Biological Technical Report for the Collection at Cactus Project

November 7, 2025

Prepared for:

JPI Companies
12250 El Camino Real, Suite 380
San Diego, CA 92130

Prepared by:

Alden Environmental, Inc.
3245 University Avenue, #1188
San Diego, CA 92104

Principal Investigator:

Greg Mason, Senior Biologist

ALDEN
ENVIRONMENTAL, INC

Biological Technical Report for the Collection at Cactus Project

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

1.0 INTRODUCTION

This report describes existing biological conditions on the approximately 39-acre Collection at Cactus Project (project) site and provides the City of San Diego (City) and project applicant with information necessary to assess impacts to biological resources under the California Environmental Quality Act (CEQA) and City, State, and federal regulations.

1.1 PROJECT LOCATION AND SITE DESCRIPTION

The project site encompasses one Assessor's Parcel Number: 646-100-77 and consists of undeveloped land located in the Central Village Specific Plan Area of the Otay Mesa Community in the City. The site is bordered to the north by State Route 905, to the south by Airway Road, to the west by Cactus Road, and partially bordered to the east by Continental Street (Figures 1 and 2). The site is surrounded by industrial land uses north of State Route 905, residential land uses to the east, vacant and commercial land uses to the south, and residential and commercial land uses to the west. The site is in the southeast quarter of Section 33 in Township 18 South, Range 1 West of the U.S. Geological Survey Otay Mesa 7.5-minute quadrangle.

The project site is not located within or adjacent to the City's Multiple Species Conservation Program (MSCP) Multi-habitat Planning Area (MHPA) or Vernal Pool Habitat Conservation Plan (VPHCP) area, and it is outside the coastal zone. The nearest MHPA land occurs approximately 500 feet to the west in Spring Canyon (Figure 2).

1.2 PROJECT DESCRIPTION

The project would allow for the development of a total of 985 multi-family residential units, including139 units on approximately 5.49 acres in CVSP Planning Area (PA) 10, 324 units on approximately 8.41 acres in PA 11, 348 units on approximately 8.89 acres in PA 12, 174 units on approximately 6.46 acres in PA 13, and a public park on 3.62 gross acres (3.5 net acres) in PA 17. Additionally, the project would include improvements to Cactus Road, Continental Road, and Airway Road as well as the construction of internal roadways. Specifically, improvements to Cactus Road would include a 113- to 124-foot ROW.

Improvements to Cactus Road also include the undergrounding of existing powerlines from the southwestern corner of the project site to just outside of the wetland area located in the northwestern corner of the project site (Figure 3). At the drainage crossing itself, the line would remain above ground to prevent disturbance of the drainage channel and its associated disturbed wetland. This design ensures that the utility improvement avoids impacts to potential jurisdictional aquatic resources and City of San Diego wetlands.

Improvements to Airway Road would include a 109- to 138-foot ROW, and improvements to Continental Road would include a 85-foot ROW. Off-site improvements also are proposed to construct a proposed force main line within Otay Mesa Road approximately 0.6-mile northwest of the Project site. Additionally, off-site improvements would include proposed wet utility lines to connect to existing lines within Cactus Road. Proposed off-site utilities would be constructed within existing roadways.

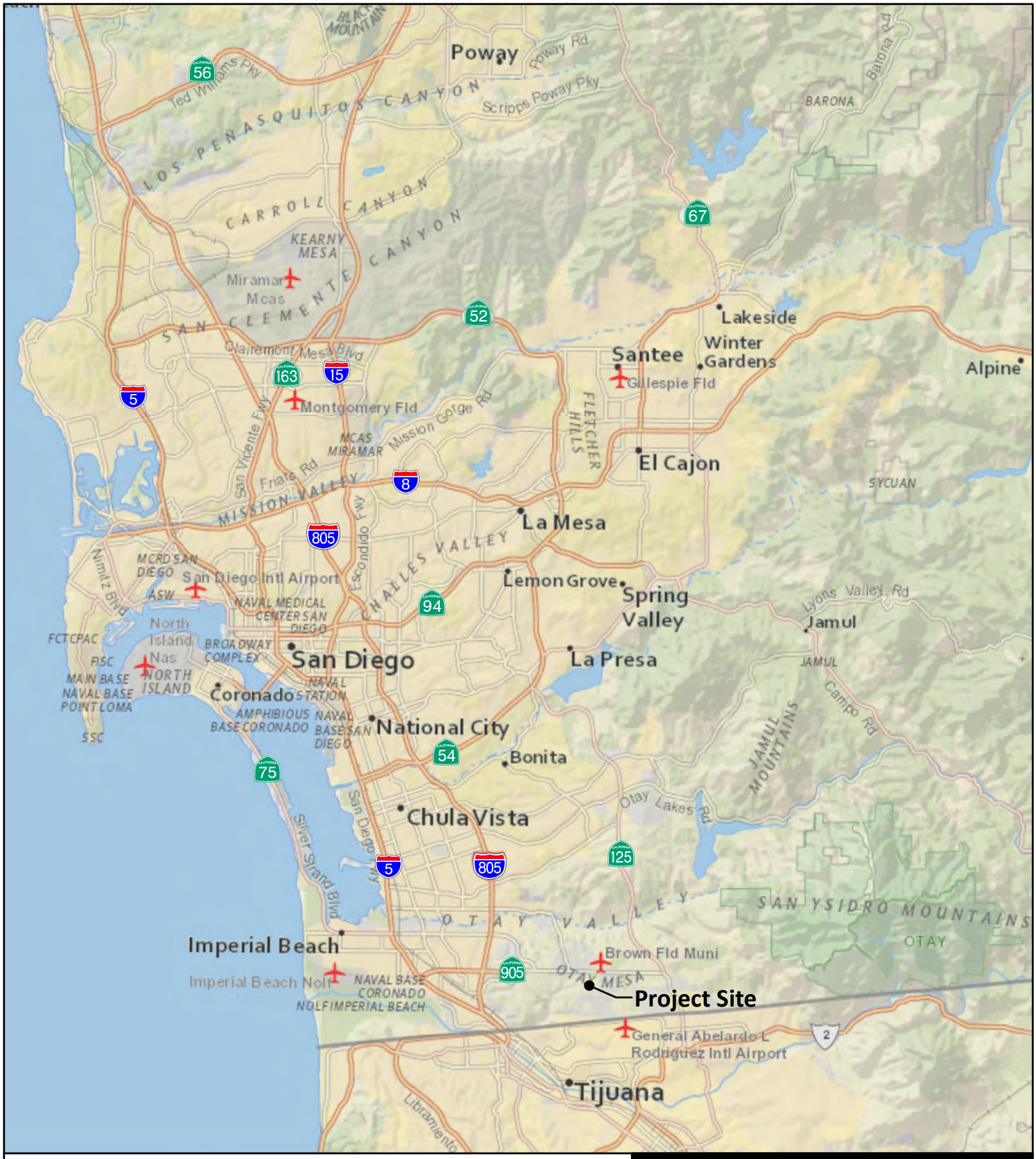
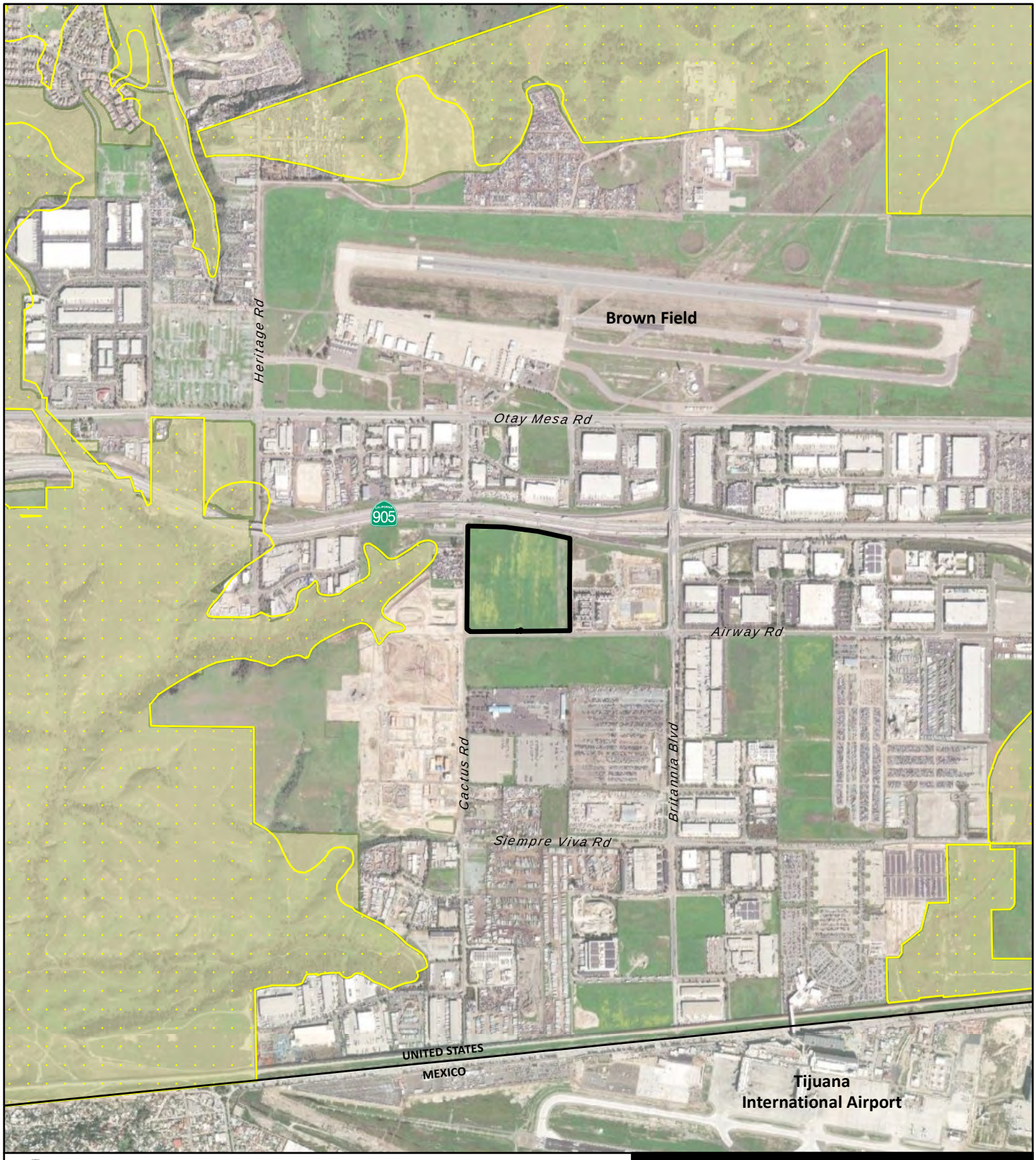


