Appendix A1

Biological Resources Letter Report

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Jacumba Fire Station Project Biological Resources Letter Report

Jacumba, San Diego County, California

1.0 INTRODUCTION

Blackhawk Environmental, Inc. (Blackhawk) was contracted by Ascent Environmental to conduct a literature review, perform baseline biological and aquatic resources assessment surveys, assess existing conditions, gauge special-status species habitat suitability and provide a biological resources letter report for a 5-acre property in support of the proposed County of San Diego Department of General Services Fire Authority – Jacumba Station #43 Project (Project). The proposed Project includes a new fire station, parking lot and associated facilities of the fire station on an approximately 2.77-acre portion of the 5-acre property (Project Site). This report summarizes the existing biological conditions of the Project site.

To assess the existing conditions of the property, Blackhawk first determined if special-status plant and wildlife species occur or have potential to occur within the Project area. This report describes the results of the literature evaluation, habitat assessment and aquatic resources assessment tasks completed on the approximately 5-acre property and associated 100-foot buffer (Survey Area). The habitat assessment focused on determining the presence or potential for occurrence of sensitive biological resources required for review under the California Environmental Quality Act (CEQA) review process.

The Project footprint was reduced from 5.01 acres to 2.77 acres following the completion of this habitat and aquatic resources assessment, as well as the focused burrowing owl (Athena cunicularia) and Quino checkerspot butterfly (Euphydras editha quino) surveys.

2.0 PROJECT SETTING

The Project site is located in the unincorporated community of Jacumba in the southeast corner of the County of San Diego, California. The site is situated immediately north of Old Highway 80, east of Laguna Street, and approximately 0.36 miles north of the international border fence that separates the United States from Mexico (Attachment A, Figure 1).

The Project site is mostly flat and vegetated by non-native grassland throughout, with grading lines showing evidence of past agricultural use within the property. Elevations on the site range slightly from



2796 above mean sea level (amsl) along the southern border to 2800 feet amsl along the northern border. The Project site is open to natural areas to the north, west and east and is bounded by Old Highway 80 to the south. Undeveloped lands continue south of Old Highway 80, as well as to the north and east. Developed lands consisting of a trailer park occur to the west.

3.0 METHODS

3.1 Literature Review

Blackhawk Environmental conducted a database review consisting of a query of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2024), the United States Fish & Wildlife Service (USFWS) Information for Planning and Consultation (IPAC) database (USFWS 2024a), the USFWS Critical Habitat Portal (USFWS 2024b), and the California Native Plant Society's (CNPS) Rare Plant Inventory (CNPS 2024). A 2-mile radius surrounding the Project site was reviewed in the CNDDB and Critical Habitat Portal. For the CNPS Rare Plant Inventory, the query focused on the US Geological Service (USGS) 7.5' Jacumba quadrangle in which the Project site is located. The CNDDB contains records of reported occurrences of federal- and state-listed species, proposed endangered or threatened species, federal Birds of Conservation Concern, California Species of Special Concern (SSC), or otherwise sensitive species or communities that may occur within and/or in the vicinity of a given project. This database and literature review were used to provide details on special-status species that have a potential to occur within the Project site prior to conducting the habitat assessment. Additionally, County of San Diego Planning & Development Services provided Blackhawk a list of County sensitive species requiring analysis for the Project. All species from the database query and County list are included in Tables 3 and 4 in Section 4.2.3 below.

Reviews of the USFWS National Wetlands Inventory (NWI, USFWS 2024c) and the USGS National Hydrography Dataset (NHD, USGS 2024) were also conducted to assess any aquatic features within the Survey Area.

Utilizing the background data described above, Blackhawk Environmental biologists Seth Reimers and Hayley Milner conducted a field survey on March 13, 2024, to assess the Project site for its existing conditions and to assess its capacity to potentially harbor sensitive biological resources identified in the literature review (target species). Furthermore, species specific assessments for target species were done before/during/after subsequent field survey visits for Quino checkerspot butterfly, burrowing owl, and sensitive plant species to determine presence/absence or their potential to occur.

3.2 Habitat Assessment and Aquatic Resources Mapping

The habitat assessment was conducted on March 13, 2024. Blackhawk biologists Seth Reimers and Hayley Milner performed a pedestrian survey of the entire 5-acre property. Methods included walking belt transects spaced approximately five to 15 meters apart in addition to meandering transects. Where appropriate, the biologist paused at select vantage points to provide full visual coverage of the Project site. During the field survey, all plant and wildlife species observed or detected were recorded in field notebooks. Binoculars were used as needed to identify wildlife species. Plant species observed were identified to species level when feasible according to the nomenclature in The Jepson Manual: Vascular Plants of California Edition 2 (2012). Vegetation communities were described according to dominant plant(s) species and annotated on high-resolution aerial photographs of the



Project Area for GIS interpolation (Figure 4). The habitat assessment did not include focused or protocol level surveys for any sensitive plant or wildlife species; however, data collected during focused surveys for Quino checkerspot butterfly and burrowing owl are included in this report. Representative photos of the Project site, habitats and existing site conditions are included in Attachment B. Table 1 details the survey conditions during the habitat assessment and aquatic resources surveys.

Table 1. Habitat Assessment/Aquatic Resources Assessment Survey Conditions

| Biologists | Date | Time | Air Temperature (°F) | Wind Speed (mph) | Cloud Cover (%) | Precipitation |
|---------------------------------|-----------|-----------|-------------------------|---------------------|--------------------|---------------|
| Seth Reimers & Hayley Milner | 3/14/2024 | 0915-1125 | 51-54 | 3-7 | 65-70 | None |

Methods described below focused on determination of potential for occurrence of sensitive plant and wildlife species. Species are considered to be sensitive, and are therefore subject to analysis in this section, if they meet one or more of the following criteria:

- Plant and animal species listed as endangered (FE), threatened (FT), or candidates (FC) for listing under the Federal Endangered Species Act (ESA);
- Plant and animal species listed as endangered (SE), threatened (ST), or candidates (SC) for listing under the California Endangered Species Act (CESA);
- Animals designated as Fully Protected Species (FP), as defined in California Fish and Game Code Sections 3511, 4700, 5050, and 5515;
- Animal species designated as Species of Special Concern (SSC) by the CDFW;
- County of San Diego Sensitive Plants (Lists, A, B, C & D) and Animals (Groups 1 & 2);
- Bat species designated as High Priority (H) by the Western Bat Working Group;
- Plants that are state-listed as Rare¹; or
- Plant species ranked by the California Native Plant Society (CNPS) as having a California Rare Plant Rank (CRPR) of 1 or 2.2

Sensitive natural communities are communities that have a limited distribution and are often vulnerable to the environmental effects of projects. These communities may or may not contain sensitive species or their habitats. For purposes of this assessment, sensitive natural communities are considered to be any of the following:

Vegetation communities listed in the California Natural Diversity Database (CNDDB);

¹ Plants that were previously state listed as "Rare" have been re-designated as state threatened.

² Under the CEQA review process, only CRPR 1 and 2 species are considered, as these are the only CNPS species that meet CEQA's definition of "rare" or "endangered." Impacts to List 3 and 4 species do not meet CEQA's definition of "rare" or "endangered."



- Communities listed in the Natural Communities List with a rarity rank of \$1 (critically imperiled),
 \$2 (imperiled), or \$3 (vulnerable); or
- San Diego County General Plan (SCGP) Sensitive Wildlife Areas.

Following the habitat assessment, potentials for sensitive species to occur were evaluated based on proximity, recency and abundance of known occurrences, availability of suitable habitats, and historic distributions of the species. Potentials for occurrence were generally evaluated based on the following criteria:

- **Observed** The species was observed within the Project Area during the survey effort.
- **High** Historic records indicate that the species has been known to occur within the vicinity of the Project Area (1 mile), and suitable habitat occurs onsite.
- Moderate Historic records indicate that the species has been known to occur within the vicinity
 of the Project Area, but low-quality suitable habitat occurs onsite, or; no historic records occur
 within the vicinity of the Project Area, but the Project Area occurs within the historic range of the
 species, and moderate to high quality habitat occurs.
- **Low** Historic records indicate that the species has not been known to occupy the immediate vicinity of the Project Area, and low-quality habitat for the species exists onsite.
- **Unlikely** The species is restricted to habitats not occurring within the Project Area or is considered extirpated from the Project Area.

