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Mr. Kerry Garza
Touchstone Communities
9815 Mira Mesa Boulevard
San Diego, CA 92131

Biological Resources Letter Report for the Parkview Townhomes Project

Dear Mr. Garza:

On behalf of Touchstone Communities, Merkel & Associates, Inc. has prepared the following biological resources letter report in support of the proposed Parkview Townhomes Project, located in the City of Escondido, California.

If you have any questions concerning this report, please do not hesitate to contact me at (858) 560-5465 or agonzales@merkelinc.com.

Sincerely,

Amanda K. Gonzales
Associate Principal/Project Manager

Keith W. Merkel
Principal Consultant

SUMMARY

Merkel & Associates, Inc. (M&A) has prepared this biological resources letter report for the proposed Parkview Townhomes Project (Project). The purpose of this report is to document the existing biological conditions within the project biological study area (BSA); identify potential impacts to biological resources that could result from implementation of the proposed project; and recommend measures to avoid, minimize, and/or mitigate significant impacts consistent with the California Environmental Quality Act (CEQA) and applicable federal, state, and local regulations.

Touchstone Communities has entered into a purchase agreement with the private property owner with the intent to remove an existing single-family home and construct a new 68-unit townhome development on an approximate 4.96-acre parcel, located within the City of Escondido, San Diego County. The Project includes site specific design measures to reduce potential effects to ensure compliance with federal, state, and local rules and regulations and to reduce potential effects to biological resources adjacent to the property. This includes construction-period and permanent best management practices and water quality requirements. In addition, all work would occur during normal daylight hours and as feasible initial clearing and grubbing would avoid the typical avian nesting season which extends from February 1 to August 31; however, if this were not feasible, pre-construction nesting bird surveys would be conducted by the project biologist to ensure that the Project does not result in take of an active nest in accordance with the federal Migratory Bird Treaty Act and California Fish (MBTA) and Game Code (FGC) §3503 and §3513. In addition, all necessary fuel modification requirements would be accommodated onsite and all temporary and permanent landscaping would avoid the use of plant species listed by the California Invasive Plant Council on the California Invasive Plant Inventory. Lastly, all temporary and permanent lighting would be shielded, and directed down onto the Project site; it would not be broadcast into the adjacent properties.

M&A conducted a literature and data review and biological investigations within the BSA between June and August 2024. Based on the results, protocol/focused surveys were conducted between June and July 2025 for the coastal California gnatcatcher (*Poliioptila californica californica*), a federally listed threatened species, and for special status bumble bee species (*Bombus* sp.).

Based on review of historic aerial imagery, the existing home was constructed between 1947 and 1953. After construction of the home, it appears that portions of the property were used in ranching-type efforts with the undeveloped areas more recently (for the past approximately 20 years) mowed on a regular basis. The entire property is bound by fencing.

The BSA consists of the private parcel plus a 100-foot mapping buffer around the parcel. The Project site is located on a south facing hillside with existing driveway access off W. El Norte Parkway. The site is bound to the west, east, and south by mixed development consisting of residential development, gas stations, hotel, and small commercial office space and to the north by the City of Escondido Rod McLeod Park. The Park is an approximate 18-acre park of mostly passive recreation use. Immediately abutting the Project site to the west is a small undeveloped lot owned by San Diego Gas & Electric, which supports a northeast-trending overhead utility corridor.

Three vegetation types have been identified within the Project property: urban/developed, disturbed habitat, and disturbed Diegan coastal sage scrub. Urban/developed has been mapped for the existing residential structures, driveway, and ornamental landscape while disturbed habitat has been mapped for most of the property, primarily located on the east side of the driveway. During the initial biological investigation, this portion of the property was dominated by weedy, non-native plants including short-pod mustard (*Hirschfeldia incana*) and tocalote (*Centaurea melitensis*). Disturbed Diegan coastal sage scrub has been mapped for a portion of the property on the west side of the driveway. This area is dominated by the native shrub, California encelia (*Encelia californica*) which provides approximately 45 percent cover. Non-native forbs comprise most of the remaining cover between shrubs. These undeveloped portions of the property are subject to frequent vegetation clearing via mowing, weed whip, or similar means. Five vegetation types have been mapped within the 100-foot buffer, urban/developed, disturbed habitat, eucalyptus woodland, Diegan coastal sage scrub and disturbed Diegan coastal sage scrub.

Two special status species were detected within the BSA in 2024: orange-throated whiptail (*Aspidoscelis hyperythra*) and coastal California gnatcatcher. The orange-throated whiptail, a California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) Special Animal and CDFW Watch List species was detected on the Project property during the initial investigation on June 7, 2024. This species is relatively common, occurring in low-elevation coastal scrub, chaparral, and valley foothill hardwood habitats; however, the individual observed onsite was detected in association with the urban development. Two coastal California gnatcatchers were incidentally detected during the follow-up biological investigation on August 22, 2024, adjacent to the Project site within the 100-foot mapping buffer. Based on the timing of the August 2024 incidental observation, it was presumed that the gnatcatchers were in transit and/or wandering from higher quality habitat. To determine presence or absence of this species within and immediately adjacent to the BSA, M&A conducted protocol surveys between June and July 2025, in accordance with the current U.S. Fish and Wildlife Service's (USFWS) *Coastal California Gnatcatcher Presence/Absence Survey Protocol* (USFWS 1997) and the *Guidance on Extending the Current USFWS California Gnatcatcher Protocol to Cover Survey Periods That Include Both Breeding and Non-Breeding Periods* (USFWS 2008). No coastal California gnatcatchers were detected within the BSA or immediately adjacent to it during the protocol survey effort. Based on the negative protocol survey results, the coastal California gnatcatcher is presumed absent from the BSA and immediately adjacent to the BSA. Active avian nests belonging to regionally common birds protected under the MBTA and §3503 and §3513 were detected within the ornamental vegetation immediately surrounding the house.

Special status bumble bee(s) were determined to have at least a moderate potential to occur onsite. As a result, focused surveys for Crotch's bumble bee (*Bombus crotchii*), a candidate for state listing were conducted by M&A in June and July 2025 in accordance with CDFW's *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*. No *Bombus* species were observed within the BSA during the focused surveys. As a result, Crotch's bumble bee or Crotch's bumble bee nests were not detected during the survey effort and are presumed to be absent from the Project site. This is the same conclusion for American bumble bee (*Bombus pensylvanicus* [including Sonoran bumble bee *B. sonorus*]), a CDFW CNDDDB Special Animal.

A concrete-lined brow ditch is present along the southern edge of the property, and drains into the local storm drain system just offsite. This brow ditch is expected to have been constructed entirely within upland habitat in order to drain sheet flow from the property. There are no aquatic resources onsite that would be regulated under Sections 404 or 401 of the Clean Water Act, Porter-Cologne Water Quality Control Act, and/or California FGC Streambed Alteration Agreement Section 1600-1616.

Implementation of the Project would result in direct, permanent impacts to the entire property and thus all communities onsite. Impacts to disturbed Diegan coastal sage scrub are considered to be significant under CEQA and would require habitat-based mitigation. Impacts to the remaining communities of urban/developed and disturbed habitat would be considered less than significant under CEQA since these habitats are not regionally considered to have high conservation value requiring mitigation. Mitigation for impacts to disturbed Diegan coastal sage scrub could be achieved via purchase of available sage scrub credits from an approved mitigation bank such as Daley Ranch or a similar bank within the local north San Diego County region. Implementation of the Project would also result in direct, permanent impacts to areas just offsite, within the W. El Norte Parkway right-of-way. The offsite improvements are necessary to improve existing access to the property and would result in impacts to urban development and disturbed habitat.

Implementation of the Project would result in direct, permanent impacts to disturbed Diegan coastal sage scrub, which could be utilized by the orange-throated whiptail. Implementation of habitat-based mitigation via purchase of available sage scrub credits from an approved mitigation bank is expected to reduce the potential impact to less than significant. In addition, implementation of the Project could result in the take of an active avian nest, if present onsite during construction. Impacts to active migratory bird nests, if present at the time of construction are prohibited under the federal MBTA and California FGC §3503 and §3513. Implementation of the Project's site specific design measures would avoid this potential impact.

Implementation of the Project could result in indirect impacts to resources adjacent to the site, most notably from the effects of disturbance/clearing of vegetation within the Project footprint. Fugitive dust created from clearing/grubbing of the site could negatively impact adjacent native habitat. In addition, exposed soils from clearing and grubbing may result in erosion and subsequent offsite sedimentation within native habitat. Introduction of invasive ornamental plants in the new landscape may have a detrimental effect on adjacent native habitats. Implementation of the Project site specific design measures are expected to reduce these potential impacts to less than significant.

INTRODUCTION, LOCATION, PROJECT DESCRIPTION

Merkel & Associates, Inc. (M&A) has prepared this biological resources letter report for the proposed Parkview Townhomes Project (Project). The purpose of this report is to document the existing biological conditions within the Project biological study area (BSA); identify potential impacts to biological resources that could result from implementation of the proposed Project; and recommend measures to avoid, minimize, and/or mitigate significant impacts consistent with the California Environmental Quality Act (CEQA) and all applicable federal, state, and local regulations.

All figures referenced within this report are included as Appendix A. Site photographs are included as Appendix B.

The approximate 4.96-acre Project site is located on private property at 550 W. El Norte Parkway within the City of Escondido (Assessors Parcel Number 226-380-48), San Diego County (Figure 1). The property is located within Section 9, Township 12 South, Range 2 West of the San Bernardino Base and Meridian; U.S. Geological Survey (USGS) Valley Center, California Quadrangle (Figure 2).

Touchstone Communities has entered into a purchase agreement with the private property owner with the intent to remove an existing single-family home and its accessory structures, and to construct a new 68-unit townhome development. The Project includes site specific design measures to ensure compliance with federal, state, and local rules and regulations and to reduce potential effects to biological resources adjacent to the property. This includes implementation of construction-period and permanent best management practices (BMPs) and water quality requirements. In addition, all work would occur during normal daylight hours and as feasible initial clearing and grubbing would avoid the typical avian nesting season which extends from February 1 to August 31; however, if this were not possible, pre-construction nesting bird surveys would be conducted by the project biologist to ensure that the Project does not result in take of an active nest in accordance with the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (FGC) §3503 and §3513. In addition, all necessary fuel modification requirements would be accommodated onsite and all temporary and permanent landscaping would avoid the use of plant species listed by the California Invasive Plant Council on the California Invasive Plant Inventory. Lastly, all temporary and permanent lighting would be shielded, and directed down onto the Project site; it would not be broadcast into the adjacent properties. Construction activities are expected to begin upon approval of the Project with construction anticipated to occur over approximately a two-year period.

METHODS AND SURVEY LIMITATIONS

Literature and Data Review

Historical and currently available biological literature and data pertaining to the Project area were reviewed prior to initiation of the field investigation. This review included examination of:

- Aerial imagery from various dates between 1938 and 2024 (Historic Aerials [Netronline 2024], Google Earth Pro, Environmental Systems Research Institute [ESRI] 2021, NearMap 2023);
- Regionally mapped vegetation community/habitat types (San Diego Geographic Information Source [SanGIS] 2023a);
- Topographical data and topographic quadrangle map and (SanGIS 2015 and USGS 1998);
- Soil types (U.S. Department of Agriculture [USDA] Natural Resources Conservation Service [NRCS] 1973, 2024, and SANGIS 2004);
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) (USFWS 2024a);
- Hydrology, floodplain, and watershed data (SanGIS 2023b, USGS 2024, Federal Emergency Management Agency [FEMA] 2023);
- Federally designated critical habitat for the project vicinity (USFWS 2024b);

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) and USFWS special status species records for the project vicinity (CDFW 2024a and USFWS 2024c, respectively); and
- Citizen science data of special status species records for the Project vicinity (e.g., iNaturalist 2025 Research Grade only; Bumble Bee Watch 2025).

Field Surveys Conducted

M&A biologist, Amanda Gonzales conducted a general biological investigation within the BSA on June 7, 2024, from approximately 1:45 pm to 4:00 pm. Weather conditions consisted of clear skies, winds ranging from approximately 4 to 6 miles per hour, and temperatures ranging (start to finish) from approximately 75 to 72 degrees Fahrenheit. Ms. Gonzales conducted a follow-up drive-by reconnaissance survey on July 15, 2024, at approximately 5:45 pm. A follow-up field inspection, focused on the west side of the BSA was conducted by Ms. Gonzales on August 22, 2024, from approximately 8:25 am to 8:50 am. Weather conditions consisted of mostly clear skies and approximately 72 degrees Fahrenheit.

The BSA consists of the Project parcel plus a 100-foot mapping buffer around the parcel. The general biological survey and follow-up field inspection were conducted on-foot with the aid of binoculars. Habitat outside the Project site was surveyed from the Project site and from publicly accessible vantage points. Vegetation communities were mapped in accordance with the habitat classifications provided in Holland as revised by Oberbauer et al. (2008). A minimum mapping unit of 0.01 acre was used for the vegetation mapping. Vegetation communities were mapped onto a color aerial photograph of the site with topographical overlay and data collected from the survey were digitized in ESRI Geographical Information System (GIS) software, using ArcGIS for Desktop. Photographs of the Project area were taken to record the biological resources present within the BSA.

A list of detectable plant and wildlife species were recorded in a field notebook. Common plant species observed were identified by visual characteristics and morphology in the field. Wildlife species were determined through direct observation (aided by binoculars), identification of songs, call notes and alarm calls, or by detection of sign (e.g., scat, etc.).

A directed survey/assessment for special status species, as defined under CEQA was conducted concurrent with the general biological survey within the BSA. Any special status species were noted on the field map and/or recorded using a mobile mapping application on a hand-held device (i.e., Avenza). For the purposes of this report, special status species are: 1) federally and state-listed species (CDFW 2024b and 2024c); and 2) CDFW Species of Special Concern (SSC), Fully Protected (FP), and Watch List (WL) species, and species designated as Special Plants or Special Animals in the CNDDDB (CDFW 2024d and 2024e), which include all taxa inventoried by the CDFW, regardless of their legal or protection status. The potential for special status species to occur within the BSA was assessed based on the presence of potentially suitable habitat, as well as historical and currently available species data. Table 1 lists criteria for evaluating special status species potential for occurrence while the below paragraph discusses the methodology for focused bumble bee surveys and protocol coastal California gnatcatcher (*Polioptila californica californica*) assessed as being necessary to determine the current presence/absence of these species within the BSA.

Table 1. Criteria for Evaluating Special Status Species Potential for Occurrence

Potential for Occurrence	Criteria
Not Expected	Diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the BSA or species is restricted to habitats or environmental conditions that do not occur in the BSA.
Low Potential	Historical records for this species do not exist in the BSA, and/or habitats or environmental conditions needed to support the species are of poor quality.
Moderate Potential	Either a historical record exists of the species in the BSA and marginal habitat exists in the proposed work areas or the habitat requirements or environmental conditions associated with the species occur in the proposed work areas, but no historical records exist in the BSA.
High Potential	Both a historical record exists of the species and the habitat requirements and environmental conditions associated with the species occur in the BSA.