Figure 1

Regional Location

COLLECTION AT CACTUS PROJECT
BIOLOGICAL TECHNICAL REPORT

ALDEN ENVIRONMENTAL, INC



Parcel Boundary
City of San Diego MHPA
City of San Diego VPHCP

N
W E
S

0 1,000 2,000 Feet

ALDEN ENVIRONMENTAL, INC

Figure 2

Project Location

COLLECTION AT CACTUS PROJECT
BIOLOGICAL TECHNICAL REPORT

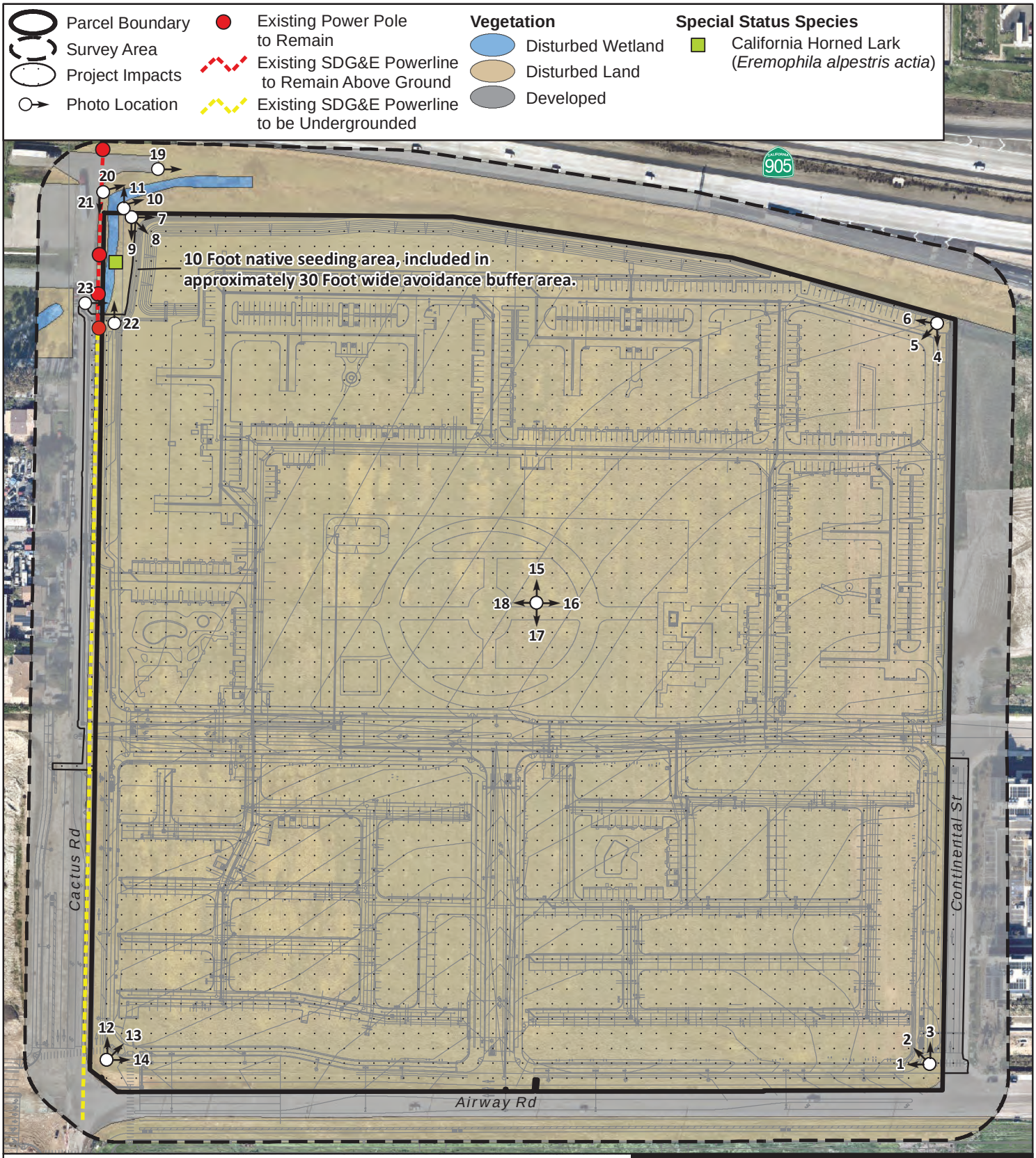


Figure 3

Biological Resources/Impacts

COLLECTION AT CACTUS PROJECT
BIOLOGICAL TECHNICAL REPORT

ALDEN ENVIRONMENTAL, INC

The City's Standard Biological Resource Protection Measures, which are implemented, as applicable prior to, during, and post construction, will be conditions of approval of the project as will comply with burrowing owl (*Athene cunicularia*; BUOW) MSCP Conditions of Coverage. These measures may include, for example, a pre-construction BUOW survey, a meeting with a Qualified Biologist, and construction monitoring by a Qualified Biologist.

2.0 METHODS AND SURVEY LIMITATIONS

2.1 LITERATURE REVIEW

Prior to surveying the site, aerial imagery of the site was reviewed, as well as available maps, sensitive species database records, and existing conditions material for the site. These included:

- National Wetlands Inventory (NWI)/National Hydrography Dataset (NHD) mapping;
- California Natural Diversity Database (CNDDB) and U.S. Fish and Wildlife Service (USFWS) Listed Species Database;
- Otay Mesa Community Plan Update Final Environmental Impact Report (Final EIR; City 2014);
- Addendum to the Program EIR for the adjacent Lumina/Epoca project (City 2019); and
- Biological Technical Report for the Britannia Airway Logistics Center Project (Alden
- 2021).

2.2 BIOLOGICAL SURVEYS

Vegetation was mapped, and focused surveys for the BUOW and sensitive plants, including Otay tarplant (*Deinandra conjugens*), were conducted. A Quino checkerspot butterfly (*Euphydryas editha quino*) habitat assessment was also conducted during the vegetation mapping. The vegetation mapping effort also included a search for potential Waters of the U.S., Waters of the State, and City Wetlands, as well as water-holding basins, like vernal pools, that could support species of federal-listed fairy shrimp. All site visits included looking for sensitive plant and/or animal species.

Table 1 presents information for the surveys/site visits. Lists of plant and animal species observed or detected during the surveys/site visits are provided in Appendices A and B, respectively. Representative site photographs were taken and are provided in Appendix C.

Table 1 SURVEY INFORMATION			
Date	**Personnel**	**Purpose**	**Time and Survey Conditions Start/Stop**
4/18/23	Greg Mason	Vegetation mapping and biological resources assessment (including Quino checkerspot butterfly habitat assessment)	N/A
2/19/24	Andrew Kort	BUOW survey (1 of 4, day 1)	0600, 100%, 55°F, wind 1-4 mph/ 1000, 100%, 60°F, wind 0-2 mph
2/20/24	Andrew Kort	BUOW survey (1 of 4, day 2)	0615, 100%, 54°F, wind 1-4 mph/ 0915, 100%, 58°F, wind 0-2 mph
4/11/24	Greg Mason	Sensitive plant survey	1000, 50%, 65°F, wind 0-1 mph/ 1100, 50%, 65°F, wind 0-1 mph
4/15/24	Andrew Kort, Julian Isacescu-Bernard	BUOW survey (2 of 4)	0710, 80%, 57°F, wind 1-3 mph/ 1000, 75%, 64°F, wind 0-2 mph
5/6/24	Andrew Kort, Julian Isacescu-Bernard	BUOW survey (3 of 4)	0700, 0%, 56°F, wind 0-1 mph/ 1000, 0%, 70°F, wind 1-3 mph
6/6/24	Greg Mason	Sensitive plant survey including focused Otay tarplant survey	0806, 100%, 62°F, wind 0-1 mph/ 0937, 100%, 64°F, wind 0-1 mph
6/20/2024	Thomas Grigolite	BUOW survey (4 of 4, day 1)	0830, 80%, 62°F, wind 3-5 mph/ 1000, 0%, 69°F, wind 4-6 mph
6/21/2024	Thomas Grigolite	BUOW survey (4 of 4, day 2)	0530, 100%, °F, wind 1-2 mph/ 1000, 0%, °F, wind 1-3 mph

2.2.1 Vegetation Mapping and Biological Resources Assessment

Vegetation mapping was conducted on April 18, 2023. Mapping took into account the City's defined differentiation between non-native grassland and other disturbed areas from Attachment II.A.1 (i.e., Map Submissions and Methodology, Problem Mapping Areas, Non-Native Annual Grasslands vs. Other Disturbed Areas [Ruderal, Agricultural/Fallow] on page 98 of the City's 2018 Biology Guidelines).

Additionally, the site was searched for evidence of potential federal, State, and/or City Wetlands (including vernal pools) and non-wetland waters of the U.S. and State during the April visit and subsequent site visits.

Lastly, a biological resources assessment of the site was conducted on April 18, 2023 to determine if focused sensitive species surveys were warranted based on the field conditions such as vegetation communities present and the soils on site. Based on the assessment, it was determined that the site should be surveyed for Otay tarplant (*Deinandra conjugens*) and BUOW. See Section 2.2.2 of this report for information on those species and the Quino checkerspot butterfly habitat assessment.

2.2.2 Sensitive Species

Sensitive species are those that are considered federal, State, or California Native Plant Society (CNPS) rare, threatened, or endangered; MSCP Narrow Endemics; or MSCP Covered Species. For simplicity, "sensitive" may be used throughout this document to refer to any of these categories.

Sensitive Plant Species

Focused sensitive plant species surveys were conducted on April 11 and June 6, 2024. These surveys occurred when most annual species with potential to occur are in bloom. Since the site supports soils with a clay component, which is potential habitat for Otay tarplant, particular attention was paid to looking for this federal- and State-listed species during the June 6 survey since that date is within the species' typical bloom period (May-June). Prior to the June 6 survey, the Cross Border Xpress OTN Parcel Project site (approximately 0.65-mile to the southeast), where Otay tarplant is known to occur, was visited to determine if Otay tarplant was in flower. Since Otay tarplant was observed in flower on that site, it was considered reasonable to assume that Otay tarplant would be in flower on the (Cactus) project site if present. Therefore, the timing was considered right for finding the species should it be present on site. It should be noted, however, that most of the site appears to be tilled regularly, which greatly reduces the chances for any sensitive plant species to occur.

Burrowing Owl

A focused BUOW survey with four site visits (Table 1) was conducted according to the survey methods in the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012; Appendix D).

The entire site was considered potential habitat for the BUOW. The site was examined by walking transects spaced approximately 20 meters apart while looking for BUOW and potential burrows or perches that could be used by the BUOW. Additionally, at the start of each transect and every 100 meters, the site was scanned with binoculars to look for BUOW. The BUOW is known to occupy California ground squirrel (*Otospermophilus beecheyi*) burrows; therefore, particular attention is paid to any areas along fence lines, or other locations where squirrel activity might occur. Dirt piles, drainages, and culverts are also carefully examined as these sites can often provide cavities that can support the species. The determination of owl presence is made by direct BUOW observation or by signs such as, but not necessarily limited to, excavated soil, whitewash (excrement), castings (pellets), and/or feathers.

Quino Checkerspot Butterfly

A habitat assessment was conducted on April 18, 2023 in accordance with the Quino Checkerspot Butterfly Survey Guidelines (USFWS 2014). The site was walked, and potential Quino checkerspot butterfly resources (open areas, host plants, nectar resources, etc.) were searched for. Characteristic Quino habitat[1] and larval host plants (i.e., dwarf plantain [*Plantago erecta*] and owl's clover [*Castilleja exserta*]) were not observed. Since the parcel was determined to have minimal potential for the Quino checkerspot butterfly, a survey for it was not conducted.

2.2.3 Survey Limitations

Sensitive species surveys were conducted during appropriate times of year and cover the activity periods for most species. Noted animal species were identified by direct observation, vocalizations, or the observance of scat, tracks, or other signs. However, the lists of species identified in Appendices A and B are not necessarily a comprehensive account of all species that utilize the site as species that are nocturnal, secretive, or seasonally restricted may not have been observed/detected. The species that are sensitive and that may have potential to occur on site, however, are still addressed in this report in Sections 4.5.2, 4.5.3, and 6.1.4 of this report.

2.2.4 Nomenclature

Nomenclature used in this report is from the following sources: City Biology Guidelines (City 2018) and the City's MSCP Subarea Plan (City 1997a); Holland (1986); Oberbauer et al. (2008); Hickman, ed. (1993); CNPS (2024); Crother (2008); American Ornithological Society (2023); Jones, et al. (1992); and California Department of Fish and Wildlife (CDFW; 2024).

[1] According to the USFWS, "Quino checkerspot butterfly habitat is characterized by patchy shrub or small tree landscapes with openings of several meters between large plants, or a landscape of open swales alternating with dense patches of shrubs; such habitats are often collectively termed 'scrublands.' Quino will frequently perch on vegetation or other substrates to mate or bask, and they require open areas to facilitate movement. Optimal habitat appears to contain little or no invasive exotic vegetation." (https://www.fws.gov/story/quino-checkerspot-butterfly)

3.0 REGULATORY CONTEXT

3.1 REGULATORY ISSUES

Biological resources that occur or may have potential to occur on site are subject to regulatory administration by the federal government, State of California, and City as follows.

3.1.1 Federal

Endangered Species Act

The federal Endangered Species Act (FESA) designates threatened and endangered animals and plants and provides measures for their protection and recovery. "Take" of listed animal species and of listed plant species in areas under federal jurisdiction is prohibited without obtaining a federal permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Harm includes any act that actually kills or injures fish or wildlife, including significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife. Activities that damage the habitat of (i.e., harm) listed wildlife species require approval from the USFWS for terrestrial species. The FESA also generally requires determination of Critical Habitat for listed species. If a project would involve a federal action potentially affecting Critical Habitat, the federal agency would be required to consult with USFWS. No federal-listed species or Critical Habitat occurs on site.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA; 16 U.S. Code Sections 703-711) includes provisions for protection of migratory birds, including the non-permitted take of migratory birds. The MBTA regulates or prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50 Code of Federal Regulations Section 10.13. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, and many others (including those that are not sensitive; see Section 4.5.3 of this report for an explanation of which species are sensitive). Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered a "take." The MBTA is an international treaty for the conservation and management of bird species that migrate through more than one country, and is enforced in the United States by the USFWS. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors). As a general/standard condition, the project must comply with the MBTA.

3.1.2 State of California

California Environmental Quality Act

Primary environmental legislation in California is found in the CEQA and its implementing guidelines (State CEQA Guidelines), requiring that projects with potential adverse effects or impacts on the environment undergo environmental review. Adverse impacts to the environment are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations. The City is the Lead Agency under the CEQA for the proposed project, and this report is part of that environmental review process.

California Fish and Game Code

Pursuant to California Fish and Game Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Raptors and owls and their active nests are protected by California Fish and Game Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that construction activities (particularly vegetation removal or construction near nests) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFW and/or USFWS. As a general/standard condition, the project must comply with California Fish and Game Code Sections 3503 and 3503.5.