4.0 RESULTS

4.1 Literature Review Results

The literature review resulted in a total of 30 sensitive wildlife species, 28 sensitive plant species, and no sensitive natural communities known to occur in the vicinity of the Project. All 58 species were determined to be sensitive based on the criteria described in Section 3.2 above. The potential, species status, and habitat requirements for each sensitive wildlife and plant species are further described in Tables 2 and 3 below in Sections 4.2.5 and 4.2.6, respectively.

4.2 Habitat Assessment Results

4.2.1 Existing Land Use and Site Conditions

The Project site is mostly flat and vegetated by non-native grassland throughout. Evidence of historical agriculture use and grading within the property is evident with low grading berms running north-south throughout the Project area, which are particularly evident within the western portion of the Project. Elevations on the site range slightly from 2796 to 2800 feet amsl and gradually slope from north to south. The Project site is open to natural areas to the north and east and is bounded by Old Highway 80 to



the south. Undeveloped lands continue south of Old Highway 80, as well as to the north and east. Developed lands consisting of a trailer park occur to the west.

Total vegetative cover in the Survey Area ranged from 0% on Old Highway 80 to 100% cover in the non-native grassland habitat on the Project site. The entirety of the Project site lacked shrubs and consisted of only an herbaceous layer. The Project site provides suitable habitat for some common and sensitive plant and wildlife species known to occur in the region.

4.2.2 Aquatic Resources Assessment Results

The literature review did not yield any National Hydrography Dataset (NHD) or National Wetland Inventory (NWI) features within or immediately adjacent to the Project site (Figure 2). A north-south running stormwater conveyance channel is situated outside of the Project footprint (west) and will not be impacted by the Project. Furthermore, the field survey effort did not identify any ephemeral drainages, vernal pools, or any other isolated water features on the Project site.

Additionally, Ascent Environmental biologist Scott Gressard completed an aquatic resources assessment of the Project site in March 2024 to determine the extents of any potential jurisdictional resources within the proposed Project boundary. The assessment evaluated characteristics that would indicate a particular resource would be under the jurisdiction of the United States Army Corps of Engineers (USACE) pursuant to Section 404 of the federal Clean Water Act (CWA), under the jurisdiction of the Regional Water Quality Control Board (RWQCB) pursuant to CWA Section 401 and the Porter-Cologne Water Quality Control Act, and CDFW pursuant to Sections 1600-1603 of the California Fish and Game Code. Mr. Gressard found the Project site to consist primarily of non-native grassland within historic agricultural lands and disturbed upland habitat. No portion of the Project boundary contains indicators of jurisdictional aquatic resources (e.g., bed and bank, hydrophytic vegetation, etc.). The stormwater conveyance channel is located approximately 150 feet west of the Project boundary and carries flows south under Old Highway 80.

4.2.3 Vegetation Communities and Land Use Types

A total of three vegetation communities and/or land cover types were observed within the Survey Area, including non-native grassland, disturbed habitat, and developed areas (Figure 4). Vegetation communities were preliminarily described according to the *Draft Vegetation Communities of San Diego County based on Preliminary Descriptions of the Terrestrial Natural Communities of California* (Oberbauer et al 2008). Specific habitats were further described based on dominant plant(s) species generally characterizing the specific vegetation community.

Non-native Grassland

Non-native grassland habitat was dominated by London rocket (Sisymbrium irio), red-stem filaree (Erodium cicutarium), wall barley (Hordeum murinum), short-pod mustard (Hirschfeldia incana), and wild oat (Avena sp.). With the exception of Old Highway 80 and its disturbed roadside shoulder, the entirety of the Survey Area was comprised of herbaceous coverage, with the only shrub coverage consisting of a few scattered fourwing saltbush in the northwest corner. Herbaceous coverage ranged



between 85 and 100 percent. All wildlife species listed in Attachment D were observed/detected in non-native grassland.

Disturbed Habitat

Disturbed habitat characterized the Old Highway 80 road shoulder and consisted of mostly bare ground with sparse non-native herbaceous species such as short-pod mustard and red-stem filaree.

Developed

Developed land was void of vegetation and consisted of the pavement of Old Highway 80 running east and west through the southern portion of the Survey Area.

Table 2. Vegetation Communities/Land Use Type Present within the Project Site and Survey Area

| Vegetation Community/ Land Use Type | Project Site (Acres) | Survey Area (Acres) |
|-------------------------------------|----------------------|---------------------|
| Non-native Grassland | 2.55 | 3.20 |
| Disturbed Habitat | 0.22 | 0.38 |
| Developed | 0.00 | 0.38 |
| Subtotals: Sensitive Lands | 2.55 | 3.20 |
| TOTAL | 2.77 | 3.96 |

4.2.4 Sensitive Natural Communities

No sensitive natural communities were identified during the literature review, and except for non-native grasslands none were found during the field survey.

4.2.5 Special-Status Wildlife Species

The literature review resulted in a list of 30 special-status wildlife species with potential to occur within the Project site.

Eight special status species were found to have moderate to high potential to occur within the Project Site based on the presence of historical records within two miles of the Project site and moderate- to high-quality suitable habitat. These species include burrowing owl (Athene cunicularia; a California Species of Special Concern [SSC] and Group 1), Cooper's hawk- foraging only (Accipiter cooperii; Group 1), prairie falcon- foraging only (Falco mexicanus; and County of San Diego Group 2 species [Group 2]), turkey vulture- foraging only (Cathartes aura; Group 1), American badger (Taxidea taxus; SSC and Group 2), greater western mastiff bat- foraging only (Eumops perotis californicus; SSC and Group 2), tricolored blackbird- foraging only (Agelaius tricolor; State Threatened [ST], SSC, and Group 1), and pocketed free-tail bat- foraging only (Nyctinomops femorosaccus; SSC and Group 2). Two of the special status species were observed, or previously observed, in the surrounding area of the Project

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site. Turkey vultures were observed 550 feet west of the Project Site during the survey. Previously, the remains of an American badger were found approximately 0.67 miles east of the Project site during the 2022 burrowing owl surveys associated with a former project (Blackhawk 2022).

Three sensitive species have a low potential to occur on the Project site and 19 sensitive species are unlikely to occur within the Project site. These species are unlikely to occur or have a low potential to occur due to the absence of suitable habitat, nesting habitat, and/or roosting habitat.

All 30 sensitive species and their potentials for occurrence are further described in Table 3 below. A complete list of wildlife species observed during the survey is included in Attachment D.



Table 3. Special-Status Wildlife Species Potentially Occurring Within the Project Site

| Species Name | Listing Status | Habitat Requirements | Observed | Potential to Occur | Factual Basis for Potential |
|--|--|--|----------|----------------------------|--|
| Invertebrates | | | | | |
| Quino checkerspot butterfly (Euphydras editha quino) | Federal: FE State: None County: Group 1 | Coastal sage scrub and chaparral habitats that contain open areas with low-growing or sparse vegetation - required the presence of at least one of its larval host plants, the most important of which is the dot-seed plantain (Plantago erecta), white snapdragon (Antirrhinum coulterianum), thread-leaved bird's beak (Cordylanthus rigidus), purple owl's clover (Castilleja exserta), and Chinese houses (Collinsia concolor) as larval host plants. | No | Low (nectaring only) | Historical occurrence within 2 miles. No suitable larval host plants occur onsite. Low-quality potential habitat for adult nectaring or basking occurs onsite. |



| Amphibians | | | | | |
|---|---|--|-----|----------|--|
| Western spadefoot (Spea hammondii) | Federal: None State: SSC County: Group 2 | Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Breeding sites include vernal pools and other temporary rain pools, cattle tanks, and occasionally in pools of intermittent streams. Typically, the pools are turbid with little or no cover. | No | Unlikely | Historical occurrence within 2 miles, however, no suitable upland soils for burrowing occur on-site. |
| Reptiles | l | l | Ι., | | T |
| Barefoot gecko (Coleonyx switaki) | Federal: None State: ST County: Group 2 | Found in arid rocky areas on flatlands, canyons, thornscrub, especially where there are large boulders and rock outcrops, and where vegetation is sparse. | No | Unlikely | No historical occurrences within 2 miles and no suitable habitat for this species occurs onsite. |