M&A qualified biologists conducted an updated habitat assessment and three focused surveys on June 5, June 19, and July 3, 2025, to determine the presence or absence of Crotch's bumble bee (*Bombus crotchii*) within the BSA. Historical and currently available biological literature and data pertaining to the Project area were reviewed prior to initiation of the field investigation. This review included examination of CDFW CNDDDB special status bumble bee records for the project vicinity (CDFW 2024a) as well as community science data of special status bumble bees for the Project vicinity (i.e., iNaturalist 2025, Research Grade only; Bumble Bee Watch 2025a, Pending and Research Grade). The surveys were conducted in accordance with CDFW's *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (CDFW 2023).

M&A qualified biologists also conducted seven protocol surveys for the federally listed threatened, coastal California gnatcatcher on June 5, June 12, June 19, June 26, July 3, July 17, and July 31, 2025, to determine the presence or absence of this species within the BSA. Surveys were conducted in accordance with the current USFWS *Coastal California Gnatcatcher Presence/Absence Survey Protocol* (USFWS 1997) and the *Guidance on Extending the Current USFWS California Gnatcatcher Protocol to Cover Survey Periods That Include Both Breeding and Non-Breeding Periods* (USFWS 2008), as authorized under M&A's federal Endangered Species Act (ESA), Section 10(a)(1)(A) permit #797999-9 and CDFW Memorandum of Understanding. The BSA contained approximately 1.4 acres of potential coastal California gnatcatcher habitat (0.58 acre within the Project site and 0.82 acre within the 100-foot buffer). Due to the relatively low quality of habitat within the BSA and the accessibility of adjacent areas that also contained potential coastal California gnatcatcher habitat, M&A's survey route extended beyond the BSA. Although habitat adjacent to the Project site was surveyed from within the Project site and from publicly accessible vantage points, based on topography, vantage points, and habitat structure, it is reasonably expected that any gnatcatcher present within approximately 300 feet of the Project parcel would have been detected.

Lastly, a directed survey/assessment for potential aquatic features, regulated under the Clean Water Act (CWA) Sections 404 and 401, Porter-Cologne Water Quality Control Act, and/or California

FGC Streambed Alteration Agreement Section 1600-1616 was conducted concurrent with the general biological survey within the BSA.

Survey Limitations

Biological inventories are generally subject to various survey limitations. Depending on the season and time of day during which field surveys are conducted, some species may not be detected due to temporal species variability. In the present case, the BSA was examined during the daylight hours in summer; therefore, some fauna including nocturnal wildlife may not have been detected. Based on the biological literature and data review performed, as well as knowledge of the project area and species-specific habitat requirements, it is anticipated that any additional species potentially present on the project site can be fairly accurately predicted, and that the surveys conducted were sufficient in obtaining a thorough review of the biological resources present on the site for the purposes of this project analysis.

APPLICABLE REGULATIONS

A variety of federal and state, and local regulations may apply to the proposed Project. These regulations are listed herein with a brief description.

Federal

The federal ESA (16 U.S.C. 1513-1543) was enacted in 1973 to provide protection to threatened and endangered species and their associated ecosystems. "Take" of a listed species is prohibited except when authorization has been granted through a permit under Sections 4(d), 7, or 10(a) of the act. Take is defined as harassing, harming, shooting, wounding, killing, trapping, capturing, or collecting, or attempting to engage in any of these activities without a permit.

The MBTA (16 U.S.C. 703-712) was enacted in 1918. Its purpose is to prohibit the kill or transport of native migratory birds, or any part, nest, or egg of any such bird unless allowed by another regulation adopted in accordance with the MBTA. Under the MBTA of 1918 (16 U.S.C. section 703-712; Ch. 128; July 3, 1918; 40 Stat. 755; as amended 1936, 1956, 1960, 1968, 1969, 1974, 1978, 1986 and 1998), it is unlawful, except as permitted by the USFWS, to "take, possess, transport, sell, purchase, barter, import, or export all species of birds protected by the MBTA, as well as their feathers, parts, nests, or eggs. Take means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect (50 CFR 10.12). Birds protected by the MBTA include all birds covered by the treaties for the protection of migratory birds between the United States and Great Britain (on behalf of Canada, 1916), Mexico (1936), Japan (1972), and Russia (1976), and subsequent amendments."

It is important to note that since the MBTA addresses migratory birds by family rather than at a lower taxonomic level, most bird species are protected by the MBTA because most taxonomic families include migratory members. In addition, "take" as defined under the federal MBTA is not synonymous with "take" as defined under the federal ESA. The MBTA definition of "take" lacks a "harm and harassment" clause comparable to "take" under the ESA, thus, the MBTA authority does not extend to activities beyond the nests, eggs, feathers, or specific bird parts (i.e., activities or habitat modification in the vicinity of nesting birds that do not result in "take" as defined under the MBTA are not prohibited). Further, "a permit is not required to dislodge or destroy migratory bird nests that are not occupied by juveniles or eggs; however, any such destruction that results in take

of any migratory bird is a violation of the MBTA (i.e., where juveniles still depend on the nest for survival) (USFWS 2003).”

In 1948, Congress first passed the Federal Water Pollution Control Act. This act was amended in 1972 and became known as the Clean Water Act (CWA) (33 U.S.C. 1251). The act regulates the discharge of pollutants into waters of the U.S. Under Section 404, permits need to be obtained from the U.S. Army Corps of Engineers for discharge of dredge or fill material into waters of the U.S. Under Section 401 of the CWA, Water Quality Certification from the Regional Water Quality Control Board (RWQCB) would need to be obtained if there are to be any impacts to waters of the U.S.

State

CEQA requires that biological resources be considered when assessing the environmental impacts resulting from proposed actions. CEQA does not specifically define what constitutes an “adverse effect” on a biological resource. Instead, lead agencies are charged with determining what specifically should be considered an impact.

The California FGC regulates the taking or possession of birds, mammals, fish, amphibian and reptiles, as well as natural resources such as wetlands and waters of the state. It includes the California Endangered Species Act (CESA) (Sections 2050-2115) and SAA regulations (Section 1600-1616), as well as provisions for legal hunting and fishing, and tribal agreements for activities involving take of native wildlife. In addition, Sections 3503, 3503.5, and 3513 of the FGC prohibit the “take, possession, or destruction of bird nests or eggs.” Section 3503 states: “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.” Section 3503.5 provides a refined and greater protection for birds-of-prey and states: “It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” The distinctions made for birds-of-prey are the inclusion of such birds themselves to the protections and the elimination of the term “needlessly” from the language of §3503. Section 3513 states: “It is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act.”

The definition of “take” under the FGC is not distinct from the definition of “take” under CESA, which is defined as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill” (California Fish and Game Code §86); however, it is important to note that the state definition of “take” again does not include a “harm and harassment” clause, and thus, activities or habitat modification in the vicinity of nesting birds that do not result in “take” as defined under the FGC/CESA are not prohibited.

The Porter-Cologne Water Quality Control Act is substantively the California version of the Federal CWA. It provides for statewide coordination of water quality regulations through the establishment of the State Water Resources Control Board and nine separate RWQCBs that oversee water quality regulation on a day-to-day basis at the regional watershed basin level.

Local

The City of Escondido is no longer an active participant in the Natural Community Conservation Plan (NCCP) program under the Multiple Habitat Conservation Plan (MHCP) conservation planning efforts. While the City continues to pursue goals of the MHCP program including habitat and species conservation and habitat connectivity, the proposed Project will be evaluated to ensure consistency with CEQA only.

SURVEY RESULTS

Environmental Setting

Based on review of historic aerial imagery, the existing home was constructed between 1947 and 1953. After construction of the home, it appears that portions of the property were used in ranching-type efforts (e.g., raising livestock) with the undeveloped areas more recently (for the past approximately 20 years) mowed on a regular basis. The entire property is bound by fencing.

The Project site is located on a south facing hillside with existing driveway access off W. El Norte Parkway. The site is bound to the west, east, and south by mixed development consisting of residential development, gas stations, hotel, and small commercial office space and to the north by the City of Escondido Rod McLeod Park. The Park is an approximate 18-acre park of mostly passive recreation use. Immediately abutting the property to the west is a small undeveloped lot owned by San Diego Gas & Electric, which supports a northeast-trending utility corridor.

The property ranges in elevation from approximately 752 feet above mean sea level (MSL) at the upper/northern portion of the parcel to 688 feet above MSL at W. El Norte Parkway (SANGIS 2015). Onsite soils are mapped as Vista Coarse Sandy Loam 15 to 30 percent slopes in the north where the existing house is primarily located, Vista Course Sandy Loam 5 to 9 percent slopes in the south and southeast, and Escondido Very Fine Sandy Loam 15 to 30 percent slopes eroded in the northwest (Figure 4) (SanGIS 2004). The Vista soil series typically consists of moderately deep, well drained soils that formed in material weathered from decomposed granitic rocks (USDA NRCS 2024). Vista soils are on hilly slopes and mountainous uplands at elevations of 400 to 3,900 feet in southern California and have slopes of 2 to 85 percent. Under irrigation, avocados and citrus are grown in areas of favorable temperature. The Escondido soil series is typically on gently rolling to hilly topography in foothills at elevations of 400 to 2,800 feet. They are well-drained soils with medium runoff and moderate permeability, used for used for range, irrigated orchards and non-irrigated grain, grain hay, and pasture.

Biological Resources

Vegetation Communities and Flora

Five vegetation types have been identified within the BSA, urban/developed, disturbed habitat, eucalyptus woodland, Diegan coastal sage scrub, and disturbed Diegan coastal sage scrub (Table 2; Figure 5). Photographs of the site are included as Appendix B.

Table 2. Vegetation Communities within the Biological Study Area

Vegetation Community	Holland/ Oberbauer Code	Habitat Type	Existing Acreage
Urban/Developed	12000	Upland, Regionally Not Sensitive	4.09
Disturbed Habitat	11300	Upland, Regionally Not Sensitive	4.45
Eucalyptus Woodland	79100	Upland, Regionally Not Sensitive	0.16
Diegan Coastal Sage Scrub	32510	Upland, Regionally Sensitive	0.76
Disturbed Diegan Coastal Sage Scrub	32510	Upland, Regionally Sensitive	0.64
Grand Total:			10.10

Within the Project property, urban/developed has been mapped for the existing residential structures, driveway, and ornamental landscape while disturbed habitat has been mapped for most of the remaining property, primarily located on the east side of the driveway. During the biological investigation, the disturbed habitat was dominated by weedy, herbaceous non-native plants including short-pod mustard (*Hirschfeldia incana*) and tocalote (*Centaurea melitensis*). Other non-native plants present include horehound (*Marrubium vulgare*) and flax-leaf fleabane (*Erigeron bonariensis*). Native shrubs including broom baccharis (*Baccharis sarothroides*) and California encelia (*Encelia californica*) were sporadically present in low numbers throughout the disturbed habitat but their density was not enough to function as a native habitat, rather, they functioned as a component of the surrounding disturbed habitat. According to the regional *Description of Vegetation communities for San Diego County* (Oberbauer et al. 2008), disturbed habitat is characterized by predominantly non-native species through human action with examples of areas that have been graded, repeatedly cleared for fuel management purposes, and/or experienced repeated use that prevents natural revegetation. Historic use of the site for ranching-type activities and regular vegetation clearing for approximately the past 20 years (e.g., mowing and/or weed whipping) has resulted in conditions optimal for non-native weedy plants as those observed onsite.

Disturbed Diegan coastal sage scrub has been mapped for a portion of the property on the west side of the driveway. This area is dominated by California encelia and includes occasional other shrubs such as flat-top buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*) and California sagebrush (*Artemisia californica*). Only two individual California sagebrush were noted. Native forbs observed between shrubs included doveweed (*Croton setiger*) and Nuttall's snapdragon (*Antirrhinum nuttallianum* ssp. *nuttallianum*). The community has been classified as "disturbed" due the frequent vegetation clearing, its low diversity of native plants and its high percent cover from non-native species including tocalote, short-pod mustard, horehound, flax-leaf fleabane, scarlet pimpernel (*Lysimachia arvensis*), stinknet (*Oncosiphon piluliferum*), red brome (*Bromus madritensis* ssp. *rubens*), and freeway iceplant (*Carpobrotus edulis*). Diegan coastal sage scrub is a drought-deciduous community, typically comprised of low, soft-woody subshrubs (up to 1 meter high) on south-facing xeric slopes or clay rich soils that are slow to release stored water (Oberbauer et al. 2008). It is typically comprised of aromatic shrubs with a diverse understory of annual and perennial native forbs and grasses. Characteristic plant species include California sagebrush and California buckwheat with black sage (*Salvia mellifera*), white sage (*Salvia apiana*), lemonadeberry

(*Rhus integrifolia*), laurel sumac (*Malosma laurina*), and purple needlegrass (*Stipa pulchra*). This community can also support sensitive plants and wildlife, where suitable conditions exist. Within the Project parcel, the entire site including this community has been subject to regular vegetation clearing. As a result, native vegetative cover is sparse and non-native species are abundant. For these reasons, the sage scrub community within the Project site is expected to have a low biological function and value.

M&A conducted a drive-by reconnaissance survey of the Project parcel approximately six weeks after the initial investigation and observed that the site had been mowed and/or weed whipped; thus, all vegetation within the disturbed and disturbed Diegan coastal sage scrub communities had been cut to ground level.

Five vegetation types have been mapped within the 100-foot buffer, urban/developed, disturbed habitat, eucalyptus woodland, Diegan coastal sage scrub, and disturbed Diegan coastal sage scrub. Similar to within the Project parcel, urban/developed has been mapped for residential lots and paved roadways while disturbed habitat has been mapped for areas dominated by non-native vegetation including short-pod mustard, tocalote, and stinknet. Abutting the parcel to the north and west is the City's Rod McLeod Park and SDG&E lot, respectively. Diegan coastal sage scrub has been mapped where this community is present. Within the buffer to the north, the sage scrub is comprised of approximately 95 percent cover, dominated by low-growing California encelia with an inclusion of deerweed (*Acmispon glaber* var. *glaber*), flat-top buckwheat, and sporadic coast prickly-pear (*Opuntia littoralis*). This area also supports pockets of non-native plants including tocalote. Based on review of historic aerial imagery and as verified in the field, the sage scrub to the north has been previously cleared. The sage scrub to the west within the SDG&E lot, is comprised of a more typical plant community, including California sagebrush, California encelia, white sage, flat-top buckwheat, coast prickly-pear, and Cleveland sage (*Salvia clevelandii*; or potential hybrid); however, this community is present in small groups of plants surrounded by non-native vegetation. In addition, the non-native vegetation appears to be maintained/cut to ground level on a regular basis. This maintenance is evident on historic aerial imagery and was verified during the biological investigations.

Zoological Resources – Fauna

Wildlife species noted during the biological survey consisted of species commonly found in native and naturalized habitats throughout San Diego County, many of which are year-round residents and to a lesser degree are wintering species. This includes the following reptile, butterfly, dragonfly, and bee species: western fence lizard (*Sceloporus occidentalis*), orange-throated whiptail (*Aspidoscelis hyperythra*); checkered white (*Pontia protodice*) and common buckeye (*Junonia coenia grisea*) butterflies; dragonfly (dragonfly sp.); bumble bee (*Bombus* sp.), and honey bee (*Apis* sp.). California ground squirrel (*Spermophilus beecheyi nudipes*) and domestic dog (*Canis familiaris*) were the only mammals detected within the BSA.

