed with disturbed areas. |
| **REPTILES** (Nomenclature from Crother 2008) | | | |
| **IGUANIDAE** **IGUANID LIZARDS** | | | |
| Coast horned lizard<br>*Phrynosoma coronatum* (San Diego/*blainvillii* pop.) | CSC, MSCP, * | Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants for forage. | This species has moderate potential to occur within the Diegan coastal sage scrub and adjacent areas within the project site due to the presence of moderately suitable habitat. |
| **SCINCIDAE** **SKINKS** | | | |
| Coronado skink<br>*Eumeces skiltonianus interparietalis* | CSC | Grasslands, open woodlands and forest, broken chaparral. Rocky habitats near streams. | This species has low potential to occur on site. This species may occur along Rose Creek 750 feet to the south, but, while there is an ephemeral drainage off site to the east, no suitably wet areas occur on site. The habitat on site is patchy, interspersed with disturbed areas, and subject to frequent human disturbance. |

| Attachment 4<br>Sensitive Wildlife Species Occurring or with the Potential to Occur<br>on the North University City Fire Station 50 Project Site | | | |
|---|---|---|---|
| Species | Status | Habitat | Occurrence/Comments |
| **TEIIDAE WHIPTAIL LIZARDS** | | | |
| Belding's orange-throated whiptail<br>*Aspidoscelis hyperythra beldingi* | CSC, MSCP | Chaparral, coastal sage scrub with coarse sandy soils and scattered brush. | **Observed** within the coastal sage scrub and non-native grassland within the survey area, just outside the project site. Habitat within project site substantially similar, so this species is expected to occur in project site. |
| **ANNIELLIDAE LEGLESS LIZARDS** | | | |
| Silvery legless lizard<br>*Anniella pulchra pulchra* | CSC | Herbaceous layers with loose soil in coastal scrub, chaparral, and open riparian. Prefers dunes and sandy washes near moist soil. | This species has a low potential to occur within the project site due to the lack of loose or sandy soil. |
| **COLUBRIDAE COLUBRID SNAKES** | | | |
| Coast patch-nosed snake<br>*Salvadora hexalepis virgultea* | CSC | Grasslands, chaparral, sagebrush, desert scrub. Found in sandy and rocky areas. | This species is unlikely to occur within the project due to the lack of suitable sandy soils within the coastal sage scrub or grassland habitats. |
| **CROTALIDAE RATTLESNAKES** | | | |
| Red diamond rattlesnake<br>*Crotalus ruber* | CSC | Desert scrub and riparian, coastal sage scrub, open chaparral, grassland, and agricultural fields. | There is moderate potential for this species to occur within the survey area due to the presence of suitable coastal sage scrub habitat. An unidentified rattlesnake was observed within coastal sage scrub just outside the survey area during protocol gnatcatcher surveys.. |

| Attachment 4<br>Sensitive Wildlife Species Occurring or with the Potential to Occur<br>on the North University City Fire Station 50 Project Site | | | |
|---|---|---|---|
| Species | Status | Habitat | Occurrence/Comments |
| **BIRDS** (Nomenclature from American Ornithologists' Union 2015 and Unitt 2004) | | | |
| **ACCIPITRIDAE HAWKS, KITES, & EAGLES** | | | |
| Cooper's hawk (nesting)<br>*Accipiter cooperii* | CSC, MSCP | Mature forest, open woodlands, wood edges, river groves. Parks and residential areas. Migrant and winter visitor. | There is no potential for this species to nest on site due to lack of trees. Cooper's hawks have moderate potential to nest in landscaping trees associated with the athletic fields 200 feet north of the project site and high potential to nest in larger trees associated with Rose Creek approximately 750 feet south of the project site. There is high potential for this species to forage on site. |
| Northern harrier (nesting)<br>*Circus cyaneus hudsonius* | CSC, MSCP | Coastal lowland, marshes, grassland, agricultural fields. Migrant and winter resident, rare summer resident. | This species has low potential to occur within the grassland habitat on the project site. Typically, this species requires large areas of grassland for foraging; however the site supports only small scattered patches of grassland interspersed with disturbed areas. |
| White-tailed kite (nesting)<br>*Elanus leucurus* | CFP, * | Nest in riparian woodland, oaks, sycamores. Forage in open, grassy areas. Year-round resident. | Although this species has a no potential to nest in the project site due to the lack of riparian woodland, oaks, or sycamores. There is high potential for this species to nest in the larger riparian trees associated with Rose Creek, which lies 750 feet to the south. The grasslands on site are marginal quality foraging habitat for this species due to their small size and patchiness. |