| California | Federal: None | This nocturnal | No | Unlikely | Historical |
|---------------|-------------------|------------------------|-----|----------|--------------------|
| glossy snake | State: SSC | species inhabits a | 110 | Ullikely | occurrence within |
| (Arizona | County: None | variety of | | | 2 miles is greater |
| ` | Courty, Notice | grassland, sage | | | than 30 years old. |
| elegens | | | | | |
| occidentalis) | | scrub, dry wash | | | Suitable sandy, |
| | | and chaparral | | | loose soils do not |
| | | habitats from sea | | | occur on-site and |
| | | level to over 7,000 | | | evidence of high |
| | | feet in elevation. | | | levels of |
| | | Tends to prefer | | | disturbance |
| | | sandy, loose soils. It | | | provides |
| | | remains in its | | | unsuitable habitat |
| | | burrow by day. | | | for this species. |
| Coast horned | Federal: None | Occurs widely in | No | Unlikely | Historical |
| lizard | State: SSC | sage scrub, | | | occurrence within |
| (Phrynosoma | County: | woodlands, | | | 2 miles, however, |
| blainvillii) | Group 2 | grasslands, and | | | suitable sandy |
| | | chaparral | | | soils and open |
| | | communities within | | | areas for sunning |
| | | microhabitats of | | | do not occur on- |
| | | loose granitic soils | | | site. Furthermore, |
| | | and open areas for | | | no native harvest |
| | | sunning and | | | ants were |
| | | foraging. This | | | observed on site. |
| | | species is | | | |
| | | commonly | | | |
| | | associated with | | | |
| | | the presence of | | | |
| | | native harvester | | | |
| | | ants. | | | |
| | | uilis. | | | |



| Southern California legless lizard or silvery legless lizard (Anniella stebbinsi; formerly Anniella pulchra pulchra) | Federal: None State: SSC County: Group 2 | Occurs in moist, loose soils with some plant cover in coastal sand dunes, suburban gardens, chaparral, pineoak woodlands, stream terraces with sycamores, cottonwoods, or oaks, oak woodlands, Joshua/juniper woodland, mixed conifer forest, desert scrub, sandy washes, and alluvial fans. | No | Unlikely | Only historical occurrence within 2 miles is from 1928. No suitable soils and low available food sources on site. |
|--|---|--|----|----------|--|
| Northern red diamond rattlesnake (Crotalus ruber ruber) | Federal: None State: SSC County: Group 2 | Inhabits arid scrub, coastal chaparral, oak and pine woodlands, rocky grassland, cultivated areas. On the desert slopes of the mountains, it ranges into rocky desert flats. | No | Unlikely | Historical occurrence within 2 miles, however, with a history of agricultural grading on site, there is no suitable habitat that occurs. |



| Birds | | | Birds | | | | | | | |
|--|---|--|-------|--------------------------------|---|--|--|--|--|--|
| Birds Burrowing Owl (Athene cunicularia) | Federal: None State: SSC County: Group 1 | Inhabits shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts | No | Moderate | Historical occurrence within 2 miles. Suitable, but low-quality foraging and nesting habitat for this species occurs onsite. Suitable ground squirrel burrows occur onsite, though no owl sign was observed. | | | | | |
| Cooper's hawk (Accipiter cooperii) | Federal: None State: None County: Group 1 | and underpasses. Mature forest, open woodlands, wood edges, river groves. Nests in coniferous, deciduous, and mixed woods, typically those with tall trees and with openings or edge habitat nearby. Also found along trees along rivers through open country, and increasingly in suburbs and cities where some tall trees exist for nest sites. | No | Moderate (foraging only) | Historical occurrence within 2 miles. Moderate quality foraging habitat for this species occurs onsite. No suitable nesting habitat for this species occurs onsite, though some suitable nesting trees occur adjacent to the site within the developed trailer park area. | | | | | |



| Leconte's thrasher (Toxostoma lecontei lecontei) | Federal: None State: SSC County: Group 2 | Found in desert scrub with areas of sparse saltbush and/or creosote bush, typically with interspersed mesquite or cholla cactus. | No | Low | No historical occurrence within 2 miles. No suitable nesting and/or foraging habitat for this species occurs onsite, though areas of suitable saltbush scrub occurs adjacent to the site. |
|--|---|--|----|----------|---|
| Osprey (Pandion haliaetus) | Federal: None State: None County: Group 1 | Forages along the coast and inland lakes and builds nests on manmade structures near water bodies. | No | Unlikely | No suitable nesting or foraging habitat for this species occurs onsite and no historical occurrence within 2 miles. |



| Prairie falcon (Falco mexicanus) | Federal: None State: None County: Group 1 | Distributed from annual grasslands to alpine meadows, but associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub areas. Requires sheltered cliff ledges for cover. Usually nests in a scrape on a sheltered ledge of a cliff or steep canyon wall overlooking a large, open area. Sometimes nests on old raven or eagle stick nest on cliff, bluff, or rock outcrop | No | Moderate (foraging only) | Historical occurrence within 2 miles. Moderate-quality foraging habitat for this species occurs onsite; however, no suitable nesting habitat for this species occurs onsite. |
|--|---|---|----|--------------------------------|--|
| Summer tanager (Piranga rubra) | Federal: None State: \$\$C County: Group 2 | Inhabits mature riparian woodland, especially where Fremont cottonwoods form a fairly continuous canopy. | No | Unlikely | No suitable nesting or foraging habitat for this species occurs onsite and no historical occurrences within 2 miles. |



| Turkey vulture (Cathartes aura) Federal: None State: None County: Group 1 Forages in a broad variety of habitats and nests in caves or crevices on steep rocky slopes. Forages in a broad variety of habitats and nests in caves or crevices on steep rocky slopes. Forages in a broad variety of habitats and nests in caves or crevices on steep rocky slopes. Forages in a broad variety of habitats and nests in caves or crevices on steep rocky slopes. Forages in a broad (foraging observed outside the survey area buffer during the habitat for this species occurs onsite; however, no suitable nesting habitat for this species occurs onsite. | Tricolored blackbird (Agelaius tricolor) | Federal: None State: ST, SSC County: Group 1 | Nests and roosts in large colonies in freshwater marshes while foraging in nearby grasslands, fields, or pastures. | No | High (foraging only) | No suitable nesting habitat for this species occurs onsite; however, the non-native grassland does provide suitable foraging habitat and this species is known to nest in a freshwater marsh west of Jacumba and forage in the surrounding areas. |
|---|---|---|---|----|----------------------------|---|
| Mammals | (Cathartes aura) | State: None County: | variety of habitats and nests in caves or crevices on | No | (foraging | This species was observed outside the survey area buffer during the habitat assessment. Moderate-quality foraging habitat for this species occurs onsite; however, no suitable nesting habitat for this species occurs |



| American badger (Taxidea taxus) | Federal: None State: SSC County: Group 2 | Found where rodent prey is ample in flat terrain to moderate slopes in a variety of open habitats including grasslands, alluvial fans, scrubs, fallow agricultural lands, and deserts. | No | Moderate | American Badger remains were found approximately 0.67 miles east of the project site during the 2022 burrowing owl surveys associated with the initial Project site. Moderate quality foraging habitat for this species occurs onsite, but no suitable burrows occur on site. |
|--|---|--|----|----------|---|
| Big free-tailed bat (Nyctinomops macrotis) | Federal: None State: SSC County: Group 2 WBWG: M | Forages in sage scrub, pine-oak woodlands, and rocky canyon lands. Roosts primarily in high rocky outcrops and rock-strewn slopes or artificial structures. | No | Unlikely | No suitable roosting or foraging habitat for this species occurs onsite and no historical occurrences within 2 miles. |
| Dulzura California pocket mouse (Chaetodipus californicus femoralis) | Federal: None State: \$\$C County: Group 2 | Found in foothills, mountains, and a short distance into the desert slopes. Prefers gravelly substrates with good sun exposure, usually in or near chaparral, but also in coastal sage scrub, oak woodland, or at the edges of grasslands. | No | Unlikely | No historic records and no suitable habitat occurs onsite for this species. |



| Greater western mastiff bat (Eumops perotis californicus) | Federal: None State: SSC County: Group 2 WBWG: M | Occurs in semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, palm oases, chaparral, desert scrub, and urban. Crevices in cliff faces, high buildings, trees, and tunnels are required for roosting. Is known to forage over 25 miles away from its roost site. | No | Moderate (foraging only) | No historical occurrence within 2 miles. Moderate-quality foraging habitat occurs onsite for this species. No suitable roosting habitat occurs onsite. |
|--|---|---|----|--------------------------------|--|
| Jacumba little pocket mouse (Perognathus longimembris internationalis) | Federal: None State: None Other: SSC County: Group 2 | Prefers flat or gently sloped terrain, loose sandy soils (tolerates a wide range of soils), and sparse vegetation. In San Diego, limited to the south and central county on the desert side of the mountains between 600-1100 m. | No | Unlikely | No historical occurrence within 2 miles. No suitable habitat on site due to the dense vegetation and lack of open areas. |
| Mountain lion (Felis concolor) | Federal: None State: None County: Group 2 | Found in riparian woodland, forest, scrub, chaparral, grassland and desert wherever mule deer and sufficient cover to stalk them exist. | No | Unlikely | No suitable habitat for this species occurs onsite. |