3.1.3 City of San Diego

Multiple Species Conservation Program

The City, USFWS, CDFW, and other local jurisdictions joined together in the late 1990s to develop the MSCP, a comprehensive program to preserve a network of habitat and open space in the region and ensure the viability of (generally) upland habitat and species, while still permitting some level of continued development. The City's MSCP Subarea Plan (1997a) was prepared pursuant to the outline developed by USFWS and CDFW to meet the requirements of the State Natural Communities Conservation Planning Act of 1992. Adopted by the City in March 1997, the City's Subarea Plan forms the basis for the MSCP Implementing Agreement, which is the contract between the City, USFWS, and CDFW (City 1997b). The Implementing Agreement ensures implementation of the City's Subarea Plan and thereby allows the City to issue "take" permits under the FESA and State Endangered Species Act to address impacts at the local level. Under the FESA, an Incidental Take Permit is required when non-federal activities would result in "take" of a threatened or endangered species. A Habitat Conservation Plan, such as the City's MSCP Subarea Plan, must accompany an application for a federal Incidental Take Permit. In July 1997, the USFWS, CDFW, and City entered into the 50-year MSCP Implementing Agreement, wherein the City received its FESA Section 10(a) Incidental Take Permit (City 1997b).

Pursuant to its MSCP permit issued under Section 10(a), the City has incidental "take" authority over 85 rare, threatened, and endangered species including regionally sensitive species that it aims to conserve (i.e., "MSCP Covered Species"). "MSCP Covered" refers to species that are covered by the City's federal Incidental Take Permit and considered to be adequately protected within the MHPA. Special conditions apply to Covered Species that would be potentially impacted including, for example, designing a project to avoid impacts to Covered Species in the MHPA where feasible. Outside the MHPA (where the project site lies), projects must incorporate measures (i.e., Area Specific Management Directives) for the protection of Covered Species as identified in Appendix A of the City's Subarea Plan.

In addition to identifying preserve areas within the City (and guiding implementation of the MSCP within its corporate boundaries), the City's Subarea Plan also regulates effects on natural communities throughout the City.

Multi-habitat Planning Area

The MHPA was developed by the City in cooperation with the USFWS, CDFW, property owners, developers, and environmental groups using the Preserve Design Criteria contained in the MSCP Plan, and the City Council-adopted criteria for the creation of the MHPA.

MHPA lands are large blocks of native habitat that can support a diversity of plant and animal life and, therefore, have been included within the City's Subarea Plan for conservation. The MHPA also delineates core biological resource areas and corridors targeted for conservation as these lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. The project site is not within or adjacent to the MHPA.

MHPA Land Use Adjacency Guidelines

Development adjacent to the MHPA must ensure that indirect impacts to the MHPA are minimized. Section 1.4.3 of the City's Subarea Plan outlines the requirements to address indirect effects related to drainage and toxics, lighting, noise, public access, invasive plant species, brush management, and grading/land development. The project site is not adjacent to the MHPA.

Vernal Pool Habitat Conservation Plan

The City's Vernal Pool Habitat Conservation Plan (VPHCP; City 2017) is intended to provide an effective framework to protect, enhance, and restore vernal pool resources in specific areas within the City's jurisdiction, while improving and streamlining the environmental permitting process for impacts to threatened and endangered species associated with vernal pools. The VPHCP conserves additional lands with vernal pools that are occupied with the vernal pool covered species. The adopted VPHCP boundary expanded and added to the City's existing MHPA. On August 3, 2018, the City received authorization from the USFWS for incidental take of the San Diego fairy shrimp (*Branchinecta sandiegonensis*) and Riverside fairy shrimp (*Streptocephalus woottoni*) for "otherwise lawful Covered Activities within the Plan Area described and defined in the VPHCP" (USFWS 2018).

Five vernal pool plant species (San Diego button-celery [*Eryngium aristulatum* var. *parishii*], spreading navarretia [*Navarretia fossalis*], California Orcutt grass [*Orcuttia californica*], San Diego mesa mint [*Pogogyne abramsii*], and Otay Mesa mint [*Pogogyne nudiuscula*]) are included in the USFWS permit due to the conservation benefits provided for the plants in the VPHCP.

The project site is not within or adjacent to the VPHCP boundary (Figure 2).

Environmentally Sensitive Lands Regulations

Mitigation requirements for sensitive biological resources follow the requirements of the City's Biology Guidelines (2018) as outlined in the City's Municipal Code Environmentally Sensitive Lands (ESL) Regulations (Chapter 14, Article 3, Division 1). ESL include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs and 100-year floodplains (San Diego Municipal Code [SDMC] 143.0110).

The purpose of the ESL Regulations is to, "protect, preserve and, where damaged, restore the ESL of San Diego and the viability of the species supported by those lands" (City Municipal Code §143.0101). Outside the Coastal Overlay Zone where the project lies, impacts to wetlands should be avoided. Unavoidable impacts should be minimized to the maximum extent practicable. Whether or not an impact is unavoidable will be determined on a case-by-case basis. If impacts to wetlands cannot be avoided, a deviation from the ESL Regulations is required. Examples of unavoidable impacts include those necessary to allow reasonable use of a parcel entirely constrained by wetlands, roads where the only access to the developable portion of the site results in impacts to wetlands, and essential public facilities (essential roads, sewer, water lines, etc.) where no feasible alternative exists.

A wetland buffer shall be maintained around all wetlands as appropriate to protect the functions and values of the wetland. Section 320.4(b)(2) of the Corps General Regulatory Policies (33CFR 320 - 330) list criteria for consideration when evaluating wetland functions and values. These include wildlife habitat (spawning, nesting, rearing, and foraging), food chain productivity, water quality, ground water recharge, and areas for the protection of resources from storm and floodwaters.

City Wetlands, specifically, are defined by the City Municipal Code (Chapter 11, Article 3, Division 1) as areas that are characterized by any of the following summarized conditions.

1. All areas persistently or periodically containing naturally occurring wetland vegetation communities;

2. Areas that have hydric soils or wetland hydrology and lack naturally occurring wetland vegetation communities; and/or

3. Areas lacking wetland vegetation communities, hydric soils, and wetland hydrology due to non-permitted filling of previously existing wetlands.

There is a constructed drainage channel that supports disturbed wetland in the northwest corner of the project site (Figure 3) that is potential City Wetland per condition #1 above. The project has been specifically designed to avoid this potential wetland, and it provides an approximately 30-foot-wide avoidance buffer to protect its functions and values. Consistent with the ESL avoidance standards, the project's proposed undergrounding of the existing western power line was designed to maintain full avoidance of the disturbed wetland and associated drainage feature. The line will transition to above ground at the drainage crossing to eliminate the need for trenching or grading within or adjacent to the wetland, thereby avoiding any direct or indirect impact to potential City Wetlands. A wetland buffer analysis is provided in Section 6.1.5 of this report.

The ESL regulations also specify development requirements inside and outside of the City's preserve, the MHPA. Inside the MHPA, development must be located in the least sensitive portion of a given site; outside of the MHPA, development must avoid wetlands and non-MSCP Covered Species (City 2018). The project site is outside the MHPA, would avoid potential wetland, and would avoid impacts to sensitive species not covered by the MSCP (i.e., California horned lark [*Eremophila alpestris actia*]; see Section 6.1.3 of this report). The MHPA is further discussed above in Section 3.1.3 of this report.

The ESL regulations also require that impacts to sensitive biological resources must be assessed and mitigation provided where necessary, as required by Section III of the City's Biology Guidelines. Mitigation is addressed in Section 7.0 of this report.

City Biology Guidelines

The City's Biology Guidelines (2018) have been formulated by the Development Services Department to aid in the implementation and interpretation of the ESL Regulations; San Diego Land Development Code, Chapter 14, Division 1, Section 143.0101 et seq; and the Open Space Residential (OR-1-2) Zone, Chapter 13, Division 2, Section 131.0201 et seq. Section III of the Biology Guidelines (Biological Impact Analysis and Mitigation Procedures) also serves as standards for the determination of impact and mitigation under CEQA. The Biology Guidelines are the baseline biological standards for processing permits issued pursuant to ESL Regulations.

4.0 SURVEY RESULTS

4.1 PHYSICAL CHARACTERISTICS

Elevation on site ranges from approximately 505 to 525 feet above mean sea level, sloping from northwest to southeast. Soils on site are mapped as Stockpen gravelly clay loam (0 to 2 percent and 2 to 5 percent slopes) and Olivenhain cobbly loam (30 to 50 percent slopes; Natural Resources Conservation Service 2024).

According to historic aerial imagery, the site consists of land that was in agricultural production as far back as 1953 and has been fallow and otherwise disturbed (for example, by trash dumping) since some time in the 1990s (Nationwide Environmental Title Research, LLC [NETR] 2024). It does appear that the site is now being regularly mowed or tilled.

4.2 VEGETATION COMMUNITIES

The project site supports one upland vegetation community, one wetland community, and developed land as shown in Table 2 and on Figure 3, and as described below.

Table 2
VEGETATION COMMUNITIES/
LAND USE TYPES ON SITE

Vegetation Community/ Land Use Type	Existing Area (acres)		
	On Site	Off Site[1]	Total
Wetland			
Disturbed Wetland	0.05	0.00	0.05
Upland			
Disturbed Land (Tier IV, other upland)	38.5	0.3	38.8
Developed	0.3	0.8	1.1
TOTAL	**38.85**	**1.1**	**39.95**

[1]Off-site improvement impact area

Disturbed Wetland

Disturbed wetland occurs in a constructed drainage channel in the northwest corner of the site (Figure 3). This drainage channel originates off site, on the south side of State Route 905, and conveys stormwater across the site and into a culvert under Cactus Road and then into Spring Canyon to the west. This habitat on site is highly disturbed and of low quality and supports species such as castor bean (*Ricinus communis*), shrubby arroyo willow (*Salix lasiolepis*), and Mexican fan palm (*Washingtonia robusta*). Disturbed wetland is, however, considered sensitive by the City.

Disturbed Land

Disturbed land includes areas that have been mechanically disturbed or where broad-leaved, non-native plant species such as black mustard (*Brassica nigra*), garland daisy (*Glebionus coronaria*), and cheeseweed (*Malva parviflora*) are prevalent. Historic aerial imagery going back to 1953 (NETR 2024) shows intensive agricultural uses on the site until the 1990s. Additionally, imagery from the 2000s shows that the site has been mostly left fallow but was subject to scattered vehicular use, significant trash dumping, and mowing. The site now appears subject to regular mowing or tilling. Disturbed land on site is currently comprised primarily of vegetation-free tilled areas, with non-native, broad-leaved species such as black mustard and garland daisy occurring in patches along the edges. Disturbed land is considered Tier IV (other upland) by the City and is not sensitive.

Developed

Developed land is where permanent structures and/or pavement have been placed, which prevents the growth of vegetation. Developed land on site occurs along Continental Street as well as in the off-site impact areas along Continental Street and Cactus Road. Developed is a non-sensitive land cover type that is not assigned to a tier of sensitivity by the City.

4.3 PLANT SPECIES OBSERVED

Eighteen species of plants were observed on site, of which only four are native. A list of these plant species is presented in Appendix A.

4.4 ANIMAL SPECIES OBSERVED OR DETECTED

Fifteen species of birds were observed or detected during the site visits. A list of these species is presented in Appendix B.

4.5 SENSITIVE BIOLOGICAL RESOURCES

According to City Municipal Code (Chapter 11, Article 3, Division 1) and the City's Biology Guidelines (City 2018), sensitive biological resources refers to upland and/or wetland areas that meet any one of the following criteria:

(a) Lands that have been included in the City's MSCP Preserve (i.e., the MHPA);

(b) Wetlands;

(c) Lands outside the MHPA that contain Tier I, Tier II, Tier IIIA, or Tier IIIB habitats;

(d) Lands supporting species or subspecies listed as rare, endangered, or threatened under Section 670.2 or 670.5, Title 14, California Code of Regulations, or the FESA, Title 50, Code of Federal Regulations, Section 17.11 or 17.12, or candidate species under the California Code of Regulations;

(e) Lands containing habitats with MSCP Narrow Endemic species as listed in the Biology Guidelines (City 2018); or

(f) Lands containing habitats of MSCP Covered Species as listed in the Biology Guidelines (City 2018).

4.5.1 Sensitive Vegetation Communities

Additionally, sensitive vegetation communities are those considered rare within the region or sensitive by CDFW (Holland 1986) and/or the City. These communities, in any form (e.g., including disturbed or burned), are considered sensitive because they have been historically depleted, are naturally uncommon, or support sensitive species. The site supports one sensitive vegetation community (ESL): disturbed wetland.