| Attachment 4<br>Sensitive Wildlife Species Occurring or with the Potential to Occur<br>on the North University City Fire Station 50 Project Site | | | |
|---|---|---|---|
| Species | Status | Habitat | Occurrence/Comments |
| **VIREONIDAE VIREOS** | | | |
| Least Bell's vireo (nesting)<br>*Vireo bellii pusillus* | FE, SE, MSCP | Willow riparian woodlands. Summer resident. | Not expected to occur within the project site due to a lack of willow riparian woodland. A patch of shrubby willows occurs southeast of the survey area, along the edge of the apartment complex, but this is a very small patch and is isolated from other riparian habitat in the region so it would provide little utility for this species. |
| **ALAUDIDAE LARKS** | | | |
| California horned lark<br>*Eremophila alpestris actia* | CSC | Sandy shores, mesas, disturbed areas, grasslands, agricultural lands, sparse creosote bush scrub. | There is low potential for this species to nest within the valley needlegrass grassland and non-native grasslands within the project site, as these grasslands are relatively small patchy. |
| **SYLVIIDAE GNATCATCHERS** | | | |
| Coastal California gnatcatcher<br>*Polioptila californica californica* | FT, CSC, MSCP | Coastal sage scrub, maritime succulent scrub. Resident. | This species has moderate potential to occur within the project site. No coastal California gnatcatchers were observed during protocol surveys; however, suitable habitat occurs within the project site. Additionally, a larger area of good quality coastal sage scrub occurs off site to the east, and any coastal California gnatcatcher in that area could use the habitat on site to augment its territory |

| Attachment 4<br>Sensitive Wildlife Species Occurring or with the Potential to Occur<br>on the North University City Fire Station 50 Project Site | | | |
|---|---|---|---|
| Species | Status | Habitat | Occurrence/Comments |
| **TURDIDAE THRUSHES** | | | |
| Western bluebird<br>*Sialia mexicana occidentalis* | MSCP | Open woodlands, farmlands, orchards. | One individual **Observed** in landscaping trees north of Nobel Drive during focused coastal California gnatcatcher surveys (RECON 2015). This species has no potential to nest in the project site, but would be most likely to nest in the larger trees along Rose Canyon, which is approximately 750 feet south of the site, south of the Lucera apartment complex. |
| **PARULIDAE WOOD WARBLERS** | | | |
| Yellow warbler (nesting)<br>*Dendroica petechia* | CSC | Breeding restricted to riparian woodland. Spring and fall migrant, localized summer resident, rare winter visitor. | Not expected to occur within the project site due to a lack of willow riparian woodland. The patch of southern willow scrub located to the southeast of the survey area is too small and isolated to provide any value to this species. |
| Yellow-breasted chat (nesting)<br>*Icteria virens auricollis* | CSC | Dense riparian woodland. Localized summer resident. | Not expected to occur within the project site due to a lack of willow riparian woodland. The patch of southern willow scrub located to the southeast of the project site is too small and isolated to provide much value to this species.. |
| **EMBERIZIDAE EMBERIZIDS** | | | |
| Southern California rufous-crowned sparrow<br>*Aimophila ruficeps canescens* | CSC, MSCP | Coastal sage scrub, chaparral, grassland. Resident. | Although this species was not detected during directed surveys, suitable habitat is present. Therefore, there is moderate potential for this species to occur within the project site. Additionally, there is a larger area of higher quality coastal sage scrub habitat off site to the east, and any individuals nesting in that area would likely augment their territories with the habitat on site. |