| Pallid bat (Antrozous pallidus) | Federal: None State: SSC County: Group 2 WBWG: L | Forages within a number of habitat types, frequently by pursuing insects while walking on the ground. Most commonly associated with arid open scrub or grassland and gentle terrain with scattered rocky outcrops. Can also be found in higher elevation coniferous forests on steep terrain. Often occurs on oak- and sycamore-lined flood plain terraces at low elevations in the inland valleys. Uses some agricultural areas for foraging. Roosts in manmade structures, rock and sandstone crevices and caves, under | No | Low (foraging only) | Historical occurrence within 2 miles. Low-quality foraging habitat occurs onsite for this species. |
|---|---|--|----|---------------------------|--|
| | | tree bark, and in rodent burrows or crevices in the ground. | | | |
| Pallid San Diego pocket mouse (Chaetodipus fallax pallidus) | Federal: None State: SSC County: Group 2 | Found on desert slopes in rocky habitat near shrubs, also grassland and sage scrub. Prefers sandy herbaceous areas, usually in association with rocks or course gravel. | No | Unlikely | No historical occurrence within 2 miles, and low-quality habitat occurs onsite for this species with the lack of sandy soils and rocky outcroppings. |



| Peninsular bighorn sheep (Ovis canadensis nelsoni) | Federal: FE State: ST, FP County: Group 1 | Desert bighorn sheep inhabit rocky slopes and cliffs, canyons, washes and alluvial fans. They prefer rugged and open habitats with grasses and forbs for grazing. | No | Unlikely | No suitable habitat for this species occurs onsite. |
|--|--|--|----|--------------------------------|--|
| Pocketed free- tailed bat (Nyctinomops femorosaccus) | Federal: None State: None Other: SSC County: Group 2 WBWG: M | Roosts in steep rugged cliffs, high rocky outcrops, slopes, and manmade structures. It has been found in riparian, oak woodland, coniferous forest, open meadow and grassland, and coastal and desert scrublands, including over scrubby ridges, reservoirs, ponds, wetlands, and artificial lights. | No | Moderate (foraging only) | No historical occurrence within 2 miles. Potential moderate-quality foraging habitat occurs onsite for this species. No suitable roosting habitat occurs onsite. |
| Small-footed myotis (Myotis ciliolabrum) | Federal: None State: None County: Group 2 WBWG: M | Roosts are found in rock crevices, snags, bridges, and buildings. Foraging occurs in areas with surface water and riparian habitat in chaparral, oak woodlands, coniferous forests and rocky areas along the desert edge. | No | Unlikely | No suitable roosting or foraging habitat for this species occurs onsite. |



| Southern grasshopper mouse (Onychomys torridus ramona) | Federal: None State: SSC County: Group 2 | Found in perennial grassland, coastal sage scrub, alluvial fans, and desert scrub habitats with friable soils and scattered shrubs. | No | Unlikely | Only historical occurrence within 2 miles is from 1909. Furthermore, no suitable soils for this species occurs onsite. |
|---|--|---|----|----------|--|
| Southern mule deer (Odocoileus hemionus) | Federal: None State: None County: Group 2 | In Southern California, inhabits a wide array of habitats from coastal sage scrub to chaparral, oak woodland, riparian woodland, and montane conifer- hardwood forest in the mountains and riparian woodland and desert scrub on the east slope of the mountains. | No | Unlikely | No historical occurrence within 2 miles and no suitable habitat occurs onsite for this species. |
| Townsend's big-eared bat (Corynorhinus townsendii) | Federal: None State: None Other: SSC County: Group 2 WBWG: H | Found in a variety of habitats from scrub deserts to pine and piñon-juniper forests, prefers mesic habitats; roosts in rock crevices, buildings, bridges and large tree cavities. Preferred foraging is among the foliage of trees and shrubs in mosaics of forested and edge habitats, including riparian zones, but tends to avoid open grasslands. | No | Unlikely | No historical occurrence within 2 miles and no suitable roosting or foraging habitat for this species occurs onsite. |



| Western red | Federal: None | Primarily roosts in | No | Unlikely | No historical |
|----------------------|-------------------|-----------------------|----|----------|--------------------|
| bat (Lasiurus | State: None | shrubs or riparian | | | occurrences |
| blossevillii) | Other: SSC | trees. Day roosts in | | | within 2 miles and |
| | County: | edge habitats | | | no suitable |
| | Group 2 | adjacent to | | | roosting or |
| | WBWG: H | streams or fields, in | | | foraging habitat |
| | | orchards and | | | for this species |
| | | urban areas. | | | occurs onsite. |
| | | Foraging occurs | | | |
| | | along river and | | | |
| | | stream courses, | | | |
| | | forested meadow | | | |
| | | edges, parks and | | | |
| | | neighborhoods, | | | |
| | | and around | | | |
| | | artificial lighting. | | | |

4.2.6 Special-Status Plant Species

The literature review resulted in a list of 28 special-status plant species with potential to occur within the Project site.

No sensitive plant species were observed within the Project site during the field survey efforts.

All 28 sensitive species are unlikely to occur within the Project site due to the absence of suitable habitat. Furthermore, opportunistic surveys for target list sensitive plant species were performed before and after focused surveys for burrowing owl and Quino checkerspot butterfly to definitively determine their absence. No sensitive plant species were observed.

These species and their potentials for occurrence are further described in Table 4 below. A complete list of plant species observed is included in Attachment C.

Table 4. Special-Status Plant Species Potentially Occurring Within the Project Site

| Species Name | Listing Status | Habitat Requirements | Observed | Potential to Occur | Factual Basis for Potential |
|---|----------------------------------|--|----------|-----------------------|------------------------------------|
| Arizona pholistoma (Pholistoma auritum var. arizonicum) | CRPR: 2B.3 County: None | Annual herb that occurs in Mojave desert scrub, preferring shaded slopes and deep canyons. Blooms: Mar Elevation: 275-835 m (900-2,740 ft) | No | Unlikely | No suitable habitat occurs onsite. |



| Species Name | Listing Status | Habitat Requirements | Observed | Potential to Occur | Factual Basis for Potential |
|---|------------------------------------|--|----------|-----------------------|---|
| Borrego bedstraw (Galium angustifolium ssp. borregoense) | CRPR: 1B.3 County: List A | Perennial herb that occurs in rocky areas of Sonoran desert scrub. Blooms: Mar (May) Elevation: 250-1,250 m (1,150-4,100 ft) | No | Unlikely | No suitable habitat occurs onsite. |
| Chaparral Ragwort (Senecio aphanactis) | CRPR: 2B.2 County: List B | An annual herb that occurs in sometimes alkaline, Chaparral, Cismontane Woodland & Coastal Scrub communities. Blooms: Jan-Apr (May) Elevation: 15-800 m (50- 2,625 ft) | No | Unlikely | Although there is a historical occurrence within 2 miles, no suitable habitat occurs onsite. |
| Cove's cassia (Senna covesii) | CRPR: 2B.2 County: List B | A perennial herb usually found in Creosote Bush Scrub. Blooms: Mar-Jun Elevation: 225-1,295 m (710- 4,250 ft) | No | Unlikely | No suitable habitat occurs onsite and as a perennial herb in bloom it would have been observed if present during the surveys. |
| Curly herissantia (Herissantia crispa) | CRPR: 2B.3 County: List B | An annual or perennial herb usually found in Creosote Bush Scrub and Sonoran desert scrub. Blooms: (Apr) Aug-Sep Elevation: 700-725 m (2,295-2,380 ft) | No | Unlikely | No suitable habitat occurs onsite and as a perennial herb it would have been observed if present during the surveys. |