4.5.2 Sensitive Plant Species

Sensitive plant species are those that are considered federal, State, or CNPS rare, threatened, or endangered; MSCP Covered Species and/or Narrow Endemic species; and Vernal Pool species. More specifically, if a species is designated with any of the following statuses (a-c below), it is considered sensitive per City Municipal Code (Chapter 11, Article 3, Division 1):

(a) A species or subspecies is listed as rare, endangered, or threatened under Section 670.2 or 670.5, Title 14, California Code of Regulations, or the FESA, Title 50, Code of Federal Regulations, Section 17.11 or 17.12, or candidate species under the California Code of Regulations;

(b) A species is a Narrow Endemic or Vernal Pool species as listed in the Biology Guidelines in the Land Development Manual (City 2018); and/or

(c) A species is a Covered Species as listed in the Biology Guidelines in the Land Development Manual (City 2018).

A species may also be considered sensitive if it is included in the CNPS Inventory of Rare and Endangered Plants (CNPS 2021). California Rare Plant Rank 1 includes plants that are rare, threatened or endangered in California. California Rare Plant Rank 2 includes plants that are rare, threatened or endangered in California but more common elsewhere. California Rare Plant Rank 3 includes plants that are eligible for State listing as rare, threatened or endangered. California Rare Plant Rank 4 plants are locally significant but few, if any, are eligible for State listing.

Sensitive plant status is often based on one or more of three distributional attributes: geographic range, habitat specificity, and/or population size. A species that exhibits a small or restricted geographic range (such as those endemic to the region) is geographically rare. A species may be more or less abundant but occur only in very specific habitats. Lastly, a species may be widespread but exists naturally in small populations.

Sensitive plant species were evaluated for their potential to occur on site (based on, for example, CNDDB records within the vicinity of the site, vegetation communities present, and soils present) and are listed in Table 3.

Table 4 lists MSCP Narrow Endemic species evaluated for their potential to occur on site. Narrow Endemic species are a subset of MSCP Covered Species (defined in Section 3.1.3 of this report). The City specifies additional conservation measures in its MSCP Subarea Plan to ensure impacts to Narrow Endemic species are avoided to the maximum extent practicable.

Table 3
SENSITIVE PLANT SPECIES EVALUATED FOR POTENTIAL TO OCCUR

SPECIES	SENSITIVITY[1]	POTENTIAL TO OCCUR
Tecate tarplant (*Deinandra floribunda*)	CNPS RPR 1B.2	Not expected due to previous agricultural activities and ongoing mechanical disturbance, and its habitats (i.e., chaparral and coastal scrub) are not present.
San Diego barrel cactus (*Ferocactus viridescens*)	CNPS RPR 2B.1 MSCP Covered	Not expected due to previous agricultural activities and ongoing mechanical disturbance. This species is a perennial stem succulent that would have been observed if present.
Laguna Mountains jewelflower (*Streptanthus bernardinus*)	CNPS RPR 4.3	Not expected because the site is too low in elevation for this species (which occurs at elevations of 2,200 to 8,205 feet above mean sea level).
Parry's tetracoccus (*Tetracoccus dioicus*)	CNPS RPR 1B.2 MSCP Covered	Not expected due to previous agricultural activities and ongoing mechanical disturbance, and its habitats (i.e., chaparral and coastal scrub) are not present.

CNPS RPR = California Native Plant Society Rare Plant Rank

1B.2 = Rare, threatened, or endangered in California and elsewhere. Moderately endangered in California (20 to 80 percent occurrences threatened/moderate degree and immediacy of threat).

2B.1 = Rare, threatened, or endangered in California but more common elsewhere. Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat).

4.3 = Uncommon in California. Plants of limited distribution, a watch list. Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

MSCP Covered = Species for which the City has take authorization from the USFWS and CDFW within the City's subarea.

Table 4 MSCP NARROW ENDEMIC[1] PLANT SPECIES EVALUATED FOR POTENTIAL TO OCCUR		
SPECIES	**SENSITIVITY[2]**	**POTENTIAL TO OCCUR**
San Diego thorn-mint (*Acanthomintha ilicifolia*)	FT/SE CNPS RPR 1B.1	Not expected due to previous agricultural activities and ongoing mechanical disturbance.
Shaw's agave (*Agave shawii*)	CNPS RPR 2B.1	Not expected due to previous agricultural activities and ongoing mechanical disturbance.
San Diego ambrosia (*Ambrosia pumila*)	FE CNPS RPR 1B.1	Not expected due to previous agricultural activities and ongoing mechanical disturbance.
Aphanisma (*Aphanisma blitoides*)	CNPS RPR 1B.2	Not expected. No known populations in MSCP area.
Coastal dunes milk vetch (*Astragalus tener* var. *titi*)	FE/SE CNPS RPR 1B.1	Not expected. Occurs in sandy places along the coast, including coastal dunes.
Encinitas baccharis (*Baccharis vanessae*)	FT/SE CNPS RPR 1B.1	Not expected. Not known from near the site.
Otay tarplant (*Deinandra conjugens*)	FT/SE CNPS RPR 1B.1	Low due to previous agricultural activities and ongoing mechanical disturbance. Was not observed during sites visits in May and June, which were during its typical blooming period.
Short-leaved dudleya (*Dudleya brevifolia*)	SE CNPS RPR 1B.1	Not expected. Occurs on dry, sandstone bluffs in chamise chaparral not present on site.
Variegated dudleya (*Dudleya variegata*)	CNPS RPR 1B.2	Not expected due to previous agricultural activities and ongoing mechanical disturbance.
San Diego button-celery (*Eryngium aristulatum* var. *parishii*)	FE/SE CNPS RPR 1B.1 VPHCP Covered	Not expected. Its vernal pool habitat is not present on site.
Spreading navarretia (*Navarretia fossalis*)	FT CNPS RPR 1B.1 VPHCP Covered	Not expected. Its vernal pool habitat is not present on site.
Snake cholla (*Cylindropuntia californica* var. *californica*)	CNPS RPR 1B.1	Not expected due to previous agricultural activities and ongoing mechanical disturbance. This species is a perennial stem succulent that would have been observed if present.
California Orcutt grass (*Orcuttia californica*)	FE/SE CNPS RPR 1B.1 VPHCP Covered	Not expected. Its vernal pool habitat is not present on site.
San Diego mesa mint (*Pogogyne abramsii*)	FE/SE CNPS RPR 1B.1 VPHCP Covered	Not expected. Site is outside the species' range.
Otay Mesa mint (*Pogogyne nudiuscula*)	FE/SE CNPS RPR 1B.1 VPHCP Covered	Not expected. Its vernal pool habitat is not present on site.

[1]Narrow Endemic is a subset of MSCP Covered

[2]FE = Federal-listed Endangered
FT = Federal-listed Threatened
SE = State-listed Endangered
CNPS RPR = California Native Plant Society Rare Plant Rank
1B.1 = Rare, threatened, or endangered in California and elsewhere. Seriously endangered in California
1B.2 = Rare, threatened, or endangered in California and elsewhere. Moderately endangered in California
2B.1 = Rare, threatened, or endangered in California but more common elsewhere. Seriously endangered in California
VPHCP Covered = The Vernal Pool Habitat Conservation Plan was developed using the requirements of a Habitat Conservation Plan under Section 10(a)(1)(B) of the federal Endangered Species Act as the basis for take authorization for covered vernal pools species.

4.5.3 Sensitive Animal Species

Sensitive animal species are those that are considered federal- and/or State-listed threatened or endangered or candidates for listing; MSCP Covered Species and/or Narrow Endemic species; and Vernal Pool species. More specifically, if a species is designated with any of the following statuses (a-c below), it is considered sensitive per City Municipal Code (Chapter 11, Article 3, Division 1):

(a) A species or subspecies is listed as endangered or threatened under Section 670.2 or 670.5, Title 14, California Code of Regulations, or the FESA, Title 50, Code of Federal Regulations, Section 17.11 or 17.12, or candidate species under the California Code of Regulations;

(b) A species is a Narrow Endemic or Vernal Pool species as listed in the Biology Guidelines in the Land Development Manual (City 2018); and/or

(c) A species is a Covered Species as listed in the Biology Guidelines in the Land Development Manual (City 2018).

A species may also be considered sensitive if it is included on the CDFW Special Animals List (CDFW 2024) as a State Species of Special Concern, State Watch List species, State Fully Protected species, or Federal Bird of Conservation Concern.

Generally, the principal reason an individual taxon (species or subspecies) is considered sensitive is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution, resulting in most cases from habitat loss.

One sensitive animal species, California horned lark, was observed on site with a nest (Figure 3).

Sensitive animal species were evaluated for their potential to occur (based on, for example, nearby CNDDB records in the site vicinity and/or the presence of potential habitat) and are listed in Table 5.

Table 5 SENSITIVE ANIMAL SPECIES EVALUATED FOR POTENTIAL TO OCCUR		
SPECIES	**SENSITIVITY**[1]	**POTENTIAL TO OCCUR**
INVERTEBRATES		
Crotch bumble bee (*Bombus crotchii*)	SCE	Not expected to forage or nest. Found between San Diego and Redding, California in a variety of habitats including open grasslands, shrublands, chaparral, desert margins including Joshua tree and creosote scrub, and semi-urban settings. Food plants include *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia,* and *Salvia*. The site is heavily disturbed and regularly tilled; as such, the site lacks suitable nectar and nesting resources for the species.
Quino checkerspot butterfly (*Euphydryas editha quino*)	FE	Low. The parcel was determined to have minimal potential for the species during the habitat assessment. Primary larval host plants dwarf plantain (*Plantago erecta*) and owl's clover (*Castilleja exserta*) were not observed. There are no CNDDB or USFWS records of the species in the site vicinity. Finally, the regular mowing/tilling of the site keeps it in an unsuitable state for the species, both in larval and adult form.
VERTEBRATES		
Amphibian		
Western spadefoot (*Spea hammondii*)	FPT SSC	Not expected. While it has been reported to the CNDDB in the site vicinity, it requires temporary pools for breeding, which do not occur on site. Additionally, the surrounding area is either developed or regularly tilled, thereby diminishing the potential for this species to occur and survive on site.
Reptile		
Baja California coachwhip (*Masticophis fuliginosus*)	SSC	Low. In California, found mainly in open areas such as grassland, shrubland, and coastal sand dunes. While the species has been reported to the CNDDB in the site vicinity, the site is heavily disturbed and regularly tilled, thereby diminishing the potential for this species to occur and survive on site.
Birds		
Burrowing owl (*Athene cunicularia*)	BCC SSC MSCP Covered	Moderate. This species was not found nor was evidence of BUOW use/occupation of the site found during the focused survey for it in 2024. There is a CNDDB record for the species near the site, however, (i.e., approximately 0.1 mile southeast of the intersection of Otay Mesa Road and Cactus Road) from 2005, and the species is presumed extant in that location. Therefore, there is potential for the BUOW to use the project site prior to or during construction.

Table 5 (continued) **SENSITIVE ANIMAL SPECIES EVALUATED FOR POTENTIAL TO OCCUR**		
SPECIES	**SENSITIVITY**[1]	**POTENTIAL TO OCCUR**
VERTEBRATES		
Birds		
Northern harrier (*Circus hudsonius*)	BCC SSC MSCP Covered	Low. The site lacks suitable nesting and foraging habitat. This species has not been reported to the CNDDB within one mile of the site.
California horned lark (*Eremophila alpestris actia*)	WL	Present

[1] FE = Federal-listed Endangered
FPT = Federal proposed Threatened
BCC = Federal Bird of Conservation Concern: USFWS' highest conservation priorities and draw attention to species in need of conservation action.
SCE = State Candidate Endangered
SSC = State Species of Special Concern: Declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.
WL = State Watch List: Birds that are/were: a) not on the current list of species of special concern but were on previous lists and have not been State listed under the California Endangered Species Act; b) previously State or federally listed and now are on neither list; or c) on the list of "Fully Protected" species.
MSCP Covered = Species for which the City has take authorization from the USFWS and CDFW within the City's subarea.

Projects must incorporate Conditions of Coverage (i.e., Area Specific Management Directives [ASMDs]) for the protection of MSCP Covered Species as identified in Appendix A of the City's MSCP Subarea Plan. ASMDs for the BUOW (an MSCP Covered Species with moderate potential to occur) must include: enhancement of known, historical, and potential BUOW habitat; and management for ground squirrels (the primary excavator of BUOW burrows). Enhancement measures may include creation of artificial burrows and vegetation management to enhance foraging habitat. Management plans must also include: monitoring of BUOW nest sites to determine use and nesting success; predator control; establishing a 300-foot-wide impact avoidance area (within the preserve [MHPA]) around occupied burrows.

Since the project site is not occupied by the BUOW, enhancement of BUOW habitat, management for ground squirrels, and associated management plans are not applicable. A 300-foot-wide avoidance area is also not applicable because the nearest MHPA to the project site is approximately 500 feet to the west in Spring Canyon.