| Attachment 4<br>Sensitive Wildlife Species Occurring or with the Potential to Occur<br>on the North University City Fire Station 50 Project Site | | | |
|---|---|---|---|
| Species | Status | Habitat | Occurrence/Comments |
| Grasshopper sparrow (nesting)<br>*Ammodramus savannarum perpallidus* | CSC | Tall grass areas. Localized summer resident, rare in winter. | This species has low potential to occur in the project site. Although there are several patches of native and non-native grassland present, there are no substantial large swathes of grassland suitable to support this species. |
| **MAMMALS** (Nomenclature from Baker et al. 2003) | | | |
| **VESPERTILIONIDAE VESPER BATS** | | | |
| Pallid bat<br>*Antrozous pallidus* | CSC | Arid deserts and grasslands. Shallow caves, crevices, rock outcrops, buildings, tree cavities. Especially near water. Colonial. Audible echolocation signal. | There is no potential for this species to roost and moderate potential for this species to forage within the project site. No suitable roosting habitat (caves, mines, and tree cavities) occur within the project site. The bat feeds on large insect prey, for which it can forage in riparian areas or a variety of upland habitats. Potentially suitable foraging habitat and insect prey are expected to be present throughout the project site. |
| **MOLOSSIDAE FREE-TAILED BATS** | | | |
| Western mastiff bat<br>*Eumops perotis californicus* | CSC | Occurs in desert scrub, chaparral, oak woodland, ponderosa pine and mixed conifer forests, and meadows. Strongly tied to areas with cliffs and other significant rock features for roosting (Western Bat Working Group 2015) | There is no potential for this species to roost on site due to the lack of suitable cliffs or areas of large rock outcrops. Although this species may fly large distances for prey, ideal foraging habitat is present along Rose Creek, which lies off site to the south. Thus there is low potential for foraging on site. |

| Attachment 4<br>Sensitive Wildlife Species Occurring or with the Potential to Occur<br>on the North University City Fire Station 50 Project Site | | | |
|---|---|---|---|
| Species | Status | Habitat | Occurrence/Comments |
| **LEPORIDAE RABBITS & HARES** | | | |
| San Diego black-tailed jackrabbit<br>*Lepus californicus bennettii* | CSC | Open areas of scrub, grasslands, and agricultural fields. | There is moderate potential for this species to occur within the coastal sage scrub and grasslands on site. Although this species was not detected, it provides moderate quality habitat and has connectivity with larger areas of undeveloped habitat associated with the Rose Canyon Open Space. |
| **HETEROMYIDAE POCKET MICE & KANGAROO RATS** | | | |
| Northwestern San Diego pocket mouse<br>*Chaetodipus fallax fallax* | CSC | San Diego County west of mountains in sparse, disturbed coastal sage scrub or grasslands with sandy soils. | There is low potential for this species to occur. Portions of the coastal sage scrub and grassland within the survey area provides marginally suitable habitat for the species. |
| **MURIDAE OLD WORLD MICE & RATS (I)** | | | |
| San Diego desert woodrat<br>*Neotoma lepida intermedia* | CSC | Coastal sage scrub and chaparral. | There is moderate potential for this species to forage within the project site due to the presence of suitable coastal sage scrub habitat. Although a woodrat midden was observed outside the survey area, it occurred in coastal sage scrub that is more dense and mature than that found within the project impact area. This species is not expected to nest within the project site. |

| Attachment 4<br>Sensitive Wildlife Species Occurring or with the Potential to Occur<br>on the North University City Fire Station 50 Project Site | | | |
|---|---|---|---|
| Species | Status | Habitat | Occurrence/Comments |
| **CERVIDAE DEER** | | | |
| Southern mule deer<br>*Odocoileus hemionus fuliginata* | MSCP | Many habitats. | There is a low potential for this species to use the project site, as the site lies within a pocket of undeveloped land surrounded by multi-family housing, a moderately busy street, and an athletic field. |

(I) = Introduced species

STATUS CODES

Listed/Proposed

FE = Listed as endangered by the federal government
FT = Listed as threatened by the federal government
SE = Listed as endangered by the state of California