A few avian species were detected within the BSA. The following were detected primarily in association with the vegetation around the residential development and to a lesser extent the coastal sage scrub: hooded oriole (*Icterus cucullatus*), house finch (*Haemorrhous mexicanus*), Anna's hummingbird (*Calypte anna*), and lesser goldfinch (*Spinus psaltria*). The following species were primarily associated with the sage scrub and disturbed habitat immediately adjacent to the sage

scrub: California towhee (*Melospiza crissalis*), black phoebe (*Sayornis nigricans*), white-throated swift (*Aeronautes saxatalis*) (fly over, forage), and greater roadrunner (*Geococcyx californianus*).

Special Status Species

Present within the BSA

Two special status species, the orange-throated whiptail, a CDFW CNDDDB Special Animal and CDFW Watch List species, and coastal California gnatcatcher, a federally listed threatened species, were detected within the BSA. The orange-throated whiptail is relatively common, occurring in low-elevation coastal scrub, chaparral, and valley foothill hardwood habitats; however, the individual observed onsite was detected in association with the urban development (Figure 5).

The coastal California gnatcatcher (Gnatcatcher) is a non-migratory bird that occurs in coastal sage scrub and associated habitats from southern Ventura County to Baja California, Mexico. The Gnatcatcher home range size varies seasonally and geographically, with winter season home ranges being larger than breeding season ranges (Bontrager 1991) and inland populations having larger home ranges than coastal populations (Atwood and Bontrager 2001). Gnatcatcher pairs strongly defend territories against other gnatcatchers and predators during the breeding season which typically extends from February 15 through August 31 with peak nesting activity from mid-March through mid-May. Some Gnatcatcher pairs will defend territories throughout the year (Preston et al. 1998). Breeding season territories range in size from less than 2.5 acres to greater than 25 acres (Atwood et al. 1998; Preston et al. 1998), with mean territory size generally being greater for inland populations than coastal populations. In the non-breeding season, the area used by individual gnatcatchers may be almost twice as large as that used during the breeding season (Preston et al. 1998).

No Gnatcatchers were detected within the BSA during the initial biological investigation on June 7, 2024, and there are no historic records of Gnatcatchers within the BSA. The closest historic records to the BSA are located approximately 0.87 miles northeast (USFWS 2024c; Record Date June 4, 2018) and 1.1 mile north of the site (USFWS 2024c; Record Date June 1, 2000). However, two Gnatcatchers were incidentally observed flying together during the follow-up investigation on August 22, 2024. The birds were first heard calling from a distance, north of the Project site and then were ultimately observed flying to the Diegan coastal sage scrub habitat immediately adjacent to the property. They were detected for a very short period of time, perched on sage scrub plants as well as non-native mustard, and then observed flying to the north out of sight (Figure 5). At the same time, a greater roadrunner, a potential predator of small passerines including gnatcatchers, was observed attempting to jump from the ground toward the perched birds.

Due to regular vegetation maintenance on the property, there is no suitable habitat for Gnatcatchers to nest onsite. Further, when sage scrub vegetation is present, it is sparse and not expected to provide nesting habitat due to the lack of sufficient vegetative cover preferred by the Gnatcatcher. In addition, most of the sage scrub immediately north of the parcel and in the BSA, within the City's Rod McLeod Park is expected to serve as low quality nesting habitat for the Gnatcatcher due to the periodic maintenance of vegetation which has likely created the current condition in which the area is dominated by California encelia and deerweed versus the species preferred plant composition including (but not limited to) California sagebrush and flat-top

buckwheat. While the sage scrub habitat to the west within the SDG&E lot supports the species preferred plant composition, the habitat is highly fragmented, separated by large patches of non-native vegetative cover mapped as disturbed habitat. Therefore, based on the literature and data review as well as the biological surveys conducted in June and August 2024, it is presumed that the Gnatcatchers detected within the 100-foot mapping buffer were in transit and/or wandering from higher quality habitat, likely located north of the BSA within the central portion of the City's Rod McLeod Park (within 500 feet of the Project parcel) or potentially further north in sage scrub habitat off Imperial Drive and Centre City Parkway located approximately 0.47 miles north of the Project site.

Because of the 2024 incidental observation, M&A qualified biologists conducted seven protocol surveys in 2025 to determine the presence or absence of this species within the BSA. The BSA contained approximately 1.4 acres of potential coastal California gnatcatcher habitat (0.58 acre within the Project site and 0.82 acre within the 100-foot buffer). Due to the relatively low quality of habitat within the BSA and the accessibility of adjacent areas that also supported potential habitat, M&A's survey route extended beyond the BSA. No Gnatcatchers were detected within the BSA or adjacent habitat during the protocol surveys. The 45-day Letter Report is included as Appendix C. Although habitat adjacent to the Project site was surveyed from within the Project site and from publicly accessible vantage points, based on topography, vantage points (e.g., sidewalk, portions of Rod McLeod Park, etc.), and habitat structure, it is reasonably expected that any Gnatcatcher present within approximately 300 feet of the Project site would have been detected.

Occurrence Potential for Special Status Species within the BSA

An evaluation of the potential for special status species to occur within the BSA was conducted based on historical detections, suitable habitat, and site conditions. Appendix D provides a complete listing of the special status species evaluated with their respective status, suitable habitat, and an assessment of their potential for presence. This list includes special status species from CDFW CNDDDB and USFWS records search within two miles of the BSA; this specific records search is included as Appendix E and F, respectively.

Two special status species, American bumble bee (*Bombus pensylvanicus* [including Sonoran bumble bee *B. sonorus* per Bumble Bee Watch 2025b]), a CNDDDB Special Animal and Crotch's bumble bee, a CESA candidate for state listing as endangered were determined, as part of the initial evaluation in 2024 to have at least a moderate potential to occur within the BSA since there is a potential for these species to utilize the coastal sage scrub within the BSA. In support of the Project, M&A conducted an updated literature review, habitat assessment, and three focused bumble bee surveys between June and July 2025, for the purpose of determining the presence or absence of these species within the BSA. The results are included as Appendix G. In summary, no *Bombus* species were observed during the 2025 focused surveys. Crotch's bumble bee or Crotch's bumble bee nests were not detected during the survey effort and are presumed to be absent from the Project site; this is the same conclusion for American bumble bee. Overall, the cover of flowering plant species and preferred nectar sources was low within the Project parcel as well as the suitable nesting opportunities. This could be a result of the urban use of the site including regular vegetation maintenance and active California ground squirrel population (since bumble bees prefer inactive rodent borrows). There are no CDFW CNDDDB, Bumble Bee Watch or iNaturalist records for Crotch's bumble bee occurring within two miles of the survey area. The closest record

of this species to the survey area is approximately 2.4 miles to the west in the City of San Marcos (iNaturalist 2025, Research Grade June 2, 2024 record). In addition, there are no American bumble bee records within two miles of the survey area; most Bumble Bee Watch and iNaturalist records for this species are at least 10 miles to the west.

There are no other special status species that are expected to have a moderate or high potential to occur within the BSA.

There is no federally designated critical habitat within the BSA.

Jurisdictional Resources

The property is not located within a designated floodplain or floodway, nor are there any NWI or USGS drainages identified onsite. A concrete-lined brow ditch is present along the southern edge of the property and drains into the local storm drain system just offsite; however, this brow ditch is expected to have been constructed entirely within upland habitat. There are no aquatic resources within the BSA that would be regulated under Sections 404 or 401 of the Clean Water Act, Porter-Cologne Water Quality Control Act, and/or California FGC Streambed Alteration Agreement Section 1600-1616.

Other Unique Features/Resources

Many species of wildlife move through the landscape during their daily and/or seasonal activities. Many resident, sedentary species move only short distances within their home ranges or territories. Others, such as migratory birds, may move great distances during the year. Larger mammalian predators often traverse extensive areas of the landscape over the course of their activities. Because predation is a key process in maintaining biodiversity, it is important to maintain connectivity between large core areas of preserved habitat. Corridors are often defined as linear habitats that differ from the extensive surrounding landscape in which they are embedded; however, this could be interpreted in various ways. As a result, the key concept in regional conservation efforts is landscape connectivity. Core areas need to be connected. The more fragmented and isolated a patch of habitat becomes, the less value it has for regional conservation efforts. General knowledge of how animals move through a landscape mosaic is often relied upon in making corridor determinations. Animals are known to follow canyon bottoms, riparian strips, and ridgelines in their local and regional movements. Riparian habitats are thus frequently identified as corridors. Riparian habitats provide cover and may be the only remaining cover within a developed or disturbed area.

The BSA is surrounded by development including W. El Norte Parkway which is a relatively busy road. While undeveloped native Diegan coastal sage scrub abuts the property to the west and north, the undeveloped lands are isolated from larger tracks of contiguous habitat and portions of the abutting lands appear to be maintained with some level of vegetation management (e.g., removal). As a result, the site's location within the urban setting does not support typical features that can be identified as a wildlife corridor. Further, while the undeveloped lands abutting the property could support species movement in transit, the lands immediately abutting the property experience some level of vegetation clearing; thus, the overall quality for use by special status wildlife is expected to be low.

Rock outcrops are present on the west side of the driveway. These features are relatively flat with limited to no crevice space for wildlife and they appear to have been maintained as part of the surrounding urban. Specifically, the northwestern grouping of rock outcrops is close to the residence and associated structures. Decorative urban ornaments (e.g., bathtub, planters, etc.) were placed on these features. In addition, the features occur within the area that is maintained and cleared of vegetation on a regular basis. As a result, these features are expected to function as a part of the surrounding disturbed habitat type.

SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

State CEQA Guidelines §15065 (a) (Title 14, Chapter 3, Article 5) states, “A project may have a significant effect on the environment” if:

- “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 animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory.”
- “The project has possible environmental effects which are individually limited but cumulatively considerable.”

The following analysis identifies potential impacts to biological resources that could result from implementation of the proposed Project and addresses the significance of these impacts pursuant to CEQA, in accordance with the Issues listed under CEQA Guidelines Appendix G, Section IV.

Project impacts are categorized pursuant to CEQA as direct, indirect, or cumulative impacts.

- CEQA Guidelines §15358 (a) (1) and (b) (Title 14, Chapter 3, Article 20) defines a “direct impact or primary effect” as “effects which are caused by the project and occur at the same time and place” and relate to a “physical change” in the environment.
- CEQA Guidelines §15358 (a) (2) and (b) (Title 14, Chapter 3, Article 20) defines an “indirect impact or secondary effect” as “effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable” and relate to a “physical change” in the environment.
- CEQA Guidelines §15355 (Title 14, Chapter 3, Article 20) defines “cumulative impacts” as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.”

Direct, indirect, and cumulative impacts can be described as either permanent or temporary. Permanent impacts are generally defined as effects that would result in an irreversible loss of biological resources; temporary impacts can be defined as effects that could be restored, thus providing habitat and wildlife functions and values effectively equal to the functions and values that existed before the area was impacted.

CEQA Guidelines §15370 (Title 14, Chapter 3, Article 20) defines “mitigation” as:

- “Avoiding the impact altogether by not taking a certain action or parts of an action.”

- “Minimizing impacts by limiting the degree or magnitude of the action and its implementation.”
- “Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.”
- “Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.”
- “Compensating for the impact by replacing or providing substitute resources or environments.”

Potential project impacts were evaluated based on examination of the proposed Project plans within the context of the biological resources documented during the field survey, and those resources assessed as having a likely potential to occur in the project area. Direct impacts were determined by overlaying the project site plans on the mapped vegetation communities and sensitive resources/species in GIS ESRI software platforms. Indirect impacts were determined based on the design, intended use, and location of the proposed project elements relative to biological resources.

Project Impacts, Significance, and Recommendation Mitigation and/or Site Design Measures

Direct Impacts

Vegetation Communities

Implementation of the Project would result in direct, permanent impacts to the entire property and thus all communities onsite, consisting of urban development, disturbed habitat, and disturbed Diegan coastal sage scrub (Table 3; Figure 6). Impacts to disturbed Diegan coastal sage scrub are considered to be significant under CEQA. Implementation of habitat-based mitigation in accordance with Table 3 and as listed in Mitigation Measure **BIO-1** included below would be required to reduce impacts to a level below significance. Impacts to the remaining communities of urban/developed and disturbed habitat would be considered less than significant under CEQA since these habitats are not regionally considered to have high conservation value requiring mitigation.

Implementation of the Project would also result in direct, permanent impacts to areas just offsite, within the W. El Norte Parkway right-of-way. The offsite improvements are necessary to improve existing access to the property and would result in impacts to urban development and disturbed habitat.

The mitigation ratios presented in Table 3 are based on regionally accepted ratios by other jurisdictions who are participants to the NCCP program; however, the ratios are subject to change based on comments by the City and/or regulatory and resource agencies during the public review period of the CEQA document. The mitigation ratio for impacts to disturbed Diegan coastal sage scrub typically varies between 1:1 for low quality habitats and 3:1 for higher quality habitat. Due to the low quality habitat present and disturbed nature of the site within an urban residential setting, the appropriate ratio is expected to be 1:1.

Table 3. Impacts to Vegetation Communities

Vegetation Community	Habitat Type	Impact Acreage			Mitigation Ratio	Required Mitigation Acreage
		Onsite	Offsite	Total		
Urban/Developed	Upland, Regionally Not Sensitive	1.34	0.04	1.38	None	0.00
Disturbed Habitat	Upland, Regionally Not Sensitive	3.04	0.02	3.06	None	0.00
Disturbed Diegan Coastal Sage Scrub	Upland, Regionally Sensitive	0.58	<0.01	0.58	1:1	0.58
Total:		4.96	0.06	5.02		0.58

Mitigation Measure BIO-1: Sensitive Habitats

Prior to issuance of the grading permit, the City of Escondido shall document that required Project habitat mitigation has been secured by the Applicant from an approved mitigation bank, preferably within the north San Diego County region. Mitigation for significant direct impacts to approximately 0.58 acres of disturbed Diegan coastal sage scrub are proposed to be mitigated at a 1:1 ratio, via purchase of 0.58 acres coastal sage scrub habitat from an approved mitigation bank.

Special Status Species

An individual orange-throated whiptail was observed onsite, within the urban landscape of the property. The orange-throated whiptail is designated as a Watch List species by CDFW and a Special Animal by CNDDDB. This species typically occurs as a resident of sage scrub and chaparral communities throughout the region and is expected to occur within the BSA and further north within the City’s Park where sage scrub is present. Due to the relatively small amount of sage scrub impacted by the Project and its low-quality value because of the frequent mowing, the site is not expected to support a high number of individuals. As a result, impacts to this species would not be expected to have a substantial adverse effect on the local long-term survival of these species; and thus, potential impacts would not be considered significant.

Focused surveys for Crotch’s bumble bee and the American bumble bee were negative. Based on the negative survey results, these species are presumed absent from the BSA and no direct impacts are anticipated. Similarly, protocol surveys were negative for the Gnatcatcher. Based on the negative protocol survey results, the Gnatcatcher is presumed absent from the BSA; it is also presumed absent from approximately 300 feet of the Project site, and no direct impacts are anticipated. Based on this information, implementation of the Project is not expected to impact habitat occupied by Crotch’s bumble bee, American bumble and the Gnatcatcher.

Jurisdictional Resources

Implementation of the Project would not result in impacts to any aquatic resources regulated under Sections 404 or 401 of the Clean Water Act, Porter-Cologne Water Quality Control Act, and/or California FGC Streambed Alteration Agreement Section 1600-1616 since none are present onsite.