| Species Name | Listing Status | Habitat Requirements | Observed | Potential to Occur | Factual Basis for Potential |
|---|---|--|----------|-----------------------|---|
| Desert beauty (Linanthus bellus) | CRPR: 2B.1 County: List B | An annual herb occurring in sandy areas of chaparral habitat. Blooms: Apr-May Elevation: 1,000-1,400m (3,280-4,595 ft) | No | Unlikely | No suitable habitat occurs on site and elevation on site is too low for this species. |
| Desert larkspur (Delphinium parishii subglobosum) | CRPR: 4.3 County: List D | A perennial herb that is usually found in Creosote Bush Scrub, Sonoran desert scrub, Chaparral, and Pinyon-Juniper Woodland communities. Blooms: Mar-Jun Elevation: 600-1,800 m (1,970-5,905 ft) | No | Unlikely | No suitable habitat occurs onsite and as a perennial herb in bloom it would have been observed if present during the surveys. |
| Desert monkey flower (Diplaucus aridus, also Mimulus aridus) | CRPR: 4.3 County: List D | A perennial evergreen shrub that is usually found in rocky Chaparral, Sonoran desert scrub, and occasionally in wetland habitats. Blooms: Apr-Jul Elevation: 750-1,200 m (2,460 – 3,935 ft) | No | Unlikely | No suitable habitat occurs onsite and as a perennial shrub it would have been observed if present during the surveys. |
| Desert spike-moss (Selaginella eremophila) | CRPR: 2B.2 County: List B | Perennial herb found in gravelly or rocky areas of chaparral and Sonoran desert scrub habitats. Bloom: (May) Jun(Jul) Elevation: 200-1,295 m (655-4,250 ft) | No | Unlikely | No suitable habitat occurs onsite. |



| Species Name | Listing Status | Habitat Requirements | Observed | Potential to Occur | Factual Basis for Potential |
|---|--|--|----------|-----------------------|--|
| Fremont's mahonia (Berberis higginsiae) | CRPR: 3.2 County: List C | A shrub that is usually found in Chaparral and woodland communities. Blooms: Mar-Apr Elevation: 800-1000 m (2,625-3,495 ft) | No | Unlikely | No suitable habitat occurs onsite and as a perennial shrub it would have been observed if present during the surveys. |
| Hairy Stickleaf (Mentzelia hirsutissima) | CRPR: 2B.3 County: List B | An annual herb occurring in washes, alluvial fans, or rocky slopes of Sonoran desert scrub or creosote bush scrub. Blooms: Mar-May Elevation: 0-700m (0-2,295 ft) | No | Unlikely | No suitable habitat occurs onsite and elevation on site is too high for this species. |
| Jacumba milk vetch (Astragalus douglasii var. perstrictus) | CRPR: 1B.2 County: List A | A perennial herb that is found in rocky areas of foothill woodland, chaparral, and valley grassland communities. Blooms: Apr-Jun Elevation: 900-1,370 m 2,955-4,495 ft | No | Unlikely | There are three historical occurrences within 2 miles, however as a perennial herb in bloom it would have been observed if present during the surveys. |
| Jacumba Mountains linanthus (Linanthus maculatus ssp. emaculatus) | CRPR: 1B.1 County: None | Annual herb occurring in washes, flats, decomposed granitic, and sandy areas of desert dunes (edges) and Sonoran desert scrub. Blooms: (Mar)Apr(May) Elevation: 395-585 m 1,295-1,920 feet) | No | Unlikely | No historical occurrence within 2 miles, no suitable habitat occurs on site, and elevation of site is too high for this species. |



| Species Name | Listing Status | Habitat Requirements | Observed | Potential to Occur | Factual Basis for Potential |
|---|------------------------------------|--|----------|-----------------------|--|
| Mexican hulsea (Hulsea Mexicana) | CRPR: 2B.3 County: List B | Annual or perennial herb that occurs in disturbed or burned areas of chaparral habitat. Blooms: Apr-Jun Elevation: 1,200 m (3,935 ft) | No | Unlikely | No historical occurrence within 2 miles and no suitable habitat occurs on site. |
| Mount Laguna aster (Dieteria asteroides var. lagunensis) | CRPR: 2B.1 County: List B | A perennial herb that is found in Yellow Pine Forest and Foothill Woodland communities. Blooms: (May)Jul-Aug Elevation: 790-2400 m (2,590-7,875 ft) | No | Unlikely | Historical occurrences within two miles are from the 1940s. Furthermore, no suitable habitat occurs onsite and as a perennial herb it would have been observed, if present, during the surveys. |
| Mountain springs bush lupine (Lupinus albifrons var. medius) | CRPR: 1B.3 County: List A | A shrub often found in desert washes, creosote bush scrub and pinyon/juniper woodlands. Blooms: Mar-May Elevation: 425-1,370 m (1,395-4,495 ft) | No | Unlikely | Historical occurrence within 2 miles is from the 1924. Furthermore, there is no suitable habitat occurs onsite and as a perennial shrub it would have been observed, if present, during the surveys. |



| Species Name | Listing Status | Habitat Requirements | Observed | Potential to Occur | Factual Basis for Potential |
|---|--|--|----------|-----------------------|--|
| Palmer's grappling hook (Harpagonella palmeri) | CRPR: 4.2 County: List D | An annual herb that prefers clay soils in dry, semi-barren areas within Chaparral, Coastal Scrub, and Valley & Foothill Grassland communities. Blooms: Mar-May Elevation: 20-955 m (65-3,135 ft) | No | Unlikely | No historical occurrences within 2 miles and no suitable habitat occurs onsite. |
| Parry's tetracoccus (Tetracoccus dioicus) | CRPR: 1B.2 County: List A | A perennial deciduous shrub found on the dry slopes of coastal sage scrub and chaparral habitats. Blooms: Apr-May Elevation: 165-1000 m (540-3,280 ft) | No | Unlikely | No historical occurrence within 2 miles. No suitable habitat occurs onsite and as a perennial shrub it would have been observed if present during the surveys. |
| Payson's jewelflower (Caulanthus simulans) | CRPR: 4.2 County: List D | An annual herb that is usually found in granitic and sandy soils of coastal sage scrub and chaparral habitats. Blooms: Mar-May Elevation: 90-2,200 m (295-7,220 ft) | No | Unlikely | No historical occurrences within 2 miles and no suitable habitat occurs onsite. |
| Pygmy lotus (Lotus haydonii or Acmispon haydonii) | CRPR: 1B.3 County: List A | A perennial herb that is usually found in Creosote Bush Scrub, Pinyon-Juniper Woodland communities. Blooms: Jan-Jun Elevation: 520-1,200 m (1,705-3,935 ft) | No | Unlikely | No suitable habitat occurs onsite and as a perennial herb in bloom it would have been observed if present during the surveys. |



| Species Name | Listing Status | Habitat Requirements | Observed | Potential to Occur | Factual Basis for Potential |
|--|------------------------------------|---|----------|-----------------------|---|
| San Jacinto Mountains bedstraw (Galium angustifolium ssp. jacinticum) | CRPR: 1B.3 County: List A | A perennial herb found in lower montane coniferous forest. Blooms: Jun-Aug Elevation: 1,350– 2,100 m (4,430 – 6,890 ft) | No | Unlikely | No suitable habitat occurs onsite and site elevation is too low for this species. |
| Single leaf basket bush (Rhus trilobata simplicifolia, also called Rhus aromatica simplicifolia) | CRPR: 2B.3 County: List B | A perennial deciduous shrub that is usually found in Chaparral and Pinyon-Juniper Woodland communities, and occasionally in wetlands. Blooms: Mar-Apr Elevation: 1,220-1,370 m (4,005-4,495 ft) | No | Unlikely | No suitable habitat occurs onsite and as a perennial shrub it would have been observed if present during the surveys. |
| Slender leaved ipomopsis (Ipomopsis tenuifolia) | CRPR: 2B.3 County: List B | A perennial herb that is usually found in Creosote Bush Scrub, Chaparral, and Pinyon-Juniper Woodland. Blooms: Mar-May Elevation: 100-1,200 m (330-3,935 ft) | No | Unlikely | Although there is historical occurrence within 2 miles, no suitable habitat occurs onsite. |
| Southern jewelflower (Streptanthus campestris) | CRPR: 1B.3 County: List A | A perennial herb that occurs in rocky areas of chaparral, lower montane coniferous forest, and pinyon and juniper woodland. Bloom: (Apr)May-Jul Elevation: 900-2,300 m (2,9550-7,545 ft) | No | Unlikely | No historical occurrence within 2 miles and no suitable habitat occurs onsite. |