Other

CFP = California fully protected species
CSC = California Department of Fish and Game species of special concern
MSCP = Multiple Species Conservation Program covered species
* = Taxa listed with an asterisk fall into one or more of the following categories:

- Taxa considered endangered or rare under Section 15380(d) of CEQA guidelines
- Taxa that are biologically rare, very restricted in distribution, or declining throughout their range
- Population(s) in California that may be peripheral to the major portion of a taxon's range but which are threatened with extirpation within California
- Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands)

# ATTACHMENT 5

## City of San Diego Biological Impacts & Monitoring MMRP Conditions

**BIOLOGICAL IMPACTS & MONITORING MMRP CONDITIONS**:
To ensure that site development would avoid significant environmental impacts, a Mitigation, Monitoring, and Reporting Program (MMRP) is required. Compliance with the mitigation measures shall be the responsibility of the applicant. The mitigation measures are described below.

Prior to the issuance of a Notice to Proceed (NTP) or any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits the Assistant Deputy Director (ADD) environmental designee of the City's Land Development Review Division (LDR) shall verify that the following statement is shown on the grading and/or construction plans as a note under the heading *Environmental Requirements*: *"PTS 463835 – North University City Fire Station Project- SDP is subject to Mitigation, Monitoring and Reporting Program and shall conform to the mitigation conditions as contained in the Mitigated Negative Declaration/463835"*.

**Biological Resources**

Prior to the issuance of a Notice to Proceed (NTP) or any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits the ADD environmental designee of the City's LDR Division shall incorporate the following mitigation measures into the project design and include them verbatim on all appropriate construction documents.

**Prior to Permit Issuance**

A. Land Development Review (LDR) Plan Check
    1. Prior to NTP or issuance for any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, whichever is applicable, the ADD environmental designee shall verify that the requirements for the restoration plans and specifications, including mitigation of direct and cumulative impacts to 0.12 acre of valley needlegrass grassland with restoration of 0.367 acre of native grassland have been shown and noted on the appropriate landscape construction documents. The landscape construction documents and specifications must be found to be in conformance with this report.

B. Restoration Plan(s) and Specifications
    1. Landscape Construction Documents (LCD) shall be prepared on D-sheets and submitted to the City of San Diego Development Services Department, Landscape Architecture Section (LAS) for review and approval. LAS shall consult with Mitigation Monitoring Coordination (MMC) and obtain concurrence prior to approval of LCD. The LCD shall consist of restoration, planting, irrigation and erosion control plans; including all required graphics, notes, details, specifications, letters, and reports as outlined below.
    2. Landscape Restoration Planting and Irrigation Plans shall be prepared in accordance with the San Diego Land Development Code (LDC) Chapter 14, Article 2, Division 4, the LDC Landscape Standards submittal requirements, and Attachment "B" (General Outline for Restoration Plans) of the City of San Diego's LDC Biology Guidelines (July 2002). The Principal Qualified Biologist (PQB) shall identify and adequately document all pertinent information

concerning the restoration goals and requirements, such as but not limited to, plant/seed palettes, timing of installation, plant installation specifications, method of watering, protection of adjacent habitat, erosion and sediment control, performance/success criteria, inspection schedule by City staff, document submittals, reporting schedule, ect. The LCD shall also include comprehensive graphics and notes addressing the ongoing maintenance requirements (after final acceptance by the City).

3. The Restoration Installation Contractor (RIC), Restoration Maintenance Contractor (RMC), Construction Manager (CM) and Grading Contractor (GC), where applicable shall be responsible to insure that for all grading and contouring, clearing and grubbing, installation of plant materials, and any necessary maintenance activities or remedial actions required during installation and the 120 day plant establishment period are done per approved LCD. The following procedures at a minimum, but not limited to, shall be performed:

   a. The RMC shall be responsible for the maintenance of the creation and restoration area for a minimum period of 120 days (the 120-day PEP). Maintenance visits shall be conducted monthly or as directeb by the Qualified Biological Monitor (QBM) (City approved) throughout the plant establishment period.
   b. At the end of the 120 day period the PQB shall review the mitigation area to assess the completion of the short-term plant establishment period and submit a report for approval by MMC.
   c. MMC will provide approval in writing to begin the five year long-term establishment/maintenance and monitoring program.
   d. Existing indigenous/native species shall not be pruned, thinned or cleared in the restoration/mitigation area.
   e. The restoration site shall not be fertilized.
   f. The RIC is responsible for reseeding (if applicable) if weeds are not removed, within one week of written recommendation by the PQB.
   g. Weed control measures shall include the following: (1) hand removal, (2) cutting, with power equipment, and (3) chemical control. Hand removal of weeds is the most desirable method of control and will be used where feasible and possible without causing unnecessary damage to native plants in the restoraiotn area.
   h. Damaged areas shall be repaired immediately by the RIC/RMC. Insect infestations, plant diseases, herbivory, and other pest problems will be closely monitored throughout the five-year maintenance period. Protective mechanisms such as metal wire netting shall be used as necessary. Diseased and infected plants shall be immediately disposed of off site in a legally-acceptable manner at the discretion of the PQB or QBM. Where possible, biological controls will be used instead of pesticides and herbicides.

C. Letters of Qualification Have Been Submitted to ADD

1. The applicant shall submit, for approval, a letter verifying the qualifications of the biological professional to MMC. This letter shall identify the PQB, Principal Restoration Specialist (PRS), and QBM, where applicable, and the names of all other persons involved in the implementation of the restoration plan and biological monitoring program, as they are defined in the City of San Diego Biological

Review References. Resumes and the biology worksheet should be updated annually.

2. MMC will provide a letter to the applicant confirming the qualifications of the PQB/PRS/QBM and all City Approved persons involved in the restoration plan and biological monitoring of the project.
3. Prior to the start of work, the applicant must obtain approval from MMC for any personnel changes associated with the restoration plan and biological monitoring of the project.

**Prior to Start of Construction**

A. PQB/PRS Shall Attend Preconstruction (Precon) Meetings

1. Prior to beginning any work that requires monitoring:
   a. The owner/permittee or their authorized representative shall arrange and perform a Precon Meeting that shall include the PQB or PRS, Construction Manager (CM) and/or Grading Contractor (GC), Landscape Architect (LA), Restoration Installation Contractor (RIC), Restoration Maintenance Contractor (RMC), Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC.
   b. The PQB shall also attend any other grading/excavation related Precon Meetings to make comments and/or suggestions concerning the restoration plan(s) and specifications with the RIC, CM and/or GC.
   c. If the PQB is unable to attend the Precon Meeting, the owner shall schedule a focused Precon Meeting with MMC, PQB/PRS, CM, BI, LA, RIC, RMC, RE and/or BI, if appropriate, prior to the start of any work associated with the restoration phase of the project, including site grading preparation.

2. Where Restoration Work Will Occur
   a. Prior to the start of any work, the PQB/PRS shall also submit a restoration monitoring exhibit (RRME) based on the appropriate reduced LCD (reduced to 11”x 17” format) to MMC, and the RE, identifying the areas to be restored including the delineation of the limits of any disturbance/grading and any excavation.
   b. PQB shall coordinate with the construction superintendent to identify appropriate Best Management Practices (BMP’s) on the RRME.

3. When Biological Monitoring Will Occur
   a. Prior to the start of any work, the PQB/PRS shall also submit a monitoring procedures schedule to MMC and the RE indicating when and where biological monitoring and related activities will occur.

4. PQB Shall Contact MMC to Request Modification
   a. The PQB may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the restoration plans and specifications. This request shall be based on relevant information (such as other sensitive species not listed by federal and/or state agencies and/or not covered by the MSCP and to which any impacts may be considered significant under CEQA) which may reduce or increase the potential for biological resources to be present.