Other Unique Features/Resources

Implementation of the Project would not result in impacts to unique features such as wildlife corridor or nursery sites since none are present onsite. However, implementation of the Project cannot avoid impacts to the rock outcrops which are present on the west side of the driveway. These features are relatively flat with limited to no crevice space for wildlife and they are maintained as part of the surrounding urban use. As a result, these features are expected to function as a part of the surrounding habitat type. The largest rock outcrop is located within the area mapped as disturbed Diegan coastal sage scrub while the smaller outcrop is located within disturbed habitat. Impacts to disturbed Diegan coastal sage scrub are considered to be significant under CEQA, as a result, implementation of **BIO-1** is expected to reduce the impact to a level below significant. Impacts to disturbed habitat would be considered less than significant under CEQA since these habitats are not regionally considered to have high conservation value requiring mitigation.

Indirect Impacts

In association with direct impacts to native vegetation communities, there are usually indirect impacts to the remaining native vegetation and wildlife communities. Many of these are related to habitat fragmentation; however, outside of those effects associated with fragmentation, indirect impacts may include elevated noise above 60 dB(A) or ambient, artificial night lighting within wildlife habitat, increased human disturbance, change in duration and amount of surface water draining the site, and increased erosion or sedimentation. These types of indirect impacts can affect vegetation communities or alter habitat use by special status species such as the orange-throated whiptail if present adjacent to the Project parcel during construction.

Implementation of the proposed Project would result in indirect impacts to vegetation communities adjacent to the site, most notably from the effects of disturbance/clearing of vegetation within the Project footprint. Fugitive dust created from clearing/grubbing of the site could negatively impact adjacent native habitat. In addition, exposed soils from clearing and grubbing may result in erosion and subsequent offsite sedimentation within native habitat. Introduction of invasive ornamental plants in the new landscape may have a detrimental effect on adjacent native habitats. Implementation of the Project **Site Specific Design Measures** as discussed in the Introduction section of the report and bulleted below, would reduce these potential impacts to less than significant.

Focused surveys for Crotch's bumble bee and the American bumble bee were negative. Based on the negative survey results, these species are presumed absent from the BSA and thus no indirect impacts are anticipated. Similarly, protocol surveys were negative for the Gnatcatcher. Based on the negative protocol survey results, the Gnatcatcher is presumed absent from the BSA; it is also presumed absent from approximately 300 feet of the Project site, and no indirect impacts are anticipated.

Site Specific Design Measures

The Project would incorporate the following site design measures that would be a condition of approval of the Project and also included as notes on the construction plan set:

1. Construction-period and permanent best management practices (BMPs) and water quality requirements would be designed and implemented in accordance with applicable state and local rules and regulations. This includes temporary placement of silt fence or similar perimeter control at the property boundary to prevent any loss of sand, silt, or material from the site during construction activities.
2. All construction activities would occur during normal daylight hours in accordance with the City of Escondido local rules and regulations.
3. A project biologist would be retained to inspect and oversee installation of temporary perimeter fencing, be onsite during the initial clearing and grubbing of habitat, and conduct regular inspections thereafter during grading operations to ensure compliance with the project biological requirements. The biologist should be knowledgeable of upland biology and ecology, possess a bachelor's degree in a biological related field, and have at least two years of experience in field biology or current certification of a nationally recognized biological society. In lieu of the above qualifications, a resume would demonstrate to the satisfaction of the City of Escondido that the proposed biologist has the appropriate training and background to effectively implement the biological-related site design measures. The biologist would have the authority to halt construction activities, if needed and would report any detection of federally or state listed species and/or violation to the City and applicable resources agencies, if needed within 48 hours of detection.
4. Environmental training would be provided for contractors and construction personnel by the project biologist prior to the start of construction work and annually thereafter. The training would be repeated if gaps in construction operations were required.
5. Initial clearing, grubbing, and/or grading of vegetation would avoid the typical avian nesting season which extends from February 1 to August 31. If this were not feasible, clearing, grubbing and/or grading of vegetation may occur during the avian nesting season if the project biologist conducts a focused survey for active nests within approximately 72 hours prior to work in the area and determines the area to be free of nesting birds. If active bird nests were found, then all construction activities undertaken for the Project must comply with regulatory requirements of the federal MBTA and California FGC Sections §3503 and §3513. This would require protection of the nest, eggs, chicks, and adults until such time as the nestlings have fully fledged and are no longer dependent upon the nest site. The project biologist may need to conduct follow-up nesting bird surveys (e.g., weekly), as needed during the nesting season if suitable habitat is present onsite.
6. All necessary fuel modification requirements would be accommodated onsite.
7. All temporary and permanent landscaping would avoid the use of plant species listed by the California Invasive Plant Council on the California Invasive Plant Inventory.
8. All temporary and permanent lighting would be shielded and directed down onto the Project site; it would not be broadcast into the adjacent properties.

Local Policies, Ordinances, and Adopted Plans

The following federal/state laws/regulations and local ordinances are applicable to the proposed Project and are evaluated below for consistency purposes.

Federal Migratory Bird Treaty Act and California Fish and Game Code

Nesting birds including the house finch and hooded oriole were detected within the Project property during the biological investigation, and there is a potential that they may be present within the Project footprint during construction. Impacts to active migratory bird nests, if present at the time of construction, are prohibited under the federal MBTA and California FGC §3503 and §3513. Potential impacts to active migratory bird nests would be avoided with implementation of the Project's **Site Specific Design Measures**, discussed in the Introduction section of this report and bulleted in the above section.

MHCP Plan

While the City of Escondido is no longer an enrolled entity within an NCCP program, they continue to pursue the goals of the NCCP program including habitat and species conservation and mitigation. Implementation of **BIO-1** and the **Site Specific Design Measures** listed within the above sections would continue to support the goals of the NCCP program.

Cumulative Impacts

Implementation of the Project mitigation measure **BIO-1** and **Site Specific Design Measures** would reduce impacts to less than cumulatively considerable. Conservation as mitigation follows mitigation ratios and lands targeted for conservation purposes within the region. While the City of Escondido is no longer an enrolled entity within an NCCP program, regional land conservation and mitigation ratios continue to be drawn from established norms for implementation or regional conservation strategies. To this end, offsite mitigation will be focused on purchase of available credits from an approved mitigation bank within the north San Diego County region that contribute to strategic conservation goals.

REFERENCES

- Atwood, J.L., S.H. Tsai, C.A. Reynolds, J.C. Luttrell, and M.R. Fugagli. 1998. Factors affecting estimates of California gnatcatcher territory size. *Western Birds* 29:269-279.
- Atwood, Jonathan L. and David R. Bontrager. 2001. California Gnatcatcher (*Polioptila californica*), *The Birds of North World Online* (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology.
- Bontrager, D.R. 1991. Habitat requirements, home range, and breeding ecology of the California Gnatcatcher (*Polioptila californica*) in south Orange County, California. Prepared for Santa Margarita Company, Rancho Santa Margarita, California. April.
- Bumble Bee Watch. 2025. The Xerces Society, Wildlife Preservation Canada, York University, University of Ottawa, The Montreal Insectarium, The London Natural History Museum, BeeSpotter. Data accessed from Bumble Bee Watch, a collaborative website to track and conserve North America's bumble bees. Available from <http://www.bumblebeewatch.org/app/#/bees/lists>. Accessed: 2024 and 2025
- California Department of Fish and Wildlife (CDFW). 2023. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species. June 6, 2023. 14pp. Available from: <https://wildlife.ca.gov/Conservation/Survey-Protocols377281281-invertebrates>
- _____. 2024a. California Natural Diversity Database (CNDDDB). Biogeographic Data Branch. RareFind; GIS shapefile update, March 2024. Sacramento, California.
- _____. 2024b July. State and Federally Listed Endangered & Threatened Animals of California [Internet]. Natural Diversity Database. Available from: <https://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>
- _____. 2024c July. State and Federally Listed Endangered & Threatened Plants of California [Internet]. Natural Diversity Database. Available from: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>
- _____. 2024d July. Special Vascular Plants, Bryophytes, and Lichens List [Internet]. Natural Diversity Database. Quarterly publication. Available from: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>
- _____. 2024e July. Special Animals [Internet]. Natural Diversity Database. Available from: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>
- Environmental Systems Research Institute (ESRI). 2021. Aerial imagery, December 2021. Available from: <https://www.esri.com/en-us/home>
- Federal Emergency Management Agency (FEMA). 2023. Hydrology-Floodplain. Publication date 08/17/2023. Credits: SanGIS; Federal Emergency Management Agency; County of San

- Diego, Department of Public Works, Flood Control Engineering. Available from: <http://www.sangis.org/>.
- Google Earth Pro™. 7.3.6.9796 (64-bit) [Software]. Build Date Thursday, February 22, 2024 10:13:06 PM UTC. Available from: <http://www.earth.google.com>. Accessed 2024.
- iNaturalist. 2025. Available from <https://www.inaturalist.org>. Accessed Research Grade Only 2024 and 2025.
- NearMap 2023. Aerial imagery, 2023. Available from: <http://www.sangis.org/>
- Netronline. 2024. Historic Aerials by Netronline. Available from: <https://www.historicaerials.com/>. Accessed 2024.
- Oberbauer, T., M. Kelly, and J. Buegge. 2008, Revised 1996 and 2006. Draft Vegetation Communities of San Diego County [Internet]. Based on “Preliminary Descriptions of the Terrestrial Natural Communities of California”, Holland RF, PhD., 1986. Available from: http://www.sdcounty.ca.gov/dplu/docs/Veg_Comm_SDCounty_2008.pdf
- Preston, K., P. Mock, M. Grishaver, E. Bailey, and D. King. 1998. California gnatcatcher territorial behavior. *Western Birds* 29:242-257.
- San Diego Geographic Information Source (SanGIS). 2004. Geology, Generalized Soil Download (zip) updated 2004 [Internet]. Available from: <http://www.sangis.org/>. Data source: U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS).
- _____. 2015. Topo. Two Foot Contours. Publication date 11/30/2015. Credits: SanGIS, United States Geological Survey (USGS). Available from: <http://www.sangis.org/>.
- _____. 2023a. Vegetation. Publication date 08/31/2023. Credits: City of San Diego; SANDAG; County of San Diego, Planning & Development Services, LUEG-GIS Services. Available from: <http://www.sangis.org/>.
- _____. 2023b. Hydrology-Floodplain. Publication date 08/17/2023. Credits: SanGIS; Federal Emergency Management Agency; County of San Diego, Department of Public Works, Flood Control Engineering. Available from: <http://www.sangis.org/>.
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 1973. Soil Survey. San Diego Area, California.
- _____. 2024. Official Soil Series Descriptions. Available from: <https://www.nrcs.usda.gov/resources/data-and-reports/official-soil-series-descriptions-osd> Accessed 2024.
- U.S. Fish and Wildlife Service (USFWS). 1997 Jul 28. Carlsbad Fish and Wildlife Office (CFWO). Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Protocol. 5 pp.

- _____. 2003 Apr. 15. Migratory Bird Permit Memorandum. MBPM-2. Available from: <https://www.fws.gov/>
- _____. 2008 Jun 17. Carlsbad Fish and Wildlife Office (CFWO). Guidance on Extending the Current USFWS California Gnatcatcher Protocol to Cover Survey Periods That Include Both Breeding and Non-Breeding Periods. 3 pp.
- _____. 2024a. National Wetlands Inventory. Available from: <http://www.fws.gov/wetlands/>. Accessed: 2024.
- _____. 2024b. Critical Habitat Portal [Internet]. Data Download (zip) updated April 2024. Available from: <http://criticalhabitat.fws.gov/>.
- _____. 2024c. Carlsbad Fish and Wildlife Office (CFWO), GIS Division Species Occurrence Data Download (zip) updated Map, March 2024 [Internet]. Available from: <http://www.fws.gov/carlsbad/giswebpage/giswebpage>
- U.S. Geological Survey (USGS). 1998. California Quadrangle Maps; California Digital Raster Graphics, 7.5 Minute (0) Series, Albers NAD 27. Teale Data Center. Sacramento, California. Accessed: 2024.
- _____. 2024. National Hydrography Dataset. Available from: <https://www.usgs.gov/national-hydrography/access-national-hydrography-products>. Accessed: 2024.

PREPARER(S) AND PERSONS/ORGANIZATIONS CONTACTED

Merkel & Associates, Inc.

Amanda Gonzales, Associate Principal with 24 years of professional biological experience (biologist with M&A since 2003); Certified Wetland Delineator, Trained CRAM Practitioner, Authorized to Independently Conduct Protocol Surveys for the Coastal California Gnatcatcher and Southwestern Willow Flycatcher, and trained/qualified Bumble Bee Surveyor (participated in virtual and in-person trainings hosted by the Xerces Society between 2023 and 2025, active bumble bee volunteer with records for Crotch's bumble bee and other non-sensitive bumble bee species uploaded to Bumble Bee Watch and iNaturalist). Project Field Biologist and Primary Report Author.

Brandon Stidum, Senior Biologist with 20 years of professional biological experience (biologist with M&A since 2014); Field Biologist, Authorized to Independently Conduct Protocol Surveys for the Coastal California Gnatcatcher, and experienced Bumble Bee Surveyor. Other certifications include Certified Wetland Delineator and Trained CRAM Practitioner.

Kyle Ince, Senior Biologist and Restoration Specialist with more than 30 years of professional biological experience (biologist with M&A since 1995); Senior Botanist, Certified Wetland Delineator, Authorized to Independently Conduct Protocol Surveys for the Coastal California Gnatcatcher, Quino Checkerspot Butterfly, and Vernal Pool Branchiopods, Certified Arborist and California State Pesticide Applicators License. Project Report Review.