| Species Name | Listing Status | Habitat Requirements | Observed | Potential to Occur | Factual Basis for Potential |
|--|--|---|----------|-----------------------|--|
| Sticky geraea (Geraea viscida) | CRPR: 2B.2 County: List B | A perennial herb that is usually found in Chaparral or disturbed habitat. Blooms: May-Jun Elevation: 450—1,700m (1,475- 5,580 ft) | No | Unlikely | Some suitable habitat occurs onsite along the disturbed road edge, but as a perennial herb in bloom it would have been observed if present during the surveys. |
| Tecate Tarplant (Deinandra floribunda) | CRPR: 1B.2 County: List A | An annual herb typically occurring in chaparral and coastal scrub communities. Blooms: Aug-Oct Elevation: 70-1220 m (230 – 4,005 ft) | No | Unlikely | Although there is a historical occurrence within 2 miles, no suitable habitat occurs onsite. |
| Thurber's beardtongue (Penstemon thurberi) | CRPR: 4.2 County: List D | A perennial herb that is usually found in creosote bush scrub, chaparral, pinyon-juniper woodland and Joshua Tree woodland communities. Blooms: May-Jul Elevation: 500-1,220 m (1,640-4,005 ft) | No | Unlikely | No suitable habitat occurs onsite and as a perennial herb in bloom it would have been observed if present during the surveys. |
| Utah vine milkweed (Cynanchum utahense also known as Funastrum utahense) | CRPR: 4.2 County: List D | A perennial herb that is usually found in Creosote Bush Scrub, Sonoran desert scrub, and Mojave desert scrub. Blooms: Apr-Jun Elevation: 100-1,435 m (330-4,710 ft) | ZO Z | Unlikely | No suitable habitat occurs onsite and as a perennial herb in bloom it would have been observed if present during the surveys. |



5.0 PROJECT IMPACTS

The proposed Project includes the construction of a new 8,500 square-foot fire station and associated facilities on an approximately 2.77-acre portion of a 5-acre property consisting of non-native grassland habitat north of Old Highway 80. No off-site impacts will occur since the Project will utilize access from the existing Old Highway 80, and any required fire fuel management will be accommodated on-site, or where it would extend off-site, the land is already developed or maintained for adjacent land use, such as maintained paved and/or dirt roads. Applicable mitigation measures are proposed to reduce impacts to sensitive biological resources to a less than significant level in conformance with the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements (County 2010b).

5.1 Significance of Project Impacts

The following discussion describes the Project's potential to directly, indirectly and cumulatively impact sensitive biological resources during development, and provides analyses of significance for each potential impact in conformance with the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements (County 2010b).

Direct Impacts

Direct impacts include those involving the loss, alteration and/or disturbance of plant communities, and consequently, the flora and fauna of the affected area. Direct impacts also include the destruction of individual plants and/or wildlife. Direct impacts may adversely affect regional populations of certain species or result in isolated populations, reducing genetic diversity and rangewide population stability; conversely, in some cases direct impacts may also have intended or unintended positive effects.

Indirect Impacts

Indirect impacts include a variety of effects related to areas or habitats that are not directly removed by Project development, such as loss of foraging habitat, increased ambient noise, artificial light, introduced predators (e.g., domestic cats, dogs and other non-native animals), competition with exotic plants and animals, and increased human presence and associated disturbances (e.g., trash, green waste, physical intrusion). Indirect impacts may include long- and/or short-term daily activities associated with project build-out, such as increased traffic, permanent barriers or fences, buildings, exotic seed-bearing ornamental plantings, irrigated landscapes and human presence, among others. These types of impacts are known as edge effects and over time, may result in some encroachment on native plants by exotic plants, altered behavioral wildlife patterns, reduced wildlife diversity, and decreased wildlife abundance in habitats adjacent to a given project site. However, as is the case with direct impacts, indirect impacts may also have intended or unintended positive effects for certain species.

Cumulative Impacts

Cumulative impacts are defined by the collective impacts of two or more projects, that when considered individually are minimal, but over time may become collectively significant.



Thresholds of Significance

Environmental impacts relative to biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, Section 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California to:

"Prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future aenerations representations of all plant and animal communities..."

Determining whether a project may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA Guidelines, Section 15064.7 (Thresholds of Significance), each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects (California State Assembly 2018). A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. In the development of thresholds of significance for impacts to biological resources, CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

"The project has the potential to: substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species..."

Therefore, for the purpose of this analysis, impacts to biological resources are considered potentially significant (before considering offsetting mitigation measures) if one or more of the following criteria discussed below would result from implementation of the proposed project.

Appendix G of the State CEQA guidelines indicate that a project may be deemed to have a significant effect on the environment if the project is likely to:

- **a)** Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- **b)** Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.



- **c)** Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- **d)** Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- **e)** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- **f)** Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.



5.2 Direct Impacts to Mapped Habitat Types

Table 5 identifies the potential impacts on existing habitat/vegetation communities as a result of the proposed Project. Project-related impacts to the mapped habitat type is restricted to non-native grassland habitat only. Significant direct impacts to non-native grassland habitat would be mitigated to a level below significance with the purchase of off-site mitigation credits from a County-approved mitigation bank and implementation of mitigation measures (see Section 6.0 Mitigation, below) before, during and after construction. As shown in Table 5, the Project proponent would be required to mitigate at a 0.5:1 ratio for the loss of non-native grassland habitat, which would require the preservation of 1.275 acres offsite. In the event that occupied BUOW burrows are identified during pre-construction take avoidance surveys, the ratio for loss would be increased to 1:1 for a total of 2.55 acres preserved offsite. Mitigation is not required for the loss of 0.22 acres of disturbed habitat, as this is not considered a sensitive habitat (County of San Diego 2010).

Table 5. Potential Impacts

| Habitat/ Vegetation Community | Existing (acres) | Impacts Onsite (acres) | Impacts Offsite (acres) | Mitigation Ratio | Mitigation Required (acres) | Preserved onsite (acres) | Offsite Mitigation (acres) |
|-------------------------------------|------------------|------------------------------|-------------------------------|---------------------|-----------------------------------|--------------------------------|----------------------------------|
| Non-native Grassland | 2.55 | 2.55 | 0 | 0.5:1 | 1.275 | 0 | 1.275 |
| Total | 2.55 | 2.55 | 0 | 0.5:1 | 1.275 | 0 | 1.275 |

5.3 Direct Impacts to Jurisdictional Wetlands and Non-wetland Waters

Jurisdictional resources, including wetlands and non-wetland waters regulated by USACE, RWQCB and CDFW, were not identified within the Project site. Development of the Project site would not result in direct impacts to any jurisdictional resources.

5.4 Direct Impacts to Special Status Wildlife Species

A total of 30 special status wildlife species were evaluated during the literature review and field survey (Table 3). Eight special status species were found to have moderate to high potential to occur based on the presence of historical records within two miles of the Project site and low- to high-quality suitable habitat; burrowing owl (moderate), Cooper's hawk (moderate-foraging only), prairie falcon (moderate-foraging only), turkey vulture (high-foraging only), American badger (moderate), greater western mastiff bat (moderate-foraging only), tricolored blackbird (high-foraging only), and pocketed free-tail bat (moderate-foraging only). Protocol presence/absence surveys were conducted for Quino checkerspot butterfly and burrowing owl in 2024. Results of the surveys determined that both species were absent from the Project site and subsequently recognized as unlikely to occur. None-the-less, burrowing owls are known to migrate through the area at different times of the year; therefore, take avoidance surveys (MM-BIO 2) are recommended to ensure potential direct impacts, such as loss of individuals, to the species are less than significant. Given that protocol surveys for Quino checkerspot butterfly determined that the species is absent from the Project site, no specific mitigation measures or avoidance measures are required.



The field survey identified suitable habitat and substrate for migratory birds protected under the Migratory Bird Treaty Act (MBTA) and CDFW Codes 3503 and 3503.5, including the special status avian species identified above. Permanent direct impacts to migratory and special status birds as a result of the Project may include foraging habitat loss, nesting habitat removal, roosting site loss and/or loss of individuals. Through implementation of pre-construction nesting bird surveys (MM-BIO 1), take avoidance burrowing owl surveys (MM-BIO 2), and biological monitoring (MM-BIO 3) detailed in Section 6 below, potential direct impacts to protected avian species are less than significant.

In addition to protected avian species, the field survey identified suitable habitat for special status mammal, reptile, and amphibian species on the Project site. Permanent direct impacts to these vertebrate species as a result of the Project may include habitat loss, burrow site loss and/or loss of individuals. Through implementation of biological monitoring (MM-BIO 3), potential direct impacts to protected mammal, reptile, and amphibian species are less than significant.

5.5 Direct Impacts to Special Status Plant Species

Although the literature review revealed 28 special status plant species occurring in the vicinity of the Project site, none were observed during the field surveys. Furthermore, no suitable habitat for these special status plant species occurs on the Project site and/or those with suitable habitat are perennial species that would have been identified during the field survey if present. Historical agricultural use and grading and lack of connectivity to natural source populations likely preclude special status plant species, including narrow endemics, from occurring within the Project site. Based on these findings, Project-related direct impacts to special status plants are considered less than significant.