A focused survey for the BUOW was conducted for the project in 2024. The BUOW was not found on site nor was evidence of BUOW use/occupation of the site found. There is a CNDDB record for the species near the site, however, (i.e., approximately 0.1 mile southeast of the intersection of Otay Mesa Road and Cactus Road) from 2005, and the BUOW is presumed extant in that location. Therefore, there is moderate potential for the BUOW to use the project site prior to or during construction. The project would comply with the BUOW ASMDs to protect the BUOW as follows; these measures would be incorporated as a permit condition.

The first measure is to conduct a pre-construction survey for the BUOW to determine if the species is present and then implement additional measures, as necessary, during construction and post construction as described below.

PRE-CONSTRUCTION SURVEY ELEMENT

Prior to Permit or Notice to Proceed Issuance:

1. As this project has been determined to be BUOW occupied or to have BUOW occupation potential, the Applicant Department or Permit Holder shall submit evidence to the ADD of Entitlements and Multiple Species Conservation Program (MSCP) staff verifying that a Biologist possessing qualifications pursuant **"**Staff Report on Burrowing Owl Mitigation, State of California Natural Resources Agency Department of Fish and Game. March 7, 2012 (hereafter referred as CDFG 2012, Staff Report), has been retained to implement a BUOW construction impact avoidance program.

2. The qualified BUOW biologist (or their designated biological representative) shall attend the pre-construction meeting to inform construction personnel about the City's BUOW requirements and subsequent survey schedule.

Prior to Start of Construction:

1. The Applicant Department or Permit Holder and Qualified Biologist must ensure that initial pre-construction/take avoidance surveys of the project "site" are completed between 14 and 30 days before initial construction activities, including brushing, clearing, grubbing, or grading of the project site; regardless of the time of the year. "Site" means the project site and the area within a radius of 450 feet of the project site. The report shall be submitted and approved by the Wildlife Agencies and/or City MSCP staff prior to construction or BUOW eviction(s) and shall include maps of the project site and BUOW locations on aerial photos.

2. The pre-construction survey shall follow the methods described in CDFG 2012, Staff Report -Appendix D

3. 24 hours prior to commencement of ground disturbing activities, the Qualified Biologist shall verify results of preconstruction/take avoidance surveys. Verification shall be provided to the City's Mitigation Monitoring and Coordination (MMC) and MSCP Sections. If results of the preconstruction surveys have changed and BUOW are present in areas not previously identified, immediate notification to the City and WA's shall be provided prior to ground disturbing activities.

During Construction:

1. **Best Management Practices shall be employed** as BUOWs are known to use open pipes, culverts, excavated holes, and other burrow-like structures at construction sites. Legally permitted active construction projects which are BUOW occupied and have followed all protocol in this mitigation section, or sites within 450 feet of occupied BUOW areas, should undertake measures to discourage BUOWs from recolonizing previously occupied areas or colonizing new portions of the site. Such measures include, but are not limited to, ensuring that the ends of all pipes and culverts are covered when they are not being worked on, and covering rubble piles, dirt piles, ditches, and berms.

2. **On-going BUOW Detection** - If BUOWs or active burrows are not detected during the pre-construction surveys, Section "A" below shall be followed. If BUOWs or burrows are detected during the pre-construction surveys, Section "B" shall be followed. NEITHER THE MSCP SUBAREA PLAN NOR THIS MITIGATION SECTION ALLOWS FOR ANY BUOWs TO BE INJURED OR KILLED OUTSIDE **OR** WITHIN THE MHPA; in addition, IMPACTS TO BUOWs WITHIN THE MHPA MUST BE AVOIDED.

   A. Post Survey Follow Up if Burrowing Owls and/or Signs of Active Natural or Artificial Burrows Are <u>Not</u> Detected During the Initial Pre-Construction Survey - Monitoring the site for new burrows is required using CDFW Staff Report 2012 Appendix D methods for the period following the initial pre-construction survey, until construction is scheduled to be complete and is complete *(NOTE - Using a projected completion date (that is amended if needed) will allow development of a monitoring schedule).*

   1) If no active burrows are found but BUOWs are observed to occasionally (1-3 sightings) use the site for roosting or foraging, they should be allowed to do so with no changes in the construction or construction schedule.

   2) If no active burrows are found but BUOWs are observed during follow up monitoring to repeatedly (4 or more sightings) use the site for roosting or foraging, the City's MMC and MSCP Sections shall be notified and any portion of the site where owls have been sites and that has not been graded or otherwise disturbed shall be avoided until further notice.

   3) If a BUOW begins using a burrow on the site at any time after the initial pre-construction survey, procedures described in Section B must be followed.

   4) Any actions other than these require the approval of the City and the Wildlife Agencies.

   B. Post Survey Follow Up if Burrowing Owls and/or Active Natural or Artificial Burrows are detected during the Initial Pre-Construction Survey - Monitoring the site for new burrows is required using Appendix D CDFG 2012, Staff Report for the period following the initial pre-construction survey, until construction is scheduled to be complete and is complete *(NOTE - Using a projected completion date (that is amended if needed) will allow development of a monitoring schedule which adheres to the required number of surveys in the detection protocol).*

   1) This section (B) applies only to sites (including biologically defined territory) wholly outside of the MHPA – **all direct and indirect impacts to BUOWs within the MHPA <u>SHALL</u> be avoided.**

   2) If one or more BUOWs are using any burrows (including pipes, culverts, debris piles *etc.*) on or within 300 feet of the proposed construction area, the City's MMC and MSCP Sections shall be contacted. The City's MSCP and MMC Section shall contact the Wildlife Agencies regarding eviction/collapsing burrows and enlist appropriate City biologist for on-going coordination with the Wildlife Agencies and the qualified consulting BUOW biologist. No construction shall occur within 300

feet of an active burrow without written concurrence from the Wildlife Agencies. This distance may increase or decrease, depending on the burrow's location in relation to the site's topography, and other physical and biological characteristics.

a) **Outside the Breeding Season** - If the BUOW is using a burrow on site outside the breeding season (i.e., September 1 – January 31), the BUOW may be evicted after the qualified BUOW biologist has determined via fiber optic camera or other appropriate device, that no eggs, young, or adults are in the burrow. Eviction requires preparation of an Exclusion Plan prepared in accordance with CDFW Staff Report 2012, Appendix E (or most recent guidance available) for review and submittal to Wildlife Agencies. Written concurrence from the Wildlife Agencies is required prior to Exclusion Plan implementation.

b) **During Breeding Season** - If a BUOW is using a burrow on-site during the breeding season (Feb 1-Aug 31), construction shall not occur within 300 feet of the burrow until the young have fledged and are no longer dependent on the burrow, at which time the BUOWs can be evicted. Eviction requires preparation of an Exclusion Plan prepared in accordance with CDFW Staff Report 2012, Appendix E (or most recent guidance available) for review and submittal to Wildlife Agencies. Written concurrence from the Wildlife Agencies is required prior to Exclusion Plan implementation.

3. **Survey Reporting During Construction -** Details of construction surveys and evictions (if applicable) carried out shall be immediately (within 5 working days or sooner) reported to the City's MMC, and MSCP Sections and the Wildlife Agencies and must be provided in writing (as by e-mail) and acknowledged to have been received by the required Agencies and DSD Staff member(s).

Post Construction:

1. Details of the all surveys and actions undertaken on-site with respect to BUOWs (i.e. occupation, eviction, locations etc.) shall be reported to the City's MMC Section and the Wildlife Agencies within 21 days post-construction and prior to the release of any grading bonds. This report must include summaries off all previous reports for the site; and maps of the project site and BUOW locations on aerial photos.

4.5.4 Waters of the U.S., Waters of the State, and City Wetlands

The constructed drainage channel in the northwest corner of the site (disturbed wetland on Figure 3) is incised with a clear Ordinary High Water Mark that reflects the constructed channel limits. Based on the vegetation present, the channel appears to support intermittent flows of water following rainfall events. Given the presence of wetland vegetation and clear signs of stream flow, this drainage is anticipated to be jurisdictional to one or more regulatory agency.

The proposed undergrounding of the southern segment of the existing western power line has also been designed to avoid this feature. The line will remain underground except at the drainage crossing, where it will continue above ground to preclude ground disturbance. As such, the utility improvements would not affect potential jurisdictional waters or City wetlands.

4.5.5 Wildlife Corridors

The site is surrounded by industrial land uses north of State Route 905, residential land uses to the east, vacant and commercial land uses to the south, and residential and commercial land uses to the west. The project site, therefore, is largely surrounded by existing development that severely limits, or even precludes, it from connecting off-site habitat areas.

5.0 MSCP COMPLIANCE

5.1 GENERAL PLANNING POLICIES AND DESIGN GUIDELINES

Section 1.4.2 of the City's Subarea Plan includes General Planning Policies and Design Guidelines that have been applied in the review and approval of development projects within or adjacent to the MHPA. Since the project site is not within or adjacent to the MHPA, these policies and guidelines do not apply.

5.2 GENERAL MANAGEMENT DIRECTIVES

General management directives have been prescribed for all areas of the City's MSCP Subarea Plan, as appropriate. One directive that applies to the project is listed below.

> *Mitigation shall be performed in accordance with ESL Regulations and the City's Biology Guidelines.*
>
> The mitigation in Section 7.0 of this report has been formulated to satisfy the requirements of the City's MSCP Subarea Plan, ESL Regulations, and Biology Guidelines.

A second directive may apply to the project if the constructed drainage channel on site is considered a "flood control channel" by the City.

> *Perform standard maintenance, such as clearing and dredging of existing flood channels, during the non-breeding or nesting season of sensitive bird or wildlife species utilizing the riparian habitat. For the least Bell's vireo, the non-breeding season generally includes mid-September through mid-March.*
>
> If the City determines that the constructed drainage channel on site is a "flood control channel," the project would comply with this directive. It should be noted that the disturbed wetland habitat in the drainage channel is not suitable for least Bell's vireo (*Vireo bellii pusillus*) nesting but may support nesting of other avian species protected by the MBTA and California Fish and Game Code.

Directives related to Restoration; Public Access, Trails, and Recreation; Adjacency Management Issues; Invasive Exotics Control and Removal; and Litter/Trash and Materials Storage are not applicable to the project as follows.

Restoration of habitat is not proposed as part of the project.

The project is a residential development with plans to allow for the future development of a 3.5-acre park on the developed site that may provide for public access, trails, and recreation, but they would be contained within the developed park.

Since the project site is not adjacent to (or within) the MHPA, there would be no adjacency management issues.

The project would remove all vegetation from the site during construction (most of which is comprised of non-native species; Appendix A) except for vegetation within the disturbed wetland and its avoidance buffer. The project would not introduce invasive, exotic species into the MHPA because the project site is not within or adjacent to the MHPA.

The project would provide appropriate trash receptacles/bins and would receive municipal trash service. The site is not within or adjacent to the MHPA; therefore, any materials storage would not impact the MHPA.

There are no wildlife corridor undercrossings on the project site to be kept free of debris or obstructions.

6.0 PROJECT IMPACT ANALYSIS

The City's CEQA Significance Determination Thresholds (Appendix I to City 2018) are used to establish whether there is a significant effect defined as a "substantial or potentially substantial adverse change in the environment," which can be direct or indirect, cumulative, and permanent or temporary. The determination of significance for the project's impacts is presented beginning in Section 6.1 of this report.

6.1 DIRECT IMPACTS

Direct impacts immediately alter the affected biological resources such that those resources are eliminated temporarily or permanently. All direct project impacts would be permanent.

6.1.1 Vegetation Communities

Except for the disturbed wetland and the approximately 30-foot-wide buffer, the entire site and off-site impact areas for roadway improvements would be directly and permanently impacted by the project (Figure 3; Table 6). All impacts would be to disturbed and developed land.

Table 6 IMPACTS TO VEGETATION COMMUNITIES/LAND COVER TYPES AND PROPOSED MITIGATION (acres)					
Vegetation Community/Land Cover Type[1]	**Existing on Site**	**Impacts**			**Mitigation**
		On Site	**Off Site[2]**	**Total**	
Disturbed Wetland (No tier)	0.05	0.0	0.0	0.0	NA
Disturbed Land (Tier IV)	38.5	38.4	0.3	38.7	NA
Developed land (No tier)	0.3	0.3	0.8	1.1	NA
TOTAL	**38.85**	**38.7**	**1.1**	**39.8**	**NA**

[1]Tiers=level of sensitivity. Tier I is most sensitive; Tier IV is least sensitive. Tier IV habitat impacts do not require mitigation. Developed has no tier and is not sensitive; impacts do not require mitigation.
[2]Off-site impacts occur within developed limits of Cactus Road and Continental Street.

Analysis of Significance of Impacts to Vegetation Communities

There would be no impacts to disturbed wetland; the project was specifically designed to avoid it and would provide a 30-foot-wide avoidance buffer.

According to the City's Biology Guidelines (City 2018), lands designated as Tier IV are not considered to have significant habitat value; therefore, the project's impacts to Tier IV disturbed land would not be significant, and no mitigation would be required. Impacts to developed land (no tier) are also not significant. No mitigation would be required.