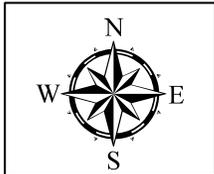
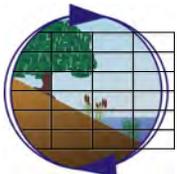
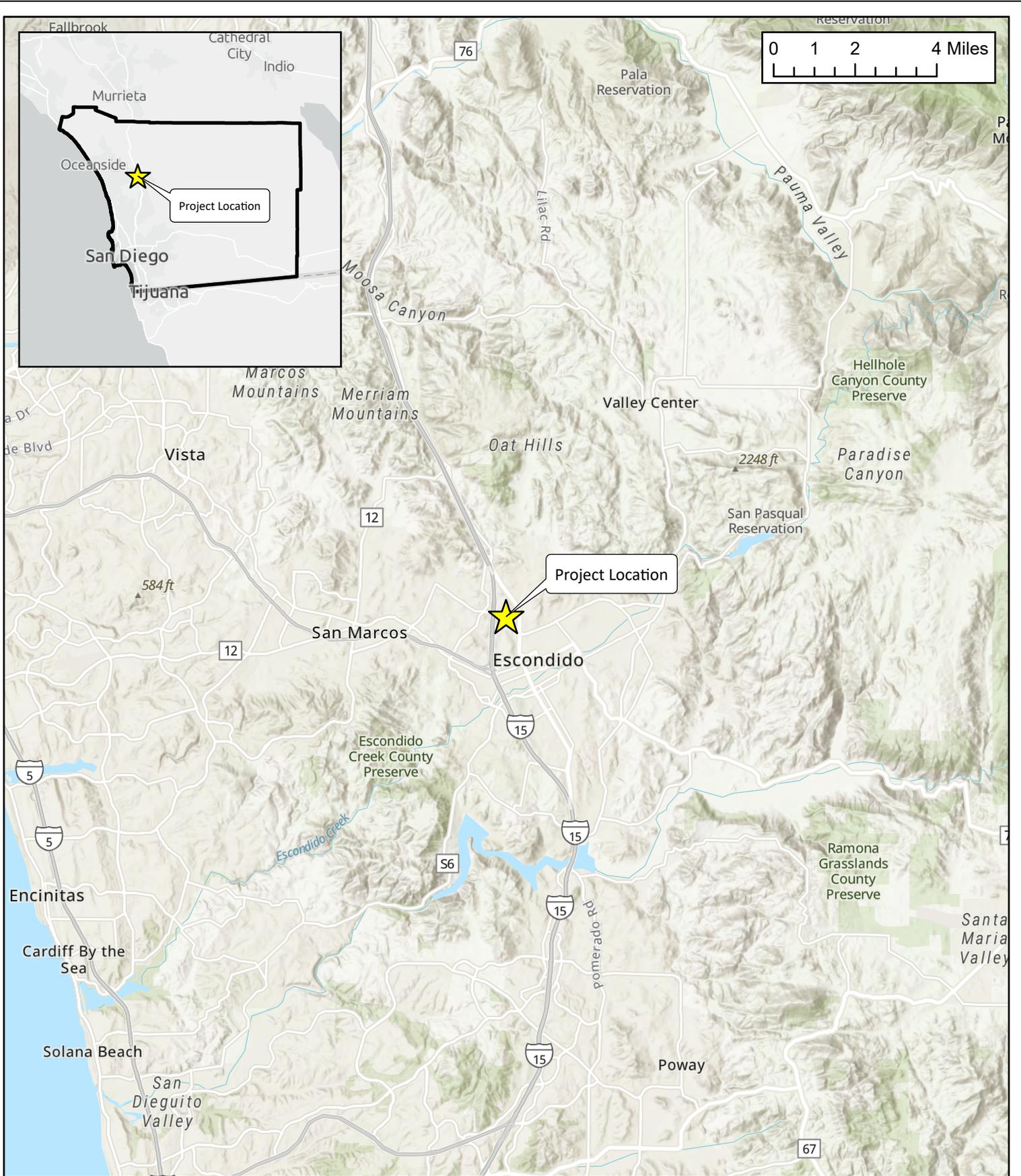
Brad M. Kelly, GIS Specialist with 21 years professional GIS experience (GIS Specialist with M&A since 2003). Project Graphics Preparation and Numeric Analyses.

Jenny Nicholson, Administrative Support. Project Report Quality Control.

Keith W. Merkel, Principal Consultant/Principal Ecologist. Mr. Merkel has over 40 years of professional consulting experience inclusive of native habitat mitigation and restoration experience and is a Principal and Corporate Officer at M&A since incorporated in 1994. Project Review.

APPENDIX A. FIGURES

- Figure 1. Regional Setting Map
- Figure 2. USGS Topography Map
- Figure 3. Project Vicinity Map
- Figure 4. Local Setting Map
- Figure 5. Biological Resources Map
- Figure 6. Project Impacts Map

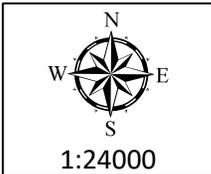
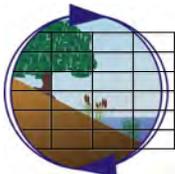
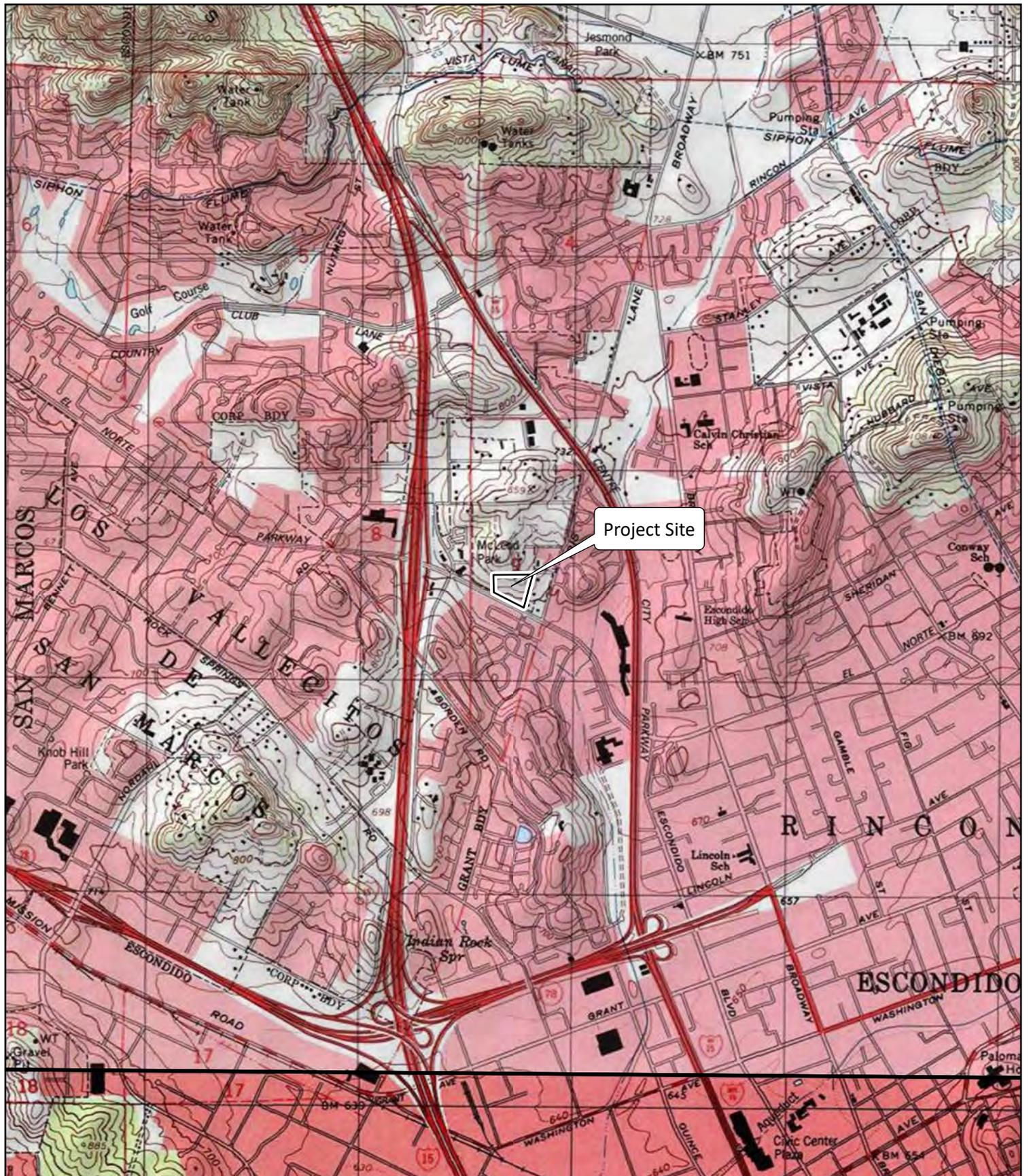


Regional Setting Map
Parkview Townhomes Project

Aerial Source: NearMap 2023

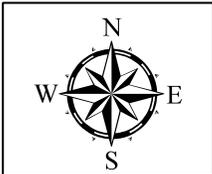
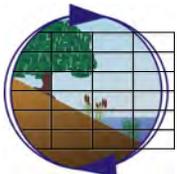
Created on August 23, 2024

Figure 1



USGS Quadrangle Map
Parkview Townhomes Project
Source: USGS 7.5' Valley Center, CA Quadrangle

Figure 2

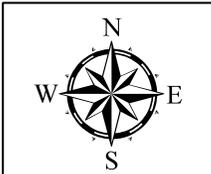
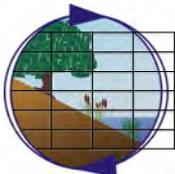
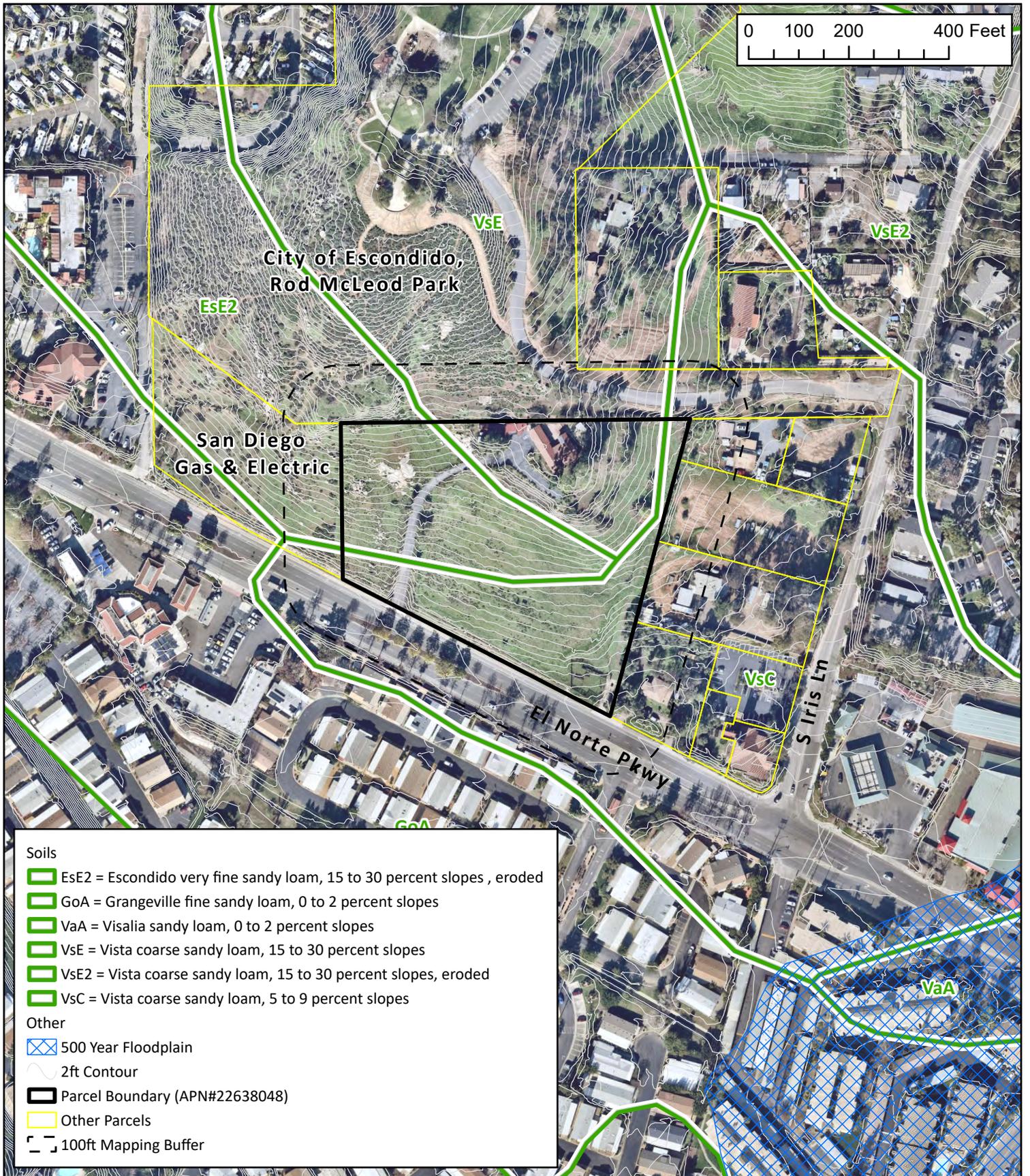


Project Vicinity Map
Parkview Townhomes Project

Aerial Source: NearMap 2023

Created on August 23, 2024

Figure 3



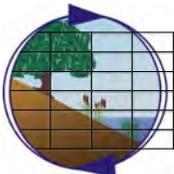
Project Vicinity Map
 Parkview Townhomes Project

Aerial Source: NearMap 2023 Created on August 23, 2024

Figure 4



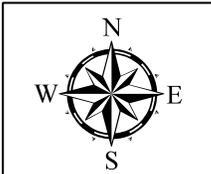
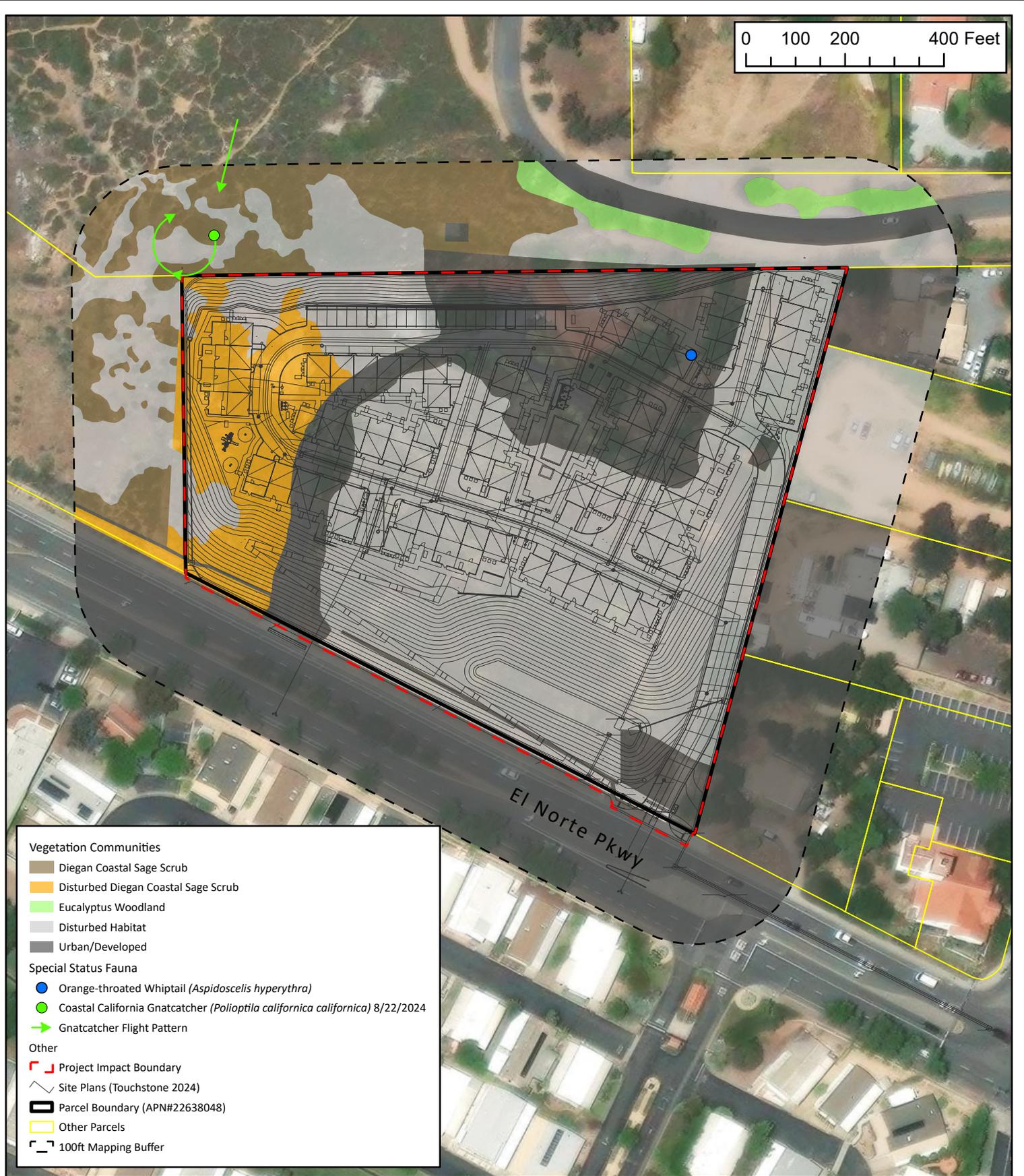
- Vegetation Communities**
- Diegan Coastal Sage Scrub
 - Disturbed Diegan Coastal Sage Scrub
 - Eucalyptus Woodland
 - Disturbed Habitat
 - Urban/Developed
- Special Status Fauna**
- Orange-throated Whiptail (*Aspidoscelis hyperythra*)
 - Coastal California Gnatcatcher (*Polioptila californica californica*) 8/22/2024
 - Gnatcatcher Flight Pattern
- Other**
- Parcel Boundary (APN#22638048)
 - Other Parcels
 - 100ft Mapping Buffer



Biological Resources Map
Parkview Townhomes Project

Aerial Source: ESRI 2025 Created: September 2025

Figure 5



Biological Impacts Map
Parkview Townhomes Project

Aerial Source: ESRI 2025 Created: September 2025

Figure 6

APPENDIX B. SITE PHOTOGRAPHS



Photo Point 1. Photo taken from the top/northern portion of the property, just south of the house and directed southward toward W. El Norte Pkwy. Ornamental landscape (i.e., iceplant) in the foreground while disturbed habitat dominated by mustard is in the background. Photo taken on 6/7/2024.