**During Construction**

A. PQB or QBM Present During Construction/Grading/Planting

1. The PQB or QBM shall be present full-time during construction activities including but not limited to, site preparation, cleaning, grading, excavation, landscape establishment in association with the project, which could result in impacts to sensitive biological resources as identified in the LCD and on the RRME. **The RIC and/or QBM are responsible for notifying the PQB/PRS of changes to any approved construction plans, procedures, and/or activities. The PQB/PRS is responsible to notify the CM, LA, RE, BI and MMC of the changes.**
2. The PQB or QBM shall document field activity via the Consultant Site Visit Record Forms (CSVR). The CSVR's shall be faxed by the CM the first day of monitoring, the last day of monitoring, monthly, and in the event that there is a deviation from conditions identified within the LCD and/or biological monitoring program. The RE shall forward copies to MMC.
3. The PQB or QBM shall be responsible for maintaining and submitting the CSVR at the time that CM responsibilities end (i.e., upon the completion of construction activity other then that of associated with biology).
4. All construction activities (including staging areas) shall be restricted to the development areas as shown on the LCD. The PQB/PRS or QBM staff shall monitor construction activities as needed, with MMC concurrence on method and schedule. This is to ensure that construction activities do not encroach into biologically sensitive areas beyond the limits of disturbance as shown on the approved LCD.
5. The PQB or QBM shall supervise the placement of orange construction fencing or City approved equivalent, along the limits of potential disturbance at the edge of the project footprint to protect sensitive vegetation communities in the surrounding area, including southern willow scrub, valley needlegrass grassland, Diegan coastal sage scrub, and non-native grassland, as shown on the approved LCD.
6. The PBQ shall provide a letter to MMC that limits of potential disturbance has been surveyed, staked and that the construction fencing is installed properly
7. The PQB or QBM shall oversee implementation of BMP's, such as gravel bags, straw logs, silt fences or equivalent erosion control measures, as needed to ensure prevention of any significant sediment transport. In addition, the PQB/QBM shall be responsible to verify the removal of all temporary construction BMP's upon completion of construction activities. Removal of temporary construction BMP's shall be verified in writing on the final construction phase CSVR.
8. PQB shall verify in writing on the CSVR's that no trash stockpiling or oil dumping, fueling of equipment, storage of hazardous wastes or construction equipment/material, parking or other construction related activities shall occur adjacent to sensitive habitat. These activities shall occur only within the designated staging area located outside the area defined as biological sensitive area.
9. The long-term establishment inspection and reporting schedule per LCD must all be approved by MMC prior to the issuance of the Notice of Completion (NOC) or any bond release.

B. Disturbance/Discovery Notification Process

1. If unauthorized disturbances occurs or sensitive biological resources are discovered that where not previously identified on the LCD and/or RRME, the PQB or QBM shall direct the contractor to temporarily divert construction in the area of disturbance or discovery and immediately notify the RE or BI, as appropriate.
2. The PQB shall also immediately notify MMC by telephone of the disturbance and report the nature and extent of the disturbance and recommend the method of additional protection, such as fencing and appropriate Best Management Practices (BMP's). After obtaining concurrence with MMC and the RE, PQB and CM shall install the approved protection and agreement on BMP's.
3. The PQB shall also submit written documentation of the disturbance to MMC within 24 hours by fax or email with photos of the resource in context (e.g., show adjacent vegetation).

C. Determination of Significance
1. The PQB shall evaluate the significance of disturbance and/or discovered biological resource and provide a detailed analysis and recommendation in a letter report with the appropriate photo documentation to MMC to obtain concurrence and formulate a plan of action which can include fines, fees, and supplemental mitigation costs.
2. MMC shall review this letter report and provide the RE with MMC's recommendations and procedures.

**Post Construction**

A. Mitigation Monitoring and Reporting Period
1. PEP and Five-Year Maintenance Period
   a. The RMC shall be retained to complete maintenance monitoring activities throughout the PEP and five-year mitigation monitoring period.
   b. Maintenance visits will be conducted monthly throughout the PEP, quarterly for the first year, and, and quarterly thereafter.
   c. Maintenance activities will include all items described in the LCD.
   d. Plant replacement will be conducted as recommended by the PQB (note: plants shall be increased in container size relative to the time of initial installation or establishment or maintenance period may be extended to the satisfaction of MMC.
2. Five-Year Biological Monitoring
   a. All biological monitoring and reporting shall be conducted by a PQB or QBM, as appropriate, consistent with the LCD.
   b. Monitoring shall involve both qualitative horticultural monitoring and quantitative monitoring (i.e., success criteria). Horticultural monitoring shall focus on soil conditions (e.g., moisture and fertility), container plant health, seed germination rates, presence of native and non-native (e.g., invasive exotic) species, any significant disease or pest problems, irrigation repair and scheduling, trash removal, illegal trespass, and any erosion problems.
   c. After plant installation is complete, qualitative monitoring surveys will occur bi-weekly for the first month of the PEP, monthly for the remainder of the PEP and first three months of Maintenance and Moniotring, and quarterly thereafter.