Table 7 shows the mitigation ratios applicable to the project per Table 3 of the Biology Guidelines.

Table 7
UPLAND MITIGATION RATIOS APPLICABLE TO THE PROJECT

Tier	Habitat Type	Mitigation Ratios
Tier IV (other uplands)	Disturbed Land	Location of Preservation

		Inside	Outside
Location of Impact	Inside	0:1	0:1
	Outside	0:1	0:1

6.1.2 Sensitive Plant Species

No sensitive plant species occur on site.

6.1.3 Sensitive Animal Species

One sensitive animal species, California horned lark, was observed on site with a nest in disturbed land habitat that happens to be within the avoidance buffer for the disturbed wetland (Figure 3).

Analysis of Significance of Impacts to Sensitive Animal Species

The California horned lark is considered to have a low level of sensitivity as a current State Watch List species. It used to be a State Species of Special Concern but no longer has that more elevated status. The California horned lark is a "common to abundant resident in a variety of open habitats, usually where trees and large shrubs are absent. Found from grasslands along the coast and deserts near sea level to alpine dwarf-shrub habitat above treeline." (Zeiner et al. 1988-1990). The loss of disturbed land on site is not considered a significant impact to the species due to its use of a "variety of open habitats."

Impacts to the species' nesting, however, wherever it may occur on site, would be significant as its nesting is protected by the MBTA and California Fish and Game Code. Potential impacts to California horned lark nesting would be avoided through project compliance with the MBTA and California Fish and Game Code (see Section 3.1 of this report) as well as implementation of the City's Standard Biological Resource Protection Measures, which are conditions of approval for the project. Therefore, no mitigation would be required.

6.1.4 Sensitive Species with Potential to Occur

Tables 3 and 4 presented lists of the sensitive and MSCP Narrow Endemic plant species evaluated for their potential to occur on site. These species are either not expected or have low potential to occur. Therefore, impacts to these species are not anticipated.

Table 5 presented a list of sensitive animal species evaluated for their potential to occur on site. All but one (i.e., BUOW) of these species is not expected to occur or has low potential to occur. Impacts to these species, therefore, are not anticipated.

The BUOW was not found during the focused survey for the species in 2024 nor was any evidence of BUOW use/occupation of the site found. However, there is still potential for the species to occupy the site prior to or during construction and be impacted. The impacts could involve injury or mortality to individuals from construction grading, earthmoving, burrow blockage, and heavy equipment compacting/crushing burrow tunnels.

Analysis of Significance of Impacts to Sensitive Species with Potential to Occur

The BUOW (an MSCP Covered Species) is only considered adequately conserved as part of the MSCP if measures are taken to avoid impacts to the species. Therefore, should the site become occupied by the BUOW prior to or during construction, direct impacts to individual owls could be significant. Permit conditions would be incorporated to address these potential impacts.

6.1.5 Waters of the U.S., Waters of the State, and City Wetlands

The constructed drainage channel in the northwest corner of the site supports 0.05 acre of disturbed wetland habitat (Figure 3). Based on the vegetation present, the channel appears to support intermittent flows of water following rainfall events. Given the presence of wetland vegetation and clear signs of stream flow, this drainage is anticipated to be jurisdictional to one or more regulatory agency, including the City as City Wetland.

Analysis of Significance of Impacts to Waters of the U.S., Waters of the State, and City Wetlands

The project has been specifically designed to avoid this constructed drainage channel and disturbed wetland with an approximately 30-foot-wide avoidance buffer. The first 20 feet from the channel is the ESL buffer. An additional 10-foot-wide buffer outside the ESL buffer would be planted with a coastal sage scrub seed mix that meets brush management requirements. Additionally, a water retention basin would be constructed adjacent to the avoidance buffer that would further protect the disturbed wetland through the treatment of storm water runoff from the project site before it enters the channel.

With this designed avoidance, the project would not impact potential Waters of the U.S. and State, and no regulatory agency permits would be required. Avoidance of this drainage channel and its protection with a buffer also eliminates impacts to potential City Wetland, thereby avoiding the need for a deviation from ESL Regulations. A wetland buffer analysis is provided below that explains how the buffer would protect the functions and values of the potential City Wetland.

Wetland Buffer Analysis

City Biology guidelines require that, "A wetland buffer shall be maintained around all wetlands as appropriate to protect the functions and values of the wetland. Section 320.4(b)(2) of the U.S. Army Corps of Engineers General Regulatory Policies list criteria for consideration when evaluating wetlands functions and values."

An approximately 30-foot-wide wetland avoidance buffer has been incorporated adjacent to the disturbed wetland (Figure 3). This buffer is considered adequate to protect the functions and values of the wetland as explained below for each of the eight Section 320.4(b)(2) General Regulatory Policies criteria.

(i) Wetlands which serve significant natural biological functions, including food chain production, general habitat and nesting, spawning, rearing and resting sites for aquatic or land species.

The potential City Wetland is highly disturbed and supports species such as castor bean, shrubby arroyo willow, and Mexican fan palm. While some animal species may utilize the habitat as a source of water when it is intermittently present and may utilize the habitat for some foraging, or potentially nesting, sensitive animal species are not really expected to occur there (see Table 5). The California horned lark was found adjacent to the disturbed wetland in disturbed land, and as noted earlier, utilizes a "variety of open habitats." While it may use the disturbed wetland for foraging, it is not likely to use it for nesting.

While the disturbed wetland habitat probably provides some value to wildlife, it is generally not considered to serve significant natural biological functions because the habitat is so disturbed and of limited areal extent. The buffer would, therefore, be adequate to protect the above-listed, relevant biological functions of the potential wetland.

(ii) Wetlands set aside for study of the aquatic environment or as sanctuaries or refuges.

The potential wetland is not within the MHPA; rather, it is within a constructed drainage channel and not set aside for study, sanctuary, or refuge.

(iii) Wetlands the destruction or alteration of which would affect detrimentally natural drainage characteristics, sedimentation patterns, salinity distribution, flushing characteristics, current patterns, or other environmental characteristics.

The potential wetland is within a constructed drainage channel that would not be destroyed or altered, and it would be protected by a buffer.

(iv) Wetlands which are significant in shielding other areas from wave action, erosion, or storm damage. Such wetlands are often associated with barrier beaches, islands, reefs and bars.

The potential wetland is not associated with barrier beaches, islands, or other such features; therefore, it does not provide shielding from wave action or erosive waves.

(v) Wetlands which serve as valuable storage areas for storm and flood waters.

The potential wetland may provide some storm and flood water storage, but that is limited given its narrowness and/or limited areal extent. The wetland buffer would ensure no net loss of any storm or flood water storage function.

(vi) Wetlands which are ground water discharge areas that maintain minimum baseflows important to aquatic resources and those which are prime natural recharge areas.

The potential wetland may contribute to groundwater recharge, but that is limited given its narrowness and/or limited areal extent. The wetland buffer would ensure no net loss of any ground water discharge/recharge.

(vii) Wetlands which serve significant water purification function.

The potential wetland may contribute to water purification but in a limited manner given its limited areal extent. The wetland buffer (and adjacent detention basin) would ensure no net loss of any water purification function.

(viii) Wetlands which are unique in nature or scarce in quantity to the region or local area.

The potential wetland is sensitive because wetlands have been significantly reduced in areal extent in the region. However, the project would avoid direct impacts to the wetland and would provide a buffer to protect its functions and values.

Therefore, direct (and indirect) impacts to potential wetland are not anticipated from the project.

6.1.6 Wildlife Corridors

The project site is largely surrounded by existing development, which severely limits, or even precludes, it from connecting off-site habitat areas. Therefore, the project would not significantly alter wildlife movement. No mitigation would be required.

6.2 INDIRECT IMPACTS

Indirect impacts consist of secondary effects of a project that can occur temporarily during construction or permanently from a project once built. Since the project site is surrounded by existing development, potential indirect impacts on sensitive biological resources (e.g., excessive noise or night-time lighting) would not occur.

6.3 CUMULATIVE IMPACTS

The MSCP was designed to compensate for the cumulative loss of biological resources throughout the San Diego region. Projects that conform to the MSCP as specified by the City's Subarea Plan and implementing ordinances, (i.e., Biology Guidelines and ESL Regulations) are not expected to result in a significant cumulative impact for those biological resources adequately covered by the MSCP. These resources include the vegetation communities identified as Tier I through IV and MSCP Covered Species (City 2018). The project would comply with the City's Subarea Plan, in accordance with ESL Regulations and the City's Biology Guidelines.

Other projects in the City would also be required to comply with the City's Subarea Plan. Therefore, the project would not contribute considerably to cumulatively significant impacts on sensitive biological resources in the City.

7.0 MITIGATION PROGRAM

While the BUOW was not found on site nor was evidence of BUOW use/occupation of the site found, there is a CNDDB record for the species near the site, and there is moderate potential for the BUOW to use the project site prior to or during construction. Project impacts to the BUOW could involve injury or mortality to individuals from construction grading, earthmoving, burrow blockage, and heavy equipment compacting/crushing burrow tunnels. The project would comply with the BUOW ASMDs as described in Section 4.5.3 of this report to address these potential impacts. These compliance measures would be incorporated as a permit condition.

The project is also required to comply with all applicable federal, State, and local regulations (see Section 3.1 of this report) as well as the City's standard Mitigation Monitoring and Reporting Program Biological Resources Protection During Construction. Successful compliance with the applicable measures and regulations would ensure that potential significant impacts do not occur, and no mitigation is required.

8.0 REFERENCES

Alden Environmental, Inc. 2021. Biological Technical Report for the Britannia Airway Logistics Center Project. December 17.

American Ornithological Society. 2023. Checklist of North and Middle American Birds. https://americanornithology.org/publications/north-and-middle-american-checklist/

California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. March 7.

California Department of Fish and Wildlife. 2024. Special Animals List. July. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline

California Native Plant Society. 2024. Rare Plant Inventory (online edition, v9.5). https://www.rareplants.cnps.org

City of San Diego. 2019. Addendum to a Program Environmental Impact Report, Project Number 555609, Addendum to PEIR No. 30330/304032, SCH No. 2004651076, Lumina Tentative Map, Right-of-Way Vacation, Easement Vacation, Neighborhood Development Permit, Site Development Permit, and MHPA Boundary Line Adjustment.

2018. Land Development Code – Biology Guidelines, as amended February 1, 2018. City of San Diego Development Services Department.

2017. Final City of San Diego Vernal Pool Habitat Conservation Plan. October. https://www.sandiego.gov/sites/default/files/vph-cp.pdf

2014. Otay Mesa Community Plan Update Final Environmental Impact Report. Revised February 21.

1997a. Multiple Species Conservation Program. City of San Diego MSCP Subarea Plan. March.

1997b. City of San Diego MSCP Implementing Agreement Documents.

Crother, B.I. 2008. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding. Sixth Edition. Society for the Study of Amphibians and Reptiles. Herpetological Circular # 37. January.

Hickman, J.C., ed. 1993. The Jepson Manual: Higher Plants of California. University of California Press, Berkeley, 1400 pp.

Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California, The Resources Agency. 156 pp.

Jones, J.K., D.C. Carter, H.H. Genoways, R.S. Hoffman and D.W. Rice. 1992. Revised Checklist of North American Mammals North of Mexico. Occasional Papers of the Museum, Texas Tech University 80: 1-22.

Nationwide Environmental Title Research, LLC. 2024. Historic Aerials by NETRONLINE. https://www.historicaerials.com/viewer

Natural Resources Conservation Service. 2024. Web Soil Survey. https://www.nrcs.usda.gov/resources/data-and-reports/web-soil-survey

Oberbauer, T., M. Kelly, and J. Buegge. 2008. Vegetation Communities of San Diego County. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California," R.F. Holland, 1986. 73 pp.

U.S. Fish and Wildlife Service. 2018. Native Endangered and Threatened Sp. Habitat Conservation Plan Endangered & Threatened Wildlife Permit Number: TE97791C-0. Effective: 08/03/18 Expires: 07/18/2047

2014. Quino Checkerspot Butterfly Survey Protocol. February 21.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California.

9.0 PREPARER'S QUALIFICATIONS/CERTIFICATIONS

Greg Mason, Principal/Senior Biologist, Alden Environmental, Inc.

Summary of Qualifications

Mr. Mason is the Principal and Senior Biologist at Alden Environmental, Inc. He has over 20 years' experience working in the environmental field and has participated in hundreds of projects in San Diego County. His experience includes oversight of large- and small-scale mitigation compliance programs, including habitat restoration, sensitive species surveys, vegetation mapping, wetland delineations, construction monitoring, impact analysis, report preparation, project permitting, and project management. He has worked extensively with both public and private clients, in coordination with federal, state and local regulatory staff, in the implementation of mitigation and monitoring programs in the field. He assists clients in obtaining aquatic resources permits including U.S. Army Corps Section 404 Permits, RWQCB Section 401 Certifications, and CDFW 1600 Streambed Alteration Agreements. Through his permitting work, Mr. Mason also facilitates the Section 7 consultation process with the USFWS and negotiates conservation measures. Mr. Mason is permitted by the USFWS to conduct presence/absence surveys for Quino checkerspot butterfly; San Diego, Riverside, vernal pool, Conservancy, and longhorn fairy shrimps; and vernal pool tadpole shrimp throughout the range of each species, and is also authorized to conduct dry season fairy shrimp analysis, identification, and culturing.