Photo Point 2. Photo taken from Photo Point 1 but directed southwest.



Photo Point 3. Photo taken from the top/northern portion of the property, on the east side of the house on the boundary between urban/developed and disturbed habitat, dominated by tocalote. Photo taken on 6/7/2024 and directed north.



Photo Point 4. Photo taken from Photo Point 2 but directed east.



Photo Point 5. Photo taken from the disturbed Diegan coastal sage scrub, west of the driveway. Rock outcrop within view; disturbed habitat in background. Photo taken on 6/7/2024 and directed north.



Photo Point 6. Photo taken from Photo Point 5 but directed south. Disturbed Diegan coastal sage scrub within view. Photo taken on 6/7/2024 and directed south.



Photo Point 7. Photo taken from the southern portion of the parcel, west of the driveway between the fencing and sidewalk (to the left of the photo). Brow ditch and disturbed Diegan coastal sage scrub within view. Photo taken on 6/7/2024 and directed west.



Photo Point 8. Photo taken from W. El Norte Parkway and directed northwest. The SDG&E lot is primarily within view. Photo taken on 6/7/2024.

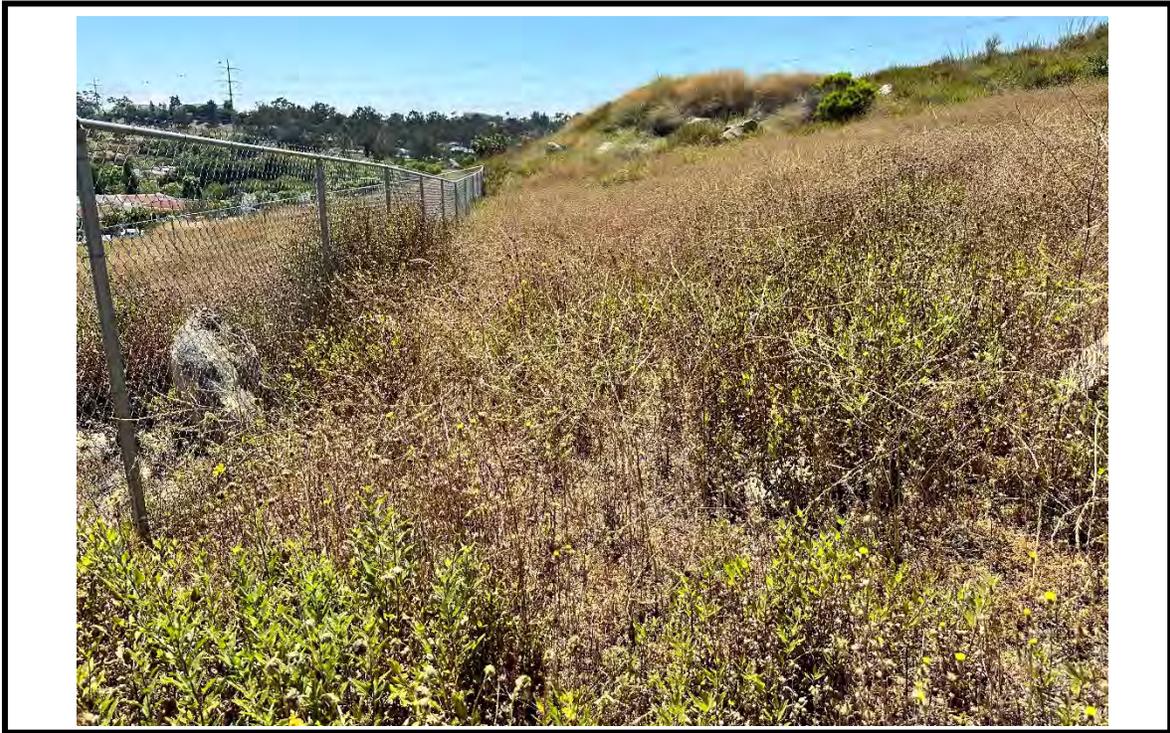


Photo Point 9. Photo taken from the northern boundary of the parcel to show the offsite habitat. Foreground mapped as Diegan coastal sage scrub, dominated by California encelia with an inclusion of non-native species. Background mostly mapped as disturbed habitat, dominated by mustards and other non-natives. Photo taken on 6/7/2024 and directed west.



Photo Point 10. Photo taken from the northern boundary of the parcel to show the offsite habitat (located east of Photo Point 9, along the property fence line). Area dominated by California encelia with an inclusion of non-native species. Photo taken on 6/7/2024 and directed west.



Photo Point 11. Photo taken from the northwest corner of the Project site and directed southeast. Photo taken on 8/22/2024 after routine vegetation maintenance throughout the entire Project property.

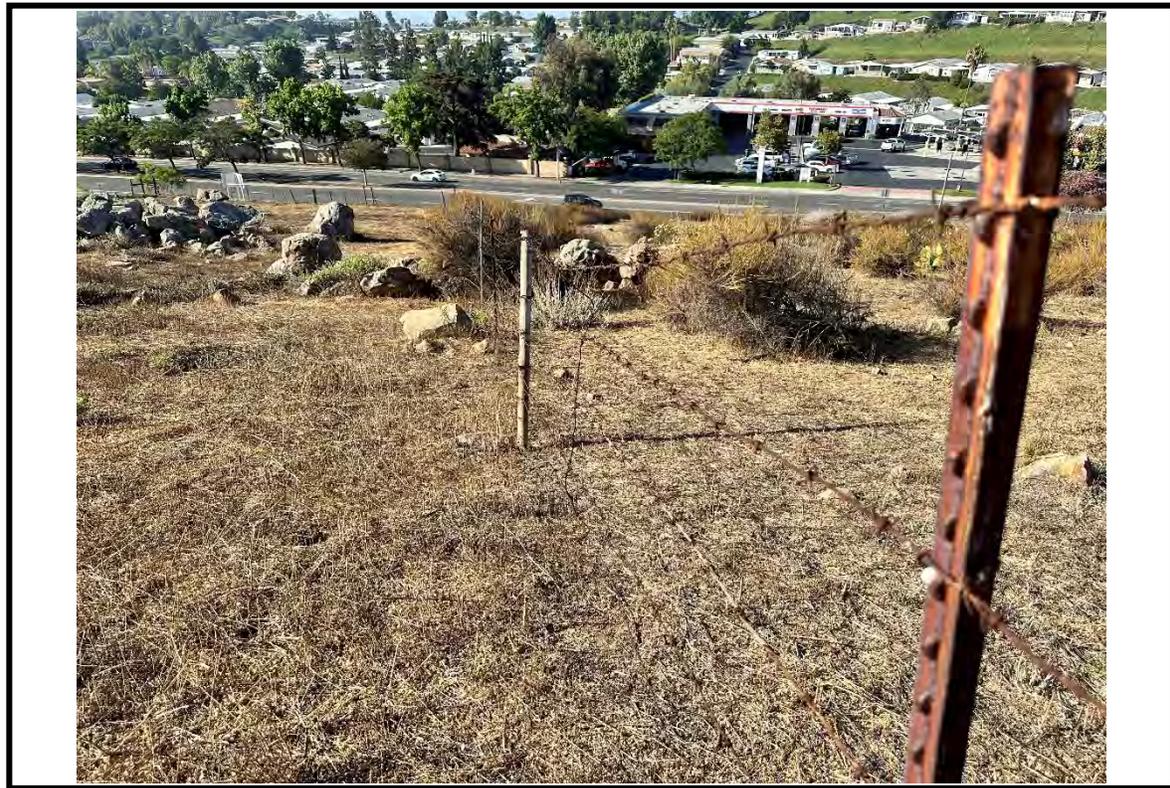
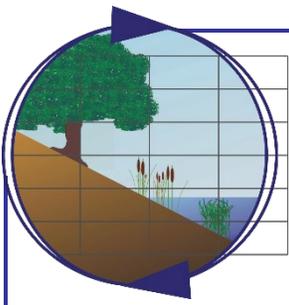


Photo Point 12. Photo taken from Photo Point 11 but directed south along the property fence line. Photo taken on 8/22/2024 and directed south.

**APPENDIX C. 2025 FOCUSED COASTAL CALIFORNIA GNATCATCHER SURVEY REPORT FOR THE
PARKVIEW TOWNHOMES PROJECT**



Merkel & Associates, Inc.

5434 Ruffin Road, San Diego, CA 92123

Tel: 858/560-5465 • Fax: 858/560-7779

e-mail: associates@merkelinc.com

September 15, 2025

M&A #24-039-01

Ms. Jess Sattler
Recovery Permit Coordinator
U.S. Fish and Wildlife Service – Carlsbad Fish and Wildlife Office
2177 Salk Ave, Suite 250
Carlsbad, CA 92008

Re: 45-day Letter Report of Coastal California Gnatcatcher Protocol Surveys for the Parkview Townhomes Project, Located in the City of Escondido, San Diego County

Dear Ms. Sattler:

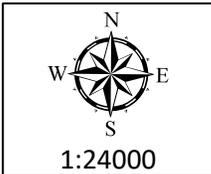
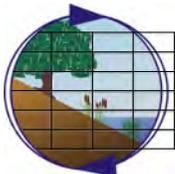
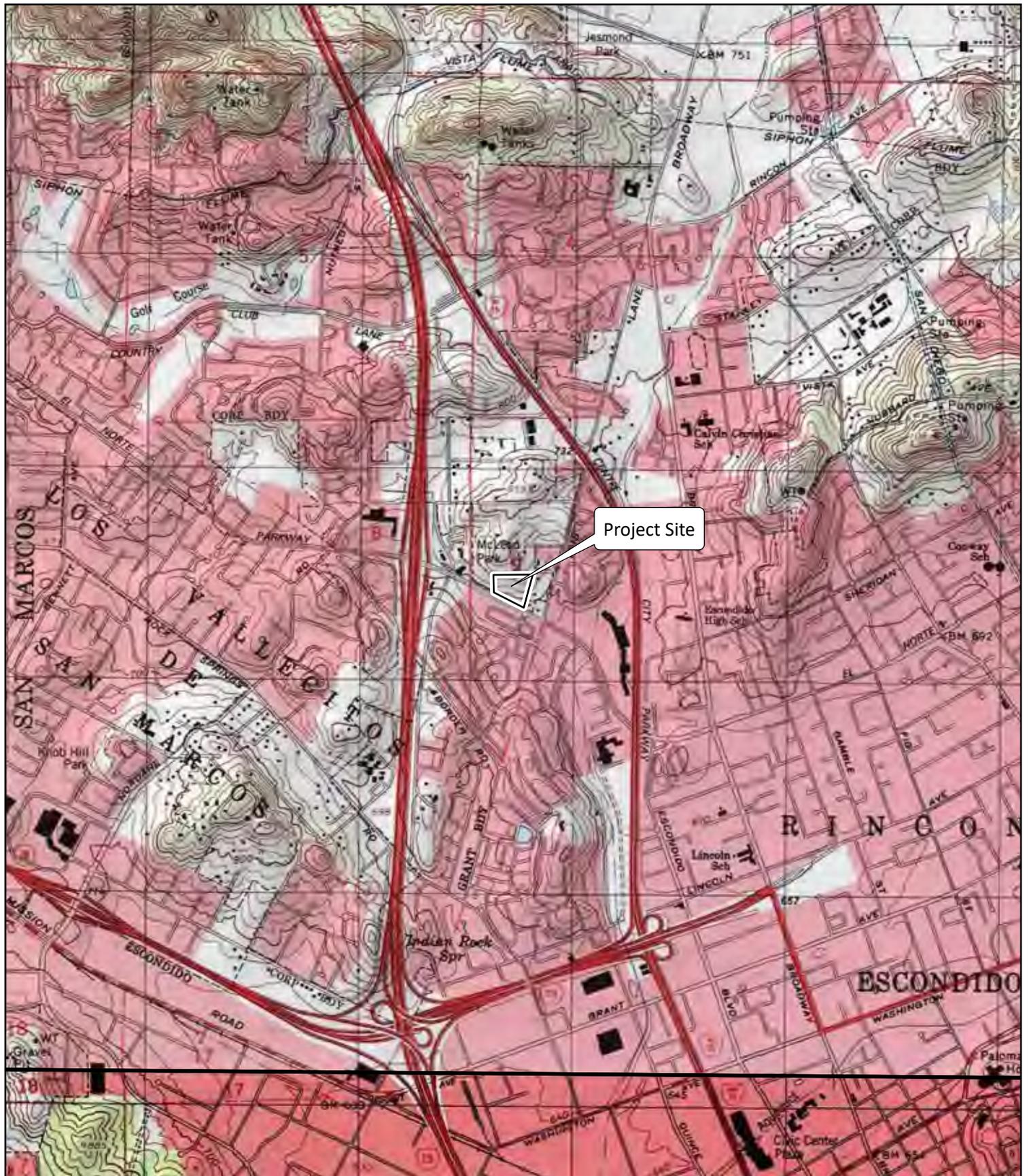
SUMMARY

Merkel & Associates, Inc. (M&A) conducted seven protocol surveys for the federally listed threatened coastal California gnatcatcher (*Polioptila californica californica*) for the purpose of determining the presence or absence of this species within the biological study area (BSA) for the Parkview Townhomes Project site (Assessors Parcel Number 226-380-48). These surveys were conducted in accordance with the current U.S. Fish and Wildlife Service's (USFWS) *Coastal California Gnatcatcher Presence/Absence Survey Protocol* (USFWS 1997) and *Guidance on Extending the Current USFWS California Gnatcatcher Protocol to Cover Survey Periods That Include Both Breeding and Non-Breeding Periods* (USFWS 2008), as authorized under M&A's federal Endangered Species Act, Section 10(a)(1)(A) permit #797999-9 and California Department of Fish and Wildlife (CDFW) Memorandum of Understanding (MOU). The BSA consists of the Project parcel plus a 100-foot buffer around the parcel. The BSA contains approximately 1.4 acres of potential gnatcatcher habitat (0.58 acre onsite and 0.82 acre within the 100-foot mapping buffer). No coastal California gnatcatchers were detected within the BSA during the protocol surveys. This letter report has been prepared and submitted to the client, USFWS, and CDFW in accordance with the requirements of M&A's 10a permit and MOU.