5.6 Indirect Impacts to Mapped Habitat Types

No sensitive vegetation communities occur within or immediately adjacent to the Project site. Non-native grassland is not considered a sensitive vegetation community due to it not including populations of sensitive species (i.e. Group A plants, Group I wildlife species, state- and federally-listed species), is not critical to a balanced ecosystem, nor is it not part of a functioning wildlife corridor. Even though non-native grassland is not a sensitive vegetation community, its removal may result in a change in stormwater discharge hydrology downstream of the Project due to a net increase of impervious surfaces. It is assumed that the Project will be designed in accordance with National Pollution Discharge Elimination System (NPDES) regulations thus not resulting in any long-term indirect adverse impacts.

5.7 Indirect Impacts to Jurisdictional Wetlands and Non-wetland Waters

Jurisdictional resources, including wetlands and non-wetland waters regulated by USACE, RWQCB and CDFW, were not identified within the Project site or the surrounding area. The north-south running stormwater conveyance ditch west of the Project is not likely a regulated feature; regardless, Project-specific Best Management Practices (such as a stormwater pollution prevention plan) will be implemented to prevent indirect impacts to this feature and/or other jurisdictional resources.

5.8 Indirect Impacts to Special Status Wildlife Species



The indirect impacts detailed for Mapped Habitat Types above are equally applicable to special status wildlife species. In addition to these impacts, construction-related noise, artificial lighting, and attracting pests and/or predators to the Project site may also affect wildlife species by disrupting normal behaviors such as foraging and breeding. The field survey identified suitable habitat and substrate for migratory birds protected under the MBTA and CDFW Codes 3503 and 3503.5, as well as suitable habitat for numerous other special status mammal, reptile, insect, and amphibian species. Through implementation of mitigation measures outlined below indirect impacts to special status wildlife are considered less than significant.

5.9 Indirect Impacts to Special Status Plant Species

Although the literature review revealed 28 special status plant species occurring in the vicinity of the Project site, none were observed during the field surveys. Furthermore, no suitable habitat for these special status plant species occurs on the Project site and/or those with suitable habitat are perennial species that would have been identified during the field survey if present. No populations of special status plant species are known to occur immediately adjacent to the Project site where they could be subjected to fugitive dust and/or encroachment upon by invasive and/or exotic landscape ornamental species; therefore, indirect impacts to special status plant species are considered less than significant.

5.10 Cumulative Impacts

Though non-native grassland habitat would be directly impacted through the construction of the Project, with the mitigation measures proposed herein to be implemented, and the purchase of offsite mitigation credits from a County-approved mitigation site, direct impacts to this habitat would be considered less than significant under the East County MSCP. The Project does not propose to have additional direct or indirect impacts to sensitive habitats, plants, or wildlife. Therefore, there are no cumulative impacts to sensitive habitats, plants, or wildlife. Depending on a wide variety of factors (e.g., project sizes, locations, existing conditions, connectivity, etc.), impacts to non-native grassland habitat may be considered potentially significant when assessing cumulative impacts; however, the small size of this Project in relation to the regional context renders cumulative impacts insignificant for this Project. At least two other projects in the vicinity of the Project are known currently: JVR Energy Park Project and Jacumba Solar Energy Project. Both projects contain sensitive resources not found on the Project site and neither of the other proposed projects contain Non-native Grassland habitat. JVR Energy Park does contain Fallow Agriculture land that may (at times) function similarly to Non-native Grassland. Each of the projects require their own specific mitigation to reduce impacts to less than significant levels. Even with the development of all three projects, the area would largely remain undeveloped and rural allowing for mostly contiguous habitat that allows continued wildlife movement. As currently designed, the Project would not contribute to potential cumulative impacts associated with nearby similar projects.

6.0 MITIGATION

The proposed Project will result in the loss of non-native grassland habitat. Mitigation credits will need to be purchased to offset the impacts to the non-native grassland habitat at a ratio of 0.5:1, as stipulated in Table 5 of the County of San Diego Guidelines for Determining Significance for Biological



Resources (County of San Diego 2010). Several special-status species have a low to high potential for occurrence on the Project site and in order to reduce any potential impacts to below a level of significance to comply with CEQA, the following mitigation measures are recommended for implementation:

- MM-BIO 1: Nesting Birds. Vegetation removal should be conducted outside of the nesting bird season between September 1st and January 31st. If vegetation removal is required during the nesting bird season (February 1st to August 31st), a pre-construction avoidance survey for MBTA and CDFW-protected nesting birds must be conducted within 100 feet of areas proposed for vegetation removal and/or initial grading activities; additionally, the survey shall be extended to 500 feet for raptors and be included from January 1 to July 15. The survey shall be conducted by a qualified biologist(s), defined as someone with familiarity with avian species in the region and at least five years of experience conducting nesting bird surveys, within seven days (i.e., 168 hours) of vegetation removal and/or initial groundbreaking activities. If active, protected nests are observed within the survey area(s), a qualified biologist will determine appropriate minimum disturbance buffers or other adaptive mitigation techniques (e.g., biological monitoring of active nests during constructionrelated activities, staggered work schedules, altered work locations, sound walls, noise abatement, etc.) and work with the contractor to ensure that direct and indirect impacts to all protected nesting birds are avoided until such nests are no longer active. If the results of the survey are negative, the Project will proceed without any further surveys or monitoring as long as there Is not a significant lapse (i.e., greater than seven days) in Project activity. If more than seven days of inactivity occurs, a new nesting bird survey will be required prior to reconvening work on the Project.
- MM-BIO 2: Burrowing Owl Surveys. Within 14 days of initiating ground disturbance and/or construction activities, conduct a pre-construction take avoidance survey for burrowing owl per guidelines specified in the Staff Report on Burrowing Owl Mitigation (2012). In addition, within 24 hours of initiating ground disturbance and/or construction activities, conduct a final pre-construction take avoidance survey. Surveys shall include areas within the Project footprint and a surrounding 500-foot (150-meter) buffer. The survey shall consist of walking parallel transects and noting any fresh burrowing owl sign or presence. The results of the take avoidance survey shall be provided to CDFW. If more than 14 days pass between the take avoidance survey and initiation of Project construction, additional take avoidance survey may be required by the qualified biologist, which will depend on what actions have been implemented to deter burrowing owls from moving into the Project footprint and buffer area.
- MM-BIO 3: Biological Monitoring. A biological monitor shall be present during all initial vegetation clearing, grubbing, and rough grading activities to relocate wildlife out of harm's way, including but not limited to protected birds (including tricolored blackbird and turkey vulture) and American badger. Biological monitoring will ensure the Project remains in compliance with any mitigation, monitoring, and compliance reporting program, as well as industry standard Best Management Practices (BMP) such as fugitive dust control, on-site vehicle speed limits, Stormwater Pollution Prevention Plan (SWPPP) implementation, and conditions related to biological resource protection set forth by the County of San Diego and/or regulatory agencies.
- MM-BIO 4: Off-site Mitigation. To off-set the loss of Non-native Grassland habitat on the Project site,
 off-site mitigation credits shall be purchased from a County-approved mitigation bank. The Project
 proponent will purchase 1.275-acres of Non-native Grassland Habitat credits. If BUOW are identified

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during pre-construction take avoidance surveys, the mitigation ratio will increase to 1:1 requiring the purchase of 2.55 acres of Non-native Grassland Habitat credits.



7.0 CONCLUSION & RECOMMENDATIONS

Blackhawk Environmental conducted a literature review for the Project site resulting in a list of 30 sensitive wildlife species and 28 sensitive plant species to evaluate during the ensuing habitat assessment and field survey. No sensitive plant communities and no aquatic resources were identified within the survey area during the literature review.

The habitat assessment determined that of the 30 special status wildlife species evaluated, eight were determined to have a moderate or high potential for occurrence, three were determined to have a low potential for occurrence and 19 were considered unlikely to occur. Protocol presence/absence surveys for Quino checkerspot butterfly and burrowing owl were conducted in 2024. Results of the surveys determined that both species were absent from the Project site and subsequently recognized as unlikely to occur. None-the-less, burrowing owls are known to migrate through the area at different times of the year; therefore, take avoidance surveys (MM-BIO 2) are recommended to ensure potential direct impacts, such as loss of individuals, to the species are less than significant. Biological monitoring (MM-BIO 3) will ensure the Project remains in compliance with any mitigation, monitoring, and compliance reporting program, as well as industry standard Best Management Practices (BMP) such as fugitive dust control, on-site vehicle speed limits, Stormwater Pollution Prevention Plan (SWPPP) implementation, and conditions related to biological resource protection set forth by the County of San Diego and/or regulatory agencies.