Professional Experience

Jr. Environmental Planner	HELIX Environmental Planning, Inc., La Mesa, CA	1992 - 1993
Peace Corps Volunteer	U.S. Peace Corps, Paraguay	1993 - 1996
Environmental Planner	Helix Environmental Planning, Inc., La Mesa, CA	1996 - 1998
Biologist	Helix Environmental Planning, Inc., La Mesa, CA	1998 - 2001
Biology Group Manager	Helix Environmental Planning, Inc., La Mesa, CA	2001 - 2004
Division Manager, Biological Services	Helix Environmental Planning, Inc., La Mesa, CA	2004 - 2008
Vice President, Biological Services	Helix Environmental Planning, Inc., La Mesa, CA	2008 - 2011
Principal and Senior Biologist	Alden Environmental, Inc., San Diego, CA	2011 - Present

Education

Bachelor of Science, Natural Resources Planning & Interpretation, Humboldt State University, 1992

Registrations/Certifications/Licenses

- USFWS Threatened/ Endangered Wildlife Species Permit (quino checkerspot butterfly; San Diego, Riverside, vernal pool, Conservancy, and longhorn fairy shrimps; and vernal pool tadpole shrimp)
- USFWS authorized for dry season fairy shrimp analysis, identification, and culturing
- CDFW Scientific Collecting Permit SC-007619
- County of San Diego, Approved Biological Consultant and Approved Revegetation Planner

Professional Affiliations

- California Native Plant Society
- Returned Peace Corps Volunteer Association

Appendix A
PLANT SPECIES OBSERVED – COLLECTION AT CACTUS

FAMILY	SCIENTIFIC NAME	COMMON NAME
MONOCOTS		
Cyperaceae	*Cyperus* sp.[1]	umbrella sedge
Poaceae	*Avena fatua*[1]	wild oat
	Bromus diandrus[1]	common ripgut grass
	Bromus madritensis ssp. *rubens*[1]	foxtail chess
DICOTS		
Apiaceae	*Foeniculum vulgare*[1]	fennel
Aracaceae	*Washingtonia robusta*[1]	Mexican fan palm
Asteraceae	*Baccharis salicifolia*	mule fat
	Baccharis sarothroides	broom baccharis
	Centaurea melitensis[1]	tocalote
	Glebionis coronaria[1]	garland daisy
Brassicaceae	*Brassica nigra*[1]	black mustard
	Hirschfeldia incana[1]	shortpod mustard
Euphorbiaceae	*Ricinus communis*[1]	castor bean
Geraniaceae	*Erodium cicutarium*[1]	red-stem filaree
Malvaceae	*Malva parviflora*[1]	cheeseweed
Salicaceae	*Salix lasiolepis*	arroyo willow
Solanaceae	*Nicotiana glauca*[1]	tree tobacco
Typhaceae	*Typha latifolia*	broad-leaved cattail

[1]Non-native species

Appendix B
ANIMAL SPECIES OBSERVED/DETECTED – COLLECTION AT CACTUS

SCIENTIFIC NAME	COMMON NAME
VERTEBRATES	
Birds	
Agelaius phoeniceus	red-winged blackbird
Calypte anna	Anna's hummingbird
Charadrius vociferus	killdeer
Corvus brachyrhynchos	American crow
Eremophila alpestris actus[1]	California horned lark
Geothlypis trichas	common yellowthroat
Haemorhous mexicanus	house finch
Melospiza melodia	song sparrow
Mimus polyglottus	northern mockingbird
Passer domesticus	house sparrow
Sayornis nigricans	black phoebe
Sayornis saya	Say's phoebe
Spinus psaltria	lesser goldfinch
Sturnella neglecta	western meadowlark
Zenaida macroura	mourning dove

[1]Sensitive species

Appendix C
Representative Photographs- April 18, 2023

Photo Point 1.


Photo Point 2.

Photo Point 3.

Photo Point 4.

Photo Point 5.

Photo Point 6.

Photo Point 7.

Photo Point 8.

Photo Point 9.

Photo Point 10.

Photo Point 11.

Photo Point 12.

Photo Point 13.

Photo Point 14.

Photo Point 15.

Photo Point 16.

Photo Point 17.

Photo Point 18.

Photo Point 19.

Photo Point 20.

Photo Point 21.

Photo Point 22.

Photo Point 23.

Appendix D

Burrowing Owl Survey Report

ALDEN ENVIRONMENTAL, INC
3245 University Ave, #1188 | San Diego, CA 92104 | **Phone/Fax:** 619.284.3815

July 1, 2024

Mr. Conner Kloeppel
JPI Companies
12250 El Camino Real, Suite 380
San Diego, CA 92130

Subject: Burrowing Owl Survey Report for the Collection at Cactus Project Site

Dear Mr. Kloeppel:

This letter presents the results of the 2024 nesting season survey for the burrowing owl (*Athene cunicularia*; BUOW) conducted on the approximately 39-acre Collection at Cactus Project Site.

LOCATION AND SITE DESCRIPTION

The project site encompasses one Assessor's Parcel Number: 646-100-77 and consists of undeveloped land located in the Central Valley Specific Plan Area of the Otay Mesa Community in the City of San Diego (City). The site is bordered to the north by State Route 905, to the south by Airway Road, to the west by Cactus Road, and partially bordered to the east by Continental Street (Figures 1 and 2). The site is surrounded by industrial land uses north of State Route 905, residential land uses to the east, vacant and commercial land uses to the south, and residential and commercial land uses to the west. The site is in the southeast quarter of Section 33 in Township 18 South, Range 1 West of the U.S. Geological Survey Otay Mesa 7.5-minute quadrangle.

The project site is not located within or adjacent to the City's Multiple Species Conservation Program Multi-habitat Planning Area or Vernal Pool Habitat Conservation Plan Area (preserves), and it is outside the coastal zone. The nearest MHPA land occurs approximately 500 feet to the west in Spring Canyon (Figure 2).

Elevation on site ranges from approximately 505 to 525 feet above mean sea level, sloping from northwest to southeast. Soils on site are mapped as Stockpen gravelly clay loam (0 to 2 percent and 2 to 5 percent slopes) and Olivenhain cobbly loam (30 to 50 percent slopes; Natural Resources Conservation Service 2024).

According to historic aerial imagery, the site consists of land that was in agricultural production as far back as 1953 and has been fallow and otherwise disturbed (for example, by trash dumping) since some time in the 1990s (Nationwide Environmental Title Research, LLC 2024). It does appear that the site is now being regularly mowed or tilled.

METHODS

Biologists Andrew Kort, Julian Isacescu-Bernard, and Thomas Grigolite conducted the BUOW survey according to the methods in the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012). Information for the survey is provided in Table 1. Field notes are included as Attachment A. Representative site photographs are included as Attachment B. A list of all bird species observed during the survey is included as Attachment C.

Table 1
Burrowing Owl Survey Information

Survey Number	Date	Biologist	Time	Weather Conditions (start/stop)
1	2/19	Andrew Kort	0600-1000	100%, 55°F, wind 1-4 mph/ 100%, 60°F, wind 0-2 mph
1	2/20	Andrew Kort	0615-0915	100%, 54°F, wind 1-4 mph/ 100%, 58°F, wind 0-2 mph
2	4/15	Andrew Kort, Julian Isacescu-Bernard	0710-1000	80%, 57°F, wind 1-3 mph/ 75%, 64°F, wind 0-2 mph
3	5/6	Andrew Kort, Julian Isacescu-Bernard	0700-1000	0%, 56°F, wind 0-1 mph/ 0%, 70°F, wind 1-3 mph
4	6/20	Thomas Grigolite	0830-1000	80%, 62°F, wind 3-5 mph/ 0%, 69°F, wind 4-6 mph
4	6/21	Thomas Grigolite	0530-1000	100%, °F, wind 1-2 mph/ 0%, °F, wind 1-3 mph

The entire site was considered potential habitat for the BUOW. The site was examined by walking transects spaced approximately 20 meters apart while looking for BUOW and potential burrows or perches that could be used by the BUOW. Additionally, at the start of each transect and every 100 meters, the site was scanned with binoculars to look for BUOW. The BUOW is known to occupy California ground squirrel (*Otospermophilus beecheyi*) burrows; therefore, particular attention is paid to any areas along fence lines, or other locations where squirrel activity might occur. Dirt piles, drainages, and culverts are also carefully examined as these sites can often provide cavities that can support the species. The determination of owl presence is made by direct BUOW observation or by sign such as, but not necessarily limited to, excavated soil, whitewash (excrement), castings (pellets), and/or feathers.

SURVEY RESULTS

No BUOW or potential BUOW sign/evidence was observed during the survey. A rodent burrow considered potentially suitable for the BUOW was found; however, no evidence of BUOW activity was detected in the vicinity. Based on the negative results of the 2024 survey, the site is not anticipated to be occupied (active burrows) by the BUOW.

Please contact me if you have any questions.

Sincerely,

Greg Mason
Senior Biologist

Enclosures:

Figure 1	Regional Location Map
Figure 2	Project Location Map
Figure 3	Survey Results
Attachment A	Field Notes
Attachment B	Representative Photographs
Attachment C	Bird Species Observed

References:

California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. March 17.

Nationwide Environmental Title Research, LLC. 2024. Historic Aerials by NETRONLINE. https://www.historicaerials.com/viewer

Natural Resources Conservation Service. 2024. Web Soil Survey. https://www.nrcs.usda.gov/resources/data-and-reports/web-soil-survey