INTRODUCTION

On behalf of Touchstone Communities (Project Applicant), Merkel & Associates, Inc. (M&A) conducted protocol surveys for the federally listed threatened, coastal California gnatcatcher (*Polioptila californica californica*) for the purpose of determining the presence or absence of this species within the biological study area (BSA) for the Parkview Townhome Project (Project) site. The BSA consists of the Project parcel plus a 100-foot buffer around the parcel.

The Project site, an approximate 4.96-acre parcel is located on private property at 550 W. El Norte Parkway within the City of Escondido (Assessors Parcel Number 226-380-48), San Diego County. The property is located within Section 9, Township 12 South, Range 2 West of the San Bernardino Base and Meridian; U.S. Geological Survey (USGS) Valley Center, California Quadrangle (UTM coordinates Easting 490705.40, Northing 3667431.23, UTM Zone 11S) (Figure 1).



USGS Quadrangle Map
Parkview Townhomes Project
Source: USGS 7.5' Valley Center, CA Quadrangle

Figure 1

METHODS

M&A conducted seven protocol surveys for the coastal California gnatcatcher, as authorized under M&A's federal Endangered Species Act (ESA), Section 10(a)(1)(A) permit #797999-9 and California Department of Fish and Wildlife (CDFW) Memorandum of Understanding (Table 1). The BSA contained approximately 1.4 acres of potential coastal California gnatcatcher habitat; this is comprised of approximately 0.58 acre within the Project site and 0.82 acre within the 100-foot buffer. Habitat outside the Project site was surveyed from the Project site boundary and from publicly accessible vantage points.

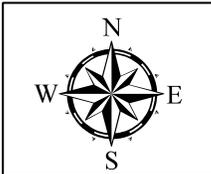
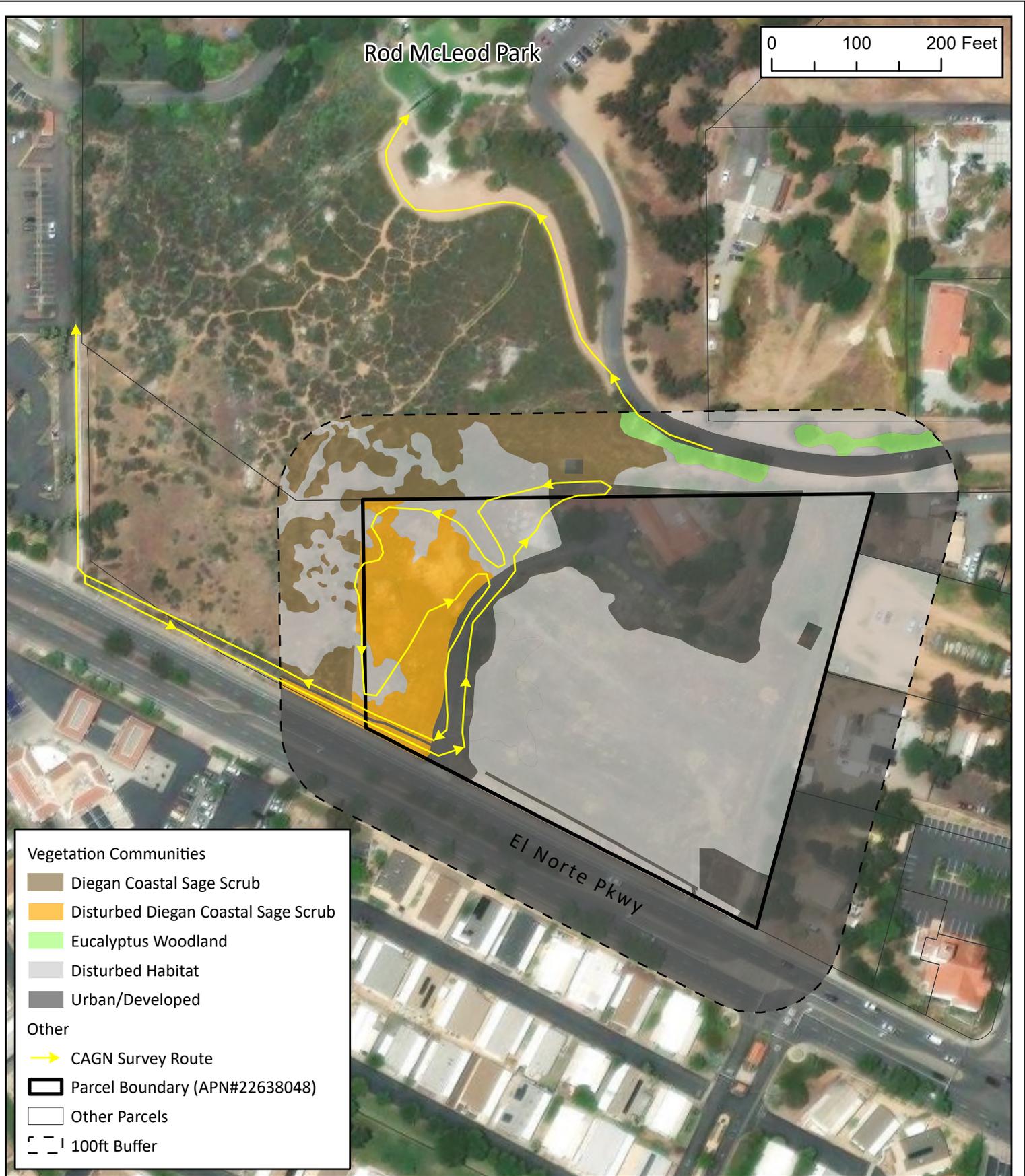
Due to the relatively low quality of habitat within the BSA and accessibility of adjacent areas that also contained potential coastal California gnatcatcher habitat, M&A's survey route extended beyond the BSA (Figure 2). Based on topography, vantage points, and habitat structure throughout the area, it is reasonably expected that any gnatcatcher present within approximately 300 feet of the Project parcel would have been detected.

Table 1. Survey Dates, Times, and Conditions

Survey #	Date	Time	Conditions ¹ (start-end)	Permitted Biologist(s)	Acres per Hour/Day ²	Taped Vocalizations Playback Frequency
1	2025 June 5	10:00-11:45	Wthr: 100%-100% cc Wind: 1-2 BS Temp.: 65°-66° F	Amanda Gonzales	0.8 per hour/ 1.4 per day	1 per 11 minutes
2	2025 June 12	10:07-11:45	Wthr: 0%-0% cc Wind: 1-1 BS Temp.: 67°-75° F	Amanda Gonzales	0.9 per hour/ 1.4 per day	1 per 6 minutes
3	2025 June 19	08:15-09:45	Wthr: 100%-10% cc Wind: 1-2 BS Temp.: 67°-71° F	Brandon Stidum	0.9 per hour/ 1.4 per day	1 per 13 minutes
4	2025 June 26	07:40-09:15	Wthr: 100%-2% cc Wind: 0-1 BS Temp.: 61°-65° F	Amanda Gonzales	0.9 per hour/ 1.4 per day	1 per 13 minutes
5	2025 July 3	07:10-08:30	Wthr: 100%-10% cc Wind: 1-1 BS Temp.: 60°-63° F	Amanda Gonzales	1.1 per hour/ 1.4 per day	1 per 9 minutes
6	2025 July 17	07:35-08:55	Wthr: 0%-0% cc Wind: 0-1 BS Temp.: 66°-69° F	Amanda Gonzales	0.9 per hour/ 1.4 per day	1 per 10 minutes
7	2025 July 31	09:00-10:45; 11:25-11:45	Wthr: 0%-0% cc Wind: 1-1 BS Temp.: 65°-75° F	Amanda Gonzales	0.7 per hour/ 1.4 per day	1 per 12 minutes

¹ cc=cloud cover; BS=Beaufort Scale (0 = <1 mile per hour [mph] wind; 1 = 1-3 mph; 2 = 4-7 mph); F = Fahrenheit

² Acres of potentially suitable coastal California gnatcatcher habitat within the BSA.



Coastal California Gnatcatcher Survey Results Map
Parkview Townhomes Project

Aerial Source: ESRI 2025

Created on Sept. 12, 2025

Figure 2

The surveys were conducted in accordance with the current U.S. Fish and Wildlife Service's (USFWS) *Coastal California Gnatcatcher Presence/Absence Survey Protocol* (USFWS 1997) and *Guidance on Extending the Current USFWS California Gnatcatcher Protocol to Cover Survey Periods That Include Both Breeding and Non-Breeding Periods* (USFWS 2008).

All vegetation communities within the BSA were previously mapped by M&A, and survey routes were slowly walked in appropriate gnatcatcher habitat. Taped recordings of gnatcatcher vocalizations, as well as "pishing", were used to elicit initial vocal responses, and an approximate six to 13-minute time interval was allowed for a response, particularly from advantageous viewpoints. A list of detected avian species was recorded in a field notebook.

RESULTS

Environmental Setting

The Project site is located on a south-facing hillside with driveway access from W. El Norte Parkway. Review of historic aerial imagery (Netronline 2024) indicates the existing home was constructed between 1947 and 1953. Following construction, portions of the property appear to have been used for ranching activities. More recently (for the past approximately 20 years) the site appears to have been regularly mowed and maintained. The entire property is bound by fencing.

Land uses adjacent to the Project site include mixed development to the west, east, and south consisting of residential development, gas station, hotel, and small commercial office space. North of the site is the City of Escondido's Rod McLeod Park. The Park is an approximate 18-acre park of mostly passive recreation use. Immediately abutting the Project site to the west is a small undeveloped lot owned by San Diego Gas & Electric (SDG&E), which supports a northeast-trending overhead utility corridor.

Vegetation Types

Three vegetation types have been identified within the Project site: urban/developed, disturbed habitat, and disturbed Diegan coastal sage scrub (Figure 2). Urban/developed has been mapped for the existing residential structures, driveway, and ornamental landscape while disturbed habitat has been mapped for most of the property, primarily located on the east side of the driveway. During the survey, the disturbed habitat was dominated by weedy, non-native forbs including short-pod mustard (*Hirschfeldia incana*) and tocalote (*Centaurea melitensis*) with an inclusion of some native species including California encelia (*Encelia californica*). Disturbed Diegan coastal sage scrub has been mapped for a portion of the property on the west side of the driveway. This area is dominated (albeit sparse) by California encelia and includes occasional other shrubs such as flat-top buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*) and California sagebrush (*Artemisia californica*); however, only two individual California sagebrush were noted. Native forbs observed between shrubs included doveweed (*Croton setiger*) and Nuttall's snapdragon (*Antirrhinum nuttallianum* ssp. *nuttallianum*). The community has been classified as "disturbed" due to the frequent vegetation maintenance, its low coverage (approximately 45 percent), low diversity of native plants, and high percent cover from non-native species including tocalote, short-pod mustard, horehound (*Marrubium vulgare*), scarlet

pimpernel (*Lysimachia arvensis*), stinknet (*Oncosiphon piluliferum*), red brome (*Bromus madritensis* ssp. *rubens*), and freeway iceplant (*Carpobrotus edulis*).

Five vegetation types have been mapped within a 100-foot buffer adjacent to the Project site: urban/developed, disturbed habitat, eucalyptus woodland, Diegan coastal sage scrub, and disturbed Diegan coastal sage scrub. Similar to within the Project parcel, urban/developed has been mapped for residential lots and paved roadways while disturbed habitat has been mapped for areas dominated by non-native vegetation including short-pod mustard, tocalote, and stinknet. Abutting the Project parcel to the north and west is the City's Rod McLeod Park and SDG&E lot, respectively. Diegan coastal sage scrub has been mapped where this community is present. Within the buffer to the north, the sage scrub is comprised of approximately 95 percent cover, dominated by low-growing California encelia with an inclusion of deerweed (*Acmispon glaber* var. *glaber*), flat-top buckwheat, and sporadic coast prickly-pear (*Opuntia littoralis*). This area also supports pockets of non-native plants including tocalote. Based on review of historic aerial imagery and as verified in the field, the sage scrub to the north has been previously cleared. The sage scrub to the west within the SDG&E lot, is comprised of a more typical plant community, including California sagebrush, California encelia, white sage, flat-top buckwheat, coast prickly-pear, and Cleveland sage (*Salvia clevelandii*; or potential hybrid); however, immediately adjacent to the site, this community is present in small groups of native shrubs surrounded by non-native forbs and grasses. In addition, the non-native vegetation appears to be maintained/cut to ground level on a regular basis. This maintenance is evident on historic aerial imagery and was verified during the biological investigations.

Overall, the sage scrub habitat present onsite is of low quality, characterized by a sparse coverage of native shrubs and a high inclusion of non-native forbs and grasses. As a result, the habitat is not expected to provide suitable conditions to support nesting by the coastal California gnatcatcher. The sage scrub adjacent to the Project site is of moderate quality, with greater shrub density and diversity than present onsite, though inclusions of non-native species and evidence of regular maintenance are also present. While the habitat could provide suitable conditions for the coastal California gnatcatcher, it is limited in size and relatively isolated.

Coastal California Gnatcatcher Survey Results

No coastal California gnatcatchers were detected within the BSA or the adjacent habitat during the protocol surveys. A list of avian species detected during the survey effort is provided as Attachment 1, and site photographs are included as Attachment 2.

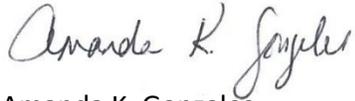
Although habitat adjacent to the Project site was surveyed from within the Project site and from publicly accessible vantage points (e.g., sidewalk, portions of McLeod Park), based on topography, vantage points, and habitat structure throughout the area, it is reasonably expected that any gnatcatcher present within approximately 300 feet of the Project parcel would have been detected.

CONCLUSIONS

No other pertinent observations pertaining to the coastal California gnatcatcher were noted during the survey efforts. Due to the limited nature of the work on this Project (e.g., protocol presence/absence surveys and not long-term research), we have no additional recommendation for species recovery.

If you have any questions concerning this report, please do not hesitate to contact me at (858) 560-5465 or agonzales@merkelinc.com.

Sincerely,



Amanda K. Gonzales
Associate Principal/Project Manager



Keith W. Merkel
Principal Consultant

cc: Hans Sin, California Department of Fish and Wildlife, South Coast Region,
hans.sin@wildlife.ca.gov

Kerry Garza, Touchstone Communities, kerry@touchstonecommunities.com

REFERENCES

Netronline. 2024. Historic Aerials by Netronline. Available from: <https://www.historicaerials.com/>. Accessed 2024.