The field survey also determined that all 28 of the sensitive plant species evaluated were considered unlikely to occur in the Project site due to the lack of suitable habitat and/or those with suitable habitat are perennial species that would have been identified during the field survey if present.

No aquatic resources were identified within the survey area during the field survey.

Though non-native grassland habitat would be directly impacted through the construction of the Project, the purchase of 1.275 acres of off-site mitigation credits from a County-approved mitigation site in accordance with MM-BIO 4 will offset these impacts, reducing them to less than significant levels.

If there are any questions or concerns regarding the findings of this report, please contact me at 619-972-7932 or seth@blackhawkenv.com.

Sincerely,

Seth Reimers Senior Biologist



ATTACHMENTS

A: Figures

B: Photo Pages

C: Plant Species Observed List D: Wildlife Species Observed List

8.0 REFERENCES

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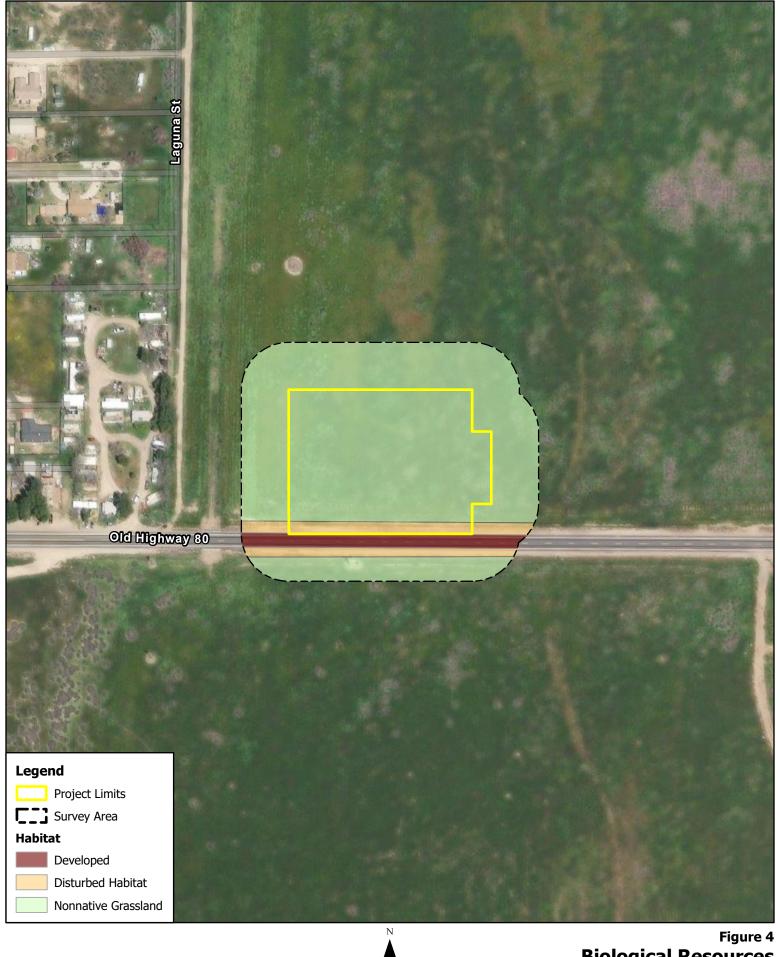
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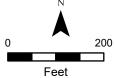
ATTACHMENT A

Figures









Biological Resources

Jacumba Fire Station Project

ATTACHMENT B

Photo Pages







Photo Point 1: Northwest-facing view of non-native grassland within the Survey Area from the southeastern corner of the Survey Area.



Photo Point 2: West-facing view of non-native grassland and disturbed habitat along the southern boundary of the Survey Area south of Old Highway 80.





Photo Point 3: West-facing view of non-native grassland within the Survey Area, taken from the east boundary of the Survey Area.



Photo Point 4: East-facing view of disturbed and non-native grassland habitats along the Project site southern boundary north of Old Highway 80.





Photo Point 5: Northeast-facing view of non-native grassland within Survey Area, taken from southwestern corner of Survey Area boundary.



Photo Point 6: Southwest-facing view of non-native grassland within Survey Area, taken from northeastern corner of Survey Area boundary.

ATTACHMENT C

Plant Species Observed





OBSERVED WILDLIFE SPECIES LIST

| AVES | BIRDS |
|-------------------------|--------------------------------|
| COLUMBIDAE | Pigeons and Doves |
| Patagioenas fasciata | band-tailed pigeon |
| * Streptopelia decaocto | Eurasian-collared dove |
| CORVIDAE | Crows & Jays |
| Aphelocoma californica | California scrub-jay |
| Corvus corax | common raven |
| FRINGILLIDAE | Finches and Allies |
| Haemorhous mexicanus | house finch |
| GALLIDAE | New World Quail |
| Callipepla californica | California quail |
| ICTERIDAE | New World Blackbirds & Orioles |
| Sturnella neglecta | western meadowlark |
| PARULIDAE | New World Warblers |
| Setophaga coronate | yellow-rumped warbler |
| PASSERELLIDAE | New World Sparrows and Towhees |
| Amphispiza bilineata | black-throated sparrow |
| Chondestes grammacus | lark sparrow |
| Zonotrichia leucophrys | white-crowned sparrow |
| PASSERIDAE | Old World Sparrows |
| * Passer domesticus | house sparrow |
| SITTIDAE | Nuthatches |
| Sitta canadensis | red-breasted nuthatch |
| STURNIDAE | Starlings and Mynas |
| * Sturnus vulgaris | European starling |

| MAMMALIA | MAMMALS |
|--------------------------|-----------------------------------|
| LEPORIDAE | Rabbits and Hares |
| ** Lepus californicus | San Diego black-tailed jackrabbit |
| Sylvilagus audobonii | desert cottontail |
| CANIDAE | Dogs |
| Canis familiaris | domestic dog |
| Canis latrans | coyote (scat) |
| GEOMYIDAE | Gophers |
| Thomomys bottae | Botta's pocket gopher (burrows) |
| SCIURIDAE | Squirrels |
| Otospermophilus beecheyi | California ground squirrel |

^{*}Non-native

^{**}Sensitive species

ATTACHMENT D

Wildlife Species Observed





OBSERVED WILDLIFE SPECIES LIST

| AVES | BIRDS |
|-------------------------|--------------------------------|
| COLUMBIDAE | Pigeons and Doves |
| Patagioenas fasciata | band-tailed pigeon |
| * Streptopelia decaocto | Eurasian-collared dove |
| CORVIDAE | Crows & Jays |
| Aphelocoma californica | California scrub-jay |
| Corvus corax | common raven |
| FRINGILLIDAE | Finches and Allies |
| Haemorhous mexicanus | house finch |
| GALLIDAE | New World Quail |
| Callipepla californica | California quail |
| ICTERIDAE | New World Blackbirds & Orioles |
| Sturnella neglecta | western meadowlark |
| PARULIDAE | New World Warblers |
| Setophaga coronate | yellow-rumped warbler |
| PASSERELLIDAE | New World Sparrows and Towhees |
| Amphispiza bilineata | black-throated sparrow |
| Chondestes grammacus | lark sparrow |
| Zonotrichia leucophrys | white-crowned sparrow |
| PASSERIDAE | Old World Sparrows |
| * Passer domesticus | house sparrow |
| SITTIDAE | Nuthatches |
| Sitta canadensis | red-breasted nuthatch |
| STURNIDAE | Starlings and Mynas |
| * Sturnus vulgaris | European starling |

| MAMMALIA | MAMMALS |
|--------------------------|-----------------------------------|
| LEPORIDAE | Rabbits and Hares |
| ** Lepus californicus | San Diego black-tailed jackrabbit |
| Sylvilagus audobonii | desert cottontail |
| CANIDAE | Dogs |
| Canis familiaris | domestic dog |
| Canis latrans | coyote (scat) |
| GEOMYIDAE | Gophers |
| Thomomys bottae | Botta's pocket gopher (burrows) |
| SCIURIDAE | Squirrels |
| Otospermophilus beecheyi | California ground squirrel |

^{*}Non-native

^{**}Sensitive species