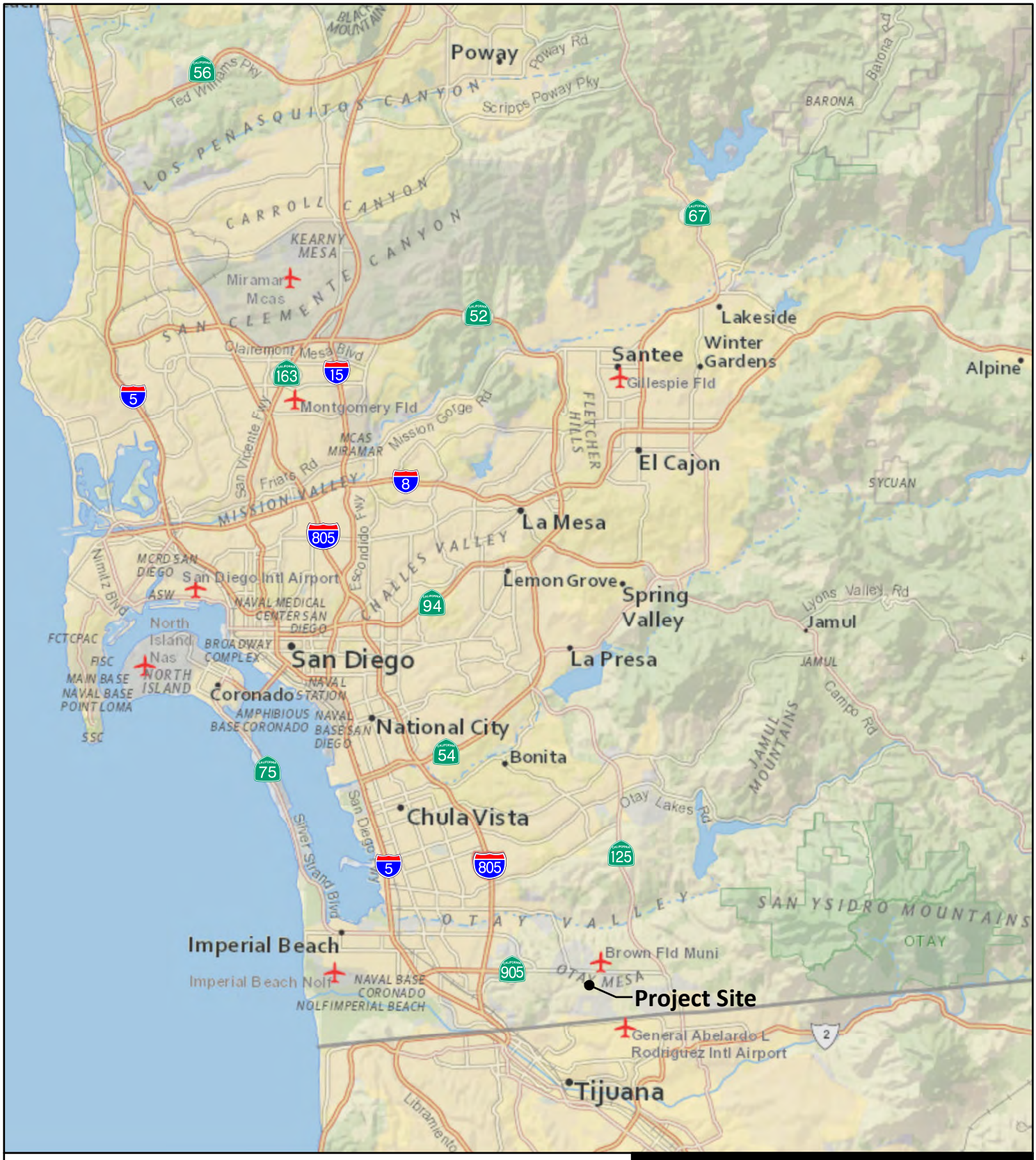
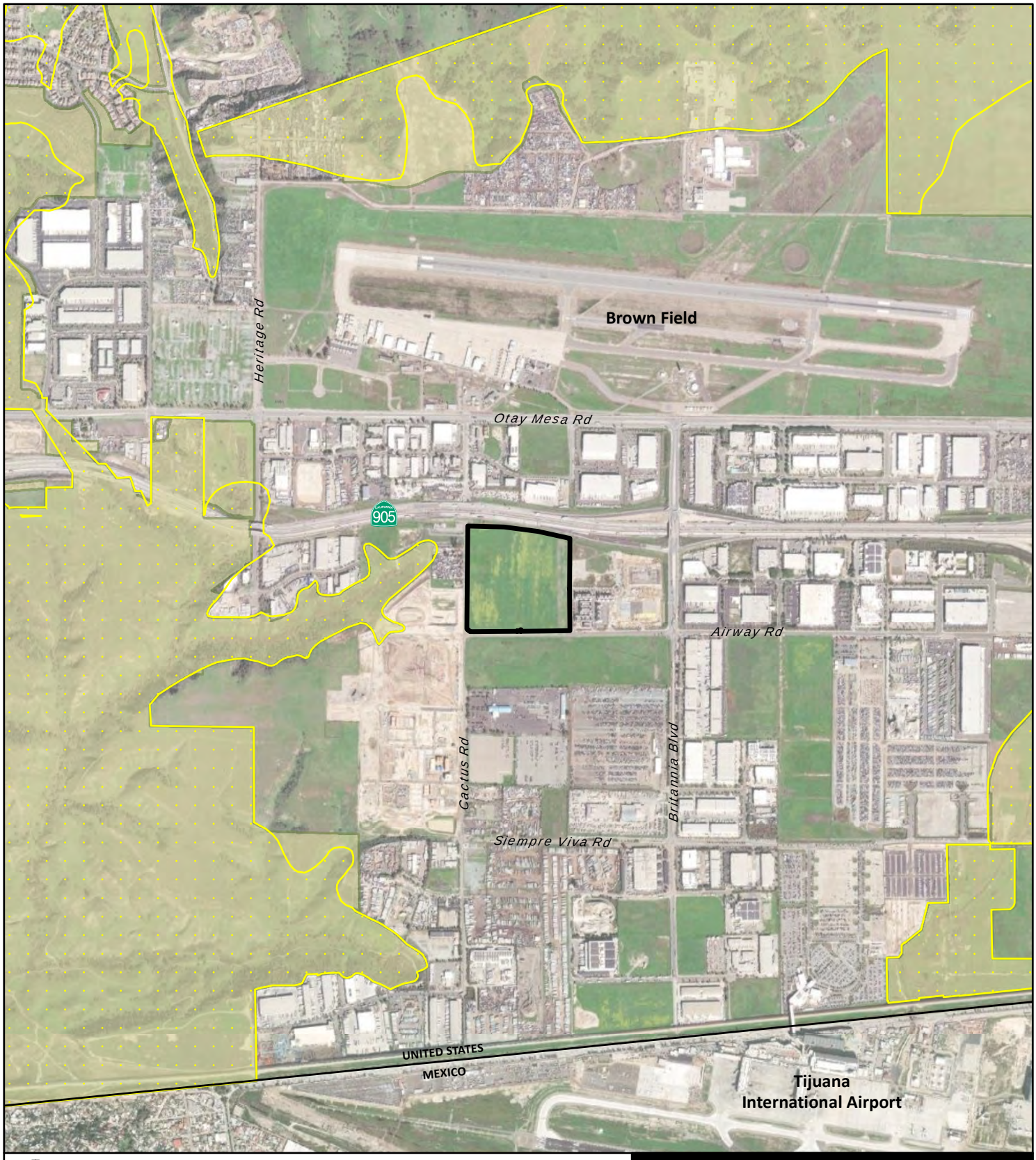


Figure 1

Regional Location

COLLECTION AT CACTUS PROJECT
2024 BURROWING OWL SURVEY

ALDEN ENVIRONMENTAL, INC



Parcel Boundary
City of San Diego MHPA
City of San Diego VPHCP

N
W E
S

0 1,000 2,000 Feet

ALDEN ENVIRONMENTAL, INC

Figure 2

Project Location

COLLECTION AT CACTUS PROJECT
2024 BURROWING OWL SURVEY

Parcel Boundary
Survey Area
Rodent Burrow

Vegetation

Disturbed Wetland
Disturbed Land
Developed

[1] No burrowing owls, or evidence of burrowing owl occupation observed.

N
W E
S

0 100 200
Feet

ALDEN
ENVIRONMENTAL, INC

Figure 3

Survey Results [1]

COLLECTION AT CACTUS PROJECT
2024 BURROWING OWL SURVEY

Attachment A

Field Notes

JPI-02 Cactus Phase II BUOW Survey #1 Notes

Andrew Kort <andrew@busbybiological.com>

Mon 2/19/2024 4:39 PM

To:Sarah Sanaee <ssanaee@aldenenv.com>

Hi Sarah,

Here are my notes for BUOW Survey #1 at JPI-02. Please let me know if you have any questions.

Date: 2/19/2024
Start: 0600 55° 1-4 mph 100% CC
End: 1000 60° 0-2 mph 100% CC

Survey conducted between morning civil twilight and 10:00 AM to provide the highest detection probability. Visibility was clear. Biologist walked straight-line transects spaced approximately 20 meters apart. At the start of each transect and every 100 meters the entire visible project area was scanned using binoculars. No burrowing owls or burrows detected.

Species
RWBL
AMCR
BLPH
WEME
SOSP
SAPH

Regards,

Andrew

--
Andrew Kort
Biologist

JPI-02 Cactus Phase II BUOW Survey #1 Buffer Notes

Andrew Kort <andrew@busbybiological.com>
Fri 2/23/2024 3:43 PM
To:Sarah Sanaee <ssanaee@aldenenv.com>

Hi Sarah,

Here are my notes for BUOW Survey #1 buffer at JPI-02. Please let me know if you have any questions.

Date: 2/20/2024
Start: 0615 54° 1-4 mph 100% CC
End: 0915 58° 0-2 mph 100% CC

Survey conducted between morning civil twilight and 10:00 AM to provide the highest detection probability. Visibility was clear. Biologist walked along buffer and utilized binoculars to survey areas that were inaccessible. No burrowing owls or burrows detected.

Species
RWBL
BLPH
WEME
SOSP

Regards,

Andrew

JPI-02 Cactus Phase II + Buffer BUOW Survey #2 Notes

Andrew Kort <andrew@busbybiological.com>

Mon 4/15/2024 11:30 AM

To:Sarah Sanaee <ssanaee@aldenenv.com>

Hi Sarah,

Here are my notes for BUOW Survey #2 at JPI-02 plus the buffer. Please let me know if you have any questions.

Date: 4/15/2024
Start: 0710 57° 1-3 mph 80% CC
End: 1000 64° 0-2 mph 75% CC

Survey conducted between morning civil twilight and 10:00 AM to provide the highest detection probability. Visibility was clear. Biologists walked straight-line transects spaced approximately 20 meters apart. At the start of each transect and every 100 meters the entire visible project area was scanned using binoculars. No potentially suitable burrows, burrowing owls, or sign were detected.

The vegetation within the survey area appeared to have been trimmed since the last survey. One active HOLA nest with three fledglings was detected.

Species
RWBL
WEME
SOSP
MODO
KILL
HOFI
HOLA
AMCR
NOMO
COYE
ANHU

Regards,

Andrew

--
Andrew Kort
Biologist

JPI-02 Cactus Phase II + Buffer BUOW Survey #3 Notes

Andrew Kort <andrew@busbybiological.com>

Mon 5/6/2024 12:27 PM

To:Sarah Sanaee <ssanaee@aldenenv.com>

Hi Sarah,

Here are my notes for BUOW Survey #3 at JPI-02 plus the buffer. Please let me know if you have any questions.

Date: 5/6/2024
Start: 0700 56° 0-1 mph 0% CC
End: 1000 70° 1-3 mph 0% CC
Surveyors: Andrew Kort and Julian Isacescu-Bernard

Survey conducted between morning civil twilight and 10:00 AM to provide the highest detection probability. Visibility was clear. Biologists walked straight-line transects spaced approximately 20 meters apart. At the start of each transect and every 100 meters the entire visible project area was scanned using binoculars. No potentially suitable burrows, burrowing owls, or sign were detected.

Species
RWBL
SOSP
HOLA
WEME
KILL
COYE
AMCR
HOFI
NOMO

Regards,

Andrew

--
Andrew Kort
Biologist

BUOW Survey #4 JPI-02 Cactus

Thomas Grigolite <tgrigolite@gmail.com>

Thu 6/20/2024 8:07 PM

To:Sarah Sanaee <ssanaee@aldenenv.com>
Cc:Andrew Kort <andrew@busbybiological.com>;gmason aldenenv.com <gmason@aldenenv.com>

Hi Sarah,

Here are my notes for BUOW Survey #4 survey site at JPI-02 Cactus first quarter of site. Please let me know if you have any questions.

Date: 6/20/2024
Start: 0830 62° 3-5 mph 80% CC
End: 1000 69° 4-6 mph 0% CC
Surveyors: Thomas Grigolite

Survey conducted between 0830 and 1000 to provide the highest detection probability. Visibility was clear. Biologists walked transects within the site, stopping at the end of each transect and every 100 meters to scan the survey area. No new potentially suitable burrows, burrowing owls, or sign were observed. Roughly a quarter of the site was surveyed and the remaining area plus buffer will be completed tomorrow 06-21-24.

Species
HOFI
LEGO
AMCR
HOSP

Thank you,
Thomas

BUOW Survey #4 JPI-02 Cactus

Thomas Grigolite <tgrigolite@gmail.com>

Fri 6/21/2024 1:35 PM

To:Sarah Sanaee <ssanaee@aldenenv.com>
Cc:gmason aldenenv.com <gmason@aldenenv.com>;Andrew Kort <andrew@busbybiological.com>

Hi Sarah,

Here are my notes for BUOW Survey #4 survey site at JPI-02 Cactus rest of site and buffer. Please let me know if you have any questions.

Date: 6/21/2024
Start: 0530 62° 1-2 mph 100% CC
End: 1000 70° 1-3 mph 0% CC
Surveyors: Thomas Grigolite

Survey conducted between morning civil twilight and 10:00 AM to provide the highest detection probability. Visibility was clear. Biologists walked transects within the site, stopping at the end of each transect and every 100 meters to scan the survey area. One new potentially suitable burrow was detected. No burrowing owls or signs were observed. Rest of site was surveyed, along with the buffer zone.

Species
HOLA
KIDE
AMCR
HOFI
HOSP

Thank you,
Thomas

Attachment B

Representative Photographs

Representative Photographs- April 18, 2023

Photo Point 1.

Photo Point 2.

Photo Point 3.

Photo Point 4.

Photo Point 5.

Photo Point 6.

Photo Point 7.

Photo Point 8.

Photo Point 9.

Photo Point 10.

Photo Point 11.

Photo Point 12.

Photo Point 13.

Photo Point 14.

Photo Point 15.

Photo Point 16.

Photo Point 17.

Photo Point 18.

Photo Point 19.

Photo Point 20.

Photo Point 21.

Photo Point 22.

Photo Point 23.

Attachment C

Bird Species Observed

Attachment C
BIRD SPECIES OBSERVED

SCIENTIFIC NAME	COMMON NAME
Agelaius phoeniceus	red-winged blackbird
Calypte anna	Anna's hummingbird
Charadrius vociferus	killdeer
Corvus brachyrhynchos	American crow
Eremophila alpestris	horned lark
Geothlypis trichas	common yellowthroat
Haemorhous mexicanus	house finch
Melospiza melodia	song sparrow
Mimus polyglottus	northern mockingbird
Passer domesticus	house sparrow
Sayornis nigricans	black phoebe
Sayornis saya	Say's phoebe
Spinus psaltria	lesser goldfinch
Sturnella neglecta	western meadowlark
Zenaida macroura	mourning dove