d. Upon the completion of the 120-days short-term plant establishment period, quantitative monitoring surveys shall be conducted at 0, 12, 24, 36, 48 and 60 months by the PQB or QBM, to determine compliance with the performance standards identified on the LCD. All plant material must have survived without supplemental irrigation for the last two years.

e. Quantitative monitoring shall include the use of fixed transects or releve methods and photo points to determine the vegetative cover within the restored habitat. Collection of transect or releve data within the restoration site shall result in the calculation of percent cover or cover class for each plant species present, percent cover of native grassland, and percent cover of non-native/non invasive vegetation. Durng the PEP, container plants will also be counted to determine percent survivorship. The data will be used determine attainment of performance/success criteria identified within the LCD.

f. Biological monitoring requirements may be reduced if, before the end of the fifth year, the restoration meets the fifth year criteria and the irrigation has been terminated for a period of at least two years.

g. The PQB or QBM shall oversee implementation of post-construction BMPs, such as gravel bags, straw logs, silt fences or equvalent erosion control measures, as needed to prevent significant sediment transport. In addition, the PBQ/QBM shall be responsible to verify the removal of all temporary post-construction BMP's upon completion of construction activities. Removal of temporary post-construction BMPs shall be verified in writing on the final post-construction phase CSVR.

C. Submittal of Draft Monitoring Report

1. A draft monitoring report shall be prepared to document the completion of the 120-day plant establishment period. The report shall include discussion on weed control, horticultural treatments (pruning, mulching, and disease control), erosion control, trash/debris removal, replacement planting/reseeding, site protection/signage, pest management, vandalism, and irrigation maintenance. The restoration effort shall be visually assessed at the end of 120 day period to determine mortality of individuals.
2. The PQB shall submit two copies of the draft monitoring report which describes the results, analysis, and conclusions of all phases of the Biological Monitoring and Reporting Program (with appropriate graphics) to MMC for review and approval within 30 days following the completion of monitoring. Monitoring reports shall be prepared on an annual basis for a period of five years. Site observation reports (SORs) shall be prepared by the PQB following each site visit and provided to the owner, RMC and RIC. SORs shall review maintenance activities, qualitative and quantitative (when appropriate) monitoring results including progress of the restoration relative to the performance/success criteria, and the need for any remedial measures.
3. Draft annual reports (three copies) summarizing the results of each progress report including quantitative monitoring results and photographs taken from permanent viewpoints shall be submitted to MMC for review and approval within 30 days following the completion of monitoring.
4. MMC shall return the Draft Monitoring Report to the PQB for revision or, for preparation of each report.

5. The PQB shall submit revised Monitoring Report to MMC (with a copy to RE) for approval within 30 days.
6. MMC will provide written acceptance of the PQB and RE of the approved report.

D. Final Monitoring Reports(s)
   1. PQB shall prepare a final monitoring report upon achievement of the fifth year success criteria and completion of the five year maintenance period.
      a. This report may occur before the end of the fifth year if the restoration meets the fifth year success criteria and the irrigation has been terminated for a period of the last two years.
      b. The final monitoring report shall be submitted to MMC for evaluation of the success of the mitigation effort and final acceptance. A request for a pre-final inspection shall be submitted at this time, MMC will schedule after review of report.
      c. If at the end of the five years any of the restored area fails to meet the project's final success standards, the applicant must consult with MMC. This consultation shall take place to determine whether the restoration effort is acceptable. The applicant understands that failure of any significant portion of the restoration area may result in a requirement to replace or renegotiate that portion of the site and/or extend the monitoring and establishment/maintenance period until all success standards are met.