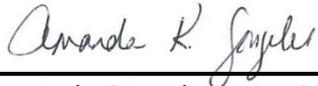
U.S. Fish and Wildlife Service (USFWS), Carlsbad Fish and Wildlife Office (CFWO). 1997 Jul 28. Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Protocol. 5 pp.

_____. 2008 Jun 17. Guidance on Extending the Current USFWS California Gnatcatcher Protocol to Cover Survey Periods That Include Both Breeding and Non-Breeding Periods. 3 pp.

_____. 2024. Carlsbad Fish and Wildlife Office (CFWO), GIS Division Species Occurrence Data Download (zip) updated Map, March 2024 [Internet]. Available from: <http://www.fws.gov/carlsbad/giswebpage/giswebpage>

I certify that the information in this survey report and attached exhibits fully and accurately represents my work in accordance with the Special Terms and Conditions of Recovery Permit TE-797999-9.

1) Fieldwork Performed By:



Date: 9/15/2025

Amanda Gonzales, Associate Principal
10(a) Permit Number 797999-9

2) Fieldwork Performed By:



Date: 9/15/2025

Brandon L. Stidum, Senior Biologist
10(a) Permit Number 797999-9

Attachment 1. Birds Observed or Detected during the Survey Effort

Cathartidae (American Vultures)

turkey vulture *Cathartes aura*

Accipitridae (Hawks and Harriers)

red-tailed hawk *Buteo jamaicensis*

Columbidae (Pigeons and Doves)

mourning dove *Zenaida macroura*

Cuculidae (Typical Cuckoos)

greater roadrunner *Geococcyx californianus*

Apodidae (Swifts)

white-throated swift *Aeronautes saxatalis*

Trochilidae (Hummingbirds)

Anna's hummingbird *Calypte anna*

Picidae (Woodpeckers and Wrynecks)

Nuttall's woodpecker *Dryobates nuttallii*

Tyrannidae (Tyrant Flycatchers)

black phoebe *Sayornis nigricans*
Cassin's kingbird *Tyrannus vociferans*

Corvidae (Jays, Magpies, and Crows)

American crow *Corvus brachyrhynchos*
common raven *Corvus corax*

Hirundinidae (Swallows)

northern rough-winged swallow *Stelgidopteryx serripennis*
cliff swallow *Petrochelidon pyrrhonota*

Troglodytidae (Wrens)

Bewick's wren *Thryomanes bewickii*

Paradoxornithidae (Parrotbills, Wrentit, and Relatives)

wrentit *Chamaea fasciata*

Mimidae (Mockingbirds and Thrashers)

northern mockingbird *Mimus polyglottos*

Sturnidae (Starlings)

*European starling *Sturnus vulgaris*

Passerellidae (New World Buntings and Sparrows)

song sparrow *Melospiza melodia*

California towhee *Melospiza crissalis*

spotted towhee *Pipilo maculatus*

Icteridae (Blackbirds, Meadowlarks, Orioles, and Relatives)

hooded oriole *Icterus cucullatus*

Fringillidae (Finches)

house finch *Haemorhous mexicanus*

lesser goldfinch *Spinus psaltria*

References

AviList Core Team. 2025. AviList: The Global Avian Checklist, v2025.

<https://doi.org/10.2173/avilist.v2025>

Attachment 2. Site Photographs



Photo Point 1. Overview of the Project site. Photo taken from the northwest corner of the Project parcel and directed south into the disturbed Diegan coastal sage scrub. Photo taken on 6/5/2025.



Photo Point 2. Photo taken from Photo Point 1 but directed southwest, into the adjacent habitat. Photo taken on 6/5/2025.



Photo Point 3. Overview of the Project site. Photo taken from the existing residence/driveway and directed southwest. Photo taken on 6/5/2025.



Photo Point 4. Overview of the eastern portion of the Project site. Photo taken from the northeastern portion of the site and directed east. Photo taken on 6/5/2025.



Photo Point 5. Overview of the habitat adjacent to the Project site. Photo taken from the western edge of the Project site and directed west into the SDG&E parcel. Photo taken on 7/31/2025.



Photo Point 6. Overview of the habitat adjacent to the Project site. Photo taken from the sidewalk (approximately 270 feet from the western edge of the Project parcel) and directed north into the SDG&E parcel (foreground) and a portion of Rod McLeod Park (background). Photo taken on 7/31/2025.



Photo Point 7. Overview of the habitat just north of the Project site. Photo taken from Rod McLeod Park. Photo taken on 7/3/2025 and directed south (towards the Project site).

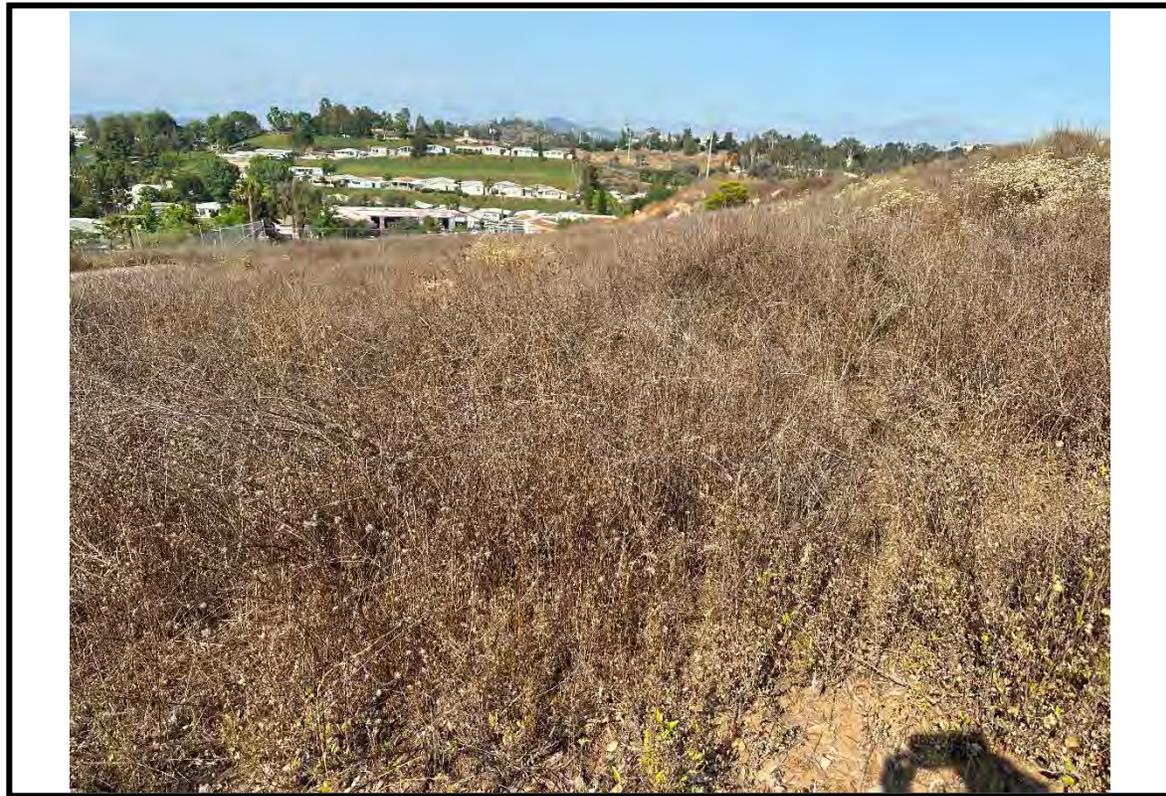


Photo Point 8. Photo taken from Photo Point 7 but directed southwest. Photo taken on 7/3/2025. Area in foreground dominated by California encelia.

APPENDIX D. OCCURRENCE OR POTENTIAL OF SPECIAL STATUS SPECIES WITHIN THE BSA

APPENDIX D. OCCURRENCE OR POTENTIAL OF SPECIAL STATUS SPECIES WITHIN THE BIOLOGICAL SURVEY AREA

Key to abbreviations:

Federal Endangered Species Act (ESA)

FE = Federally-listed as Endangered

FT = Federally-listed as Threatened

FPE = Federally proposed for listing as Endangered

FPT = Federally proposed for listing as Threatened

FPD = Federally proposed for delisting

FC = Federal candidate species

SC = Species of concern

Delisted species are monitored for 5 years

BCC = Birds of Conservation Concern

California Endangered Species Act (CESA)

SE = State-listed as Endangered

ST = State-listed as Threatened

SCE = State candidate for listing as Endangered

SCT = State candidate for listing as Threatened

SCD = State candidate for de-listing

SR = California Rare Species

California Natural Diversity Database (CNDDDB)

SP = Special Plant

SA = Special Animal

California Department of Fish and Wildlife (DFW)

SSC = Species of Special Concern

FP = California fully protected species

WL = Watch List

California Rare Plant Rank (CRPR)

List 1A = Plants presumed extinct in California

List 1B = Plants rare, threatened, or endangered in California and elsewhere

List 2 = Plants rare, threatened, or endangered in California, but more common elsewhere

List 3 = Plants about which more information is needed (a review list)

List 4 = Plants of limited distribution (a watch list); Threat level:

0.1-Seriously threatened in California (high degree/immediacy of threat)

0.2-Fairly threatened in California (moderate degree/immediacy of threat)

0.3-Not very threatened in California (low degree/immediacy of threats/ no current threats known)

Multiple Species/Habitat Conservation Program (MSCP)/(MHCP)

NE = Narrow Endemic Species

CS = Covered Species

Vernal Pool Habitat Conservation Plan (VPHCP)

VP = Vernal Pool Species

County of San Diego

Plant List A = Plants rare, threatened or endangered in California and elsewhere

Plant List B = Plants rare, threatened or endangered in California but more common elsewhere

Plant List C = Plants which may be quite rare, but need more information to determine their true rarity

Plant List D = Plants of limited distribution and are uncommon, but not presently rare or endangered

Animal Group 1 = Animals rare, threatened or endangered in California and elsewhere

Animal Group 2 = Animals rare, threatened or endangered in California but more common elsewhere

U.S. Fish and Wildlife Service (USFWS)

BCC = Birds of Conservation Concern

Scientific Name Common Name	Sensitivity Codes and Status ^{1, 2}	Habitat Preferences/Requirements ³	Verified In BSA	Potential To Occur In BSA	Factual Basis for Determination of Occurrence Potential
PLANTS					
<i>Acanthomintha ilicifolia</i> San Diego thornmint	ESA: FT CESA: SE CNDDDB: SP CRPR 1B.1 MSCP: NE, CS Cnty of SD List: A MHCP: NE, CS	Native, annual herb that has a distinctive microhabitat, preferring grassy openings in chaparral or sage scrub on gabbroic substrate with friable or broken clay soils, including vernal pools; ranges in elevation from 10-960 meters (33-3,150 ft); blooming period April-June.	No	Not Expected	Not observed during the 2024 biological investigation. Species preferred soil conditions are not present within the BSA.
<i>Ambrosia pumila</i> San Diego ambrosia	ESA: FE CNDDDB: SP CRPR 1B.1 MSCP: NE, CS Cnty of SD List: A MHCP: NE, CS	Native, perennial, rhizomatous herb that prefers creek beds, seasonally dry drainages, and floodplains; usually a protective tree canopy is absent and it grows on the periphery of willow woodland; ranges in elevation from 20-450 m (66-1,476 ft.); blooming period April-October.	No	Not Expected	Not observed during the 2024 biological investigation. No suitable habitat within the BSA or local area.
<i>Arctostaphylos rainbowensis</i> rainbow manzanita	CNDDDB: SP CRPR: 1B.1 Cnty of SD List: A	Native/CA endemic, evergreen shrub that prefers chaparral with a relatively dense canopy from six to eight feet being common at elevations ranging from 225-670 meters (738-2,198 ft.); blooming period December-March.	No	Not Expected	Not observed during the 2024 biological investigation. No suitable habitat within the BSA. Historic record within 2 miles of the BSA (CNDDDB record from 2007; record listed as "presumed extant").
<i>Centromadia (=Hemizonia) parryi</i> ssp. <i>australis</i> southern tarplant	CNDDDB: SP CRPR 1B.1 Cnty of SD List: A	Native, annual herb that occurs in mesic areas within grasslands, alkaline locales, vernal pools, and salt marsh; blooming period May-November.	No	Low	Not observed during the 2024 biological investigation. No suitable mesic soils occur within the BSA. Historic record within 2 miles of the BSA (CNDDDB record from 1916; record listed as "presumed extant").
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i> summer holly	CNDDDB: SP CRPR 1B.2 MHCP: CS Cnty of SD List: A	Native, evergreen shrub that prefers mesic north-facing slopes in heavy chaparral; rugged steep drainages seem to be a preferred location for isolated shrubs;	No	Not Expected	Not observed during the 2024 biological investigation. No suitable habitat or slope aspect present within the BSA.

Scientific Name Common Name	Sensitivity Codes and Status ^{1, 2}	Habitat Preferences/Requirements ³	Verified In BSA	Potential To Occur In BSA	Factual Basis for Determination of Occurrence Potential
		blooming period April-June.			Historic record within 2 miles of the BSA (CNDDDB record from 2007; record listed as “presumed extant”).
INVERTEBRATES					
<i>Bombus pensylvanicus</i> American bumble bee	CNDDDB: SA	A relatively large bee, the fuzzy black-and-yellow American bumble bee prefers the habitats offered by farmlands and open fields, where they nest below the grass or underground.	No	Not Expected	One <i>Bombus</i> species observed onsite during the June 2024 biological survey. However, focused surveys for Crotch’s bumble bee were negative in 2025; no <i>Bombus</i> species detected and the cover of flowering plant species and preferred nectar sources was low throughout the survey area. There are multiple Bumble Bee Watch records for this species from San Diego County but all records are greater than 2 miles away from the BSA; species reported in a variety of areas including urban gardens. Historic record within 2 miles of the BSA (CNDDDB record from 1982; record listed as “presumed extant”).
<i>Bombus crotchii</i> Crotch bumble bee	CESA: SCE CNDDDB: SA	The Crotch bumble bee is nearly endemic to California, and historically occupied grasslands and shrublands in southern to central California, with occasional records in the northern portion of the state. Like all bumble bees, the species requires floral resources, and undisturbed nest sites and overwintering sites; primarily nests underground and may rely on sufficient	No	Not Expected	One <i>Bombus</i> species observed onsite during the June 2024 biological survey. However, focused surveys for Crotch’s bumble bee were negative in 2025; no <i>Bombus</i> species detected and the cover of flowering plant species and preferred nectar sources was low throughout the survey area..

Scientific Name Common Name	Sensitivity Codes and Status ^{1, 2}	Habitat Preferences/Requirements ³	Verified In BSA	Potential To Occur In BSA	Factual Basis for Determination of Occurrence Potential
		<p>availability of rodent and other animal burrows to provide potential nesting sites. Crotch bumble bees are generalist foragers and have been reported visiting a wide variety of flowering plants. The Crotch bumble bee has a short tongue, and thus is best suited to forage at open flowers with short corollas. The plant families most commonly visited in California include Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, Hydrophyllaceae, Asclepiadaceae and Boraginaceae.</p> <p>The flight period for Crotch bumble bee queens in California is from late February to late October. Their flight period peaks in early April and there is a second pulse in July. The flight period for workers and males in California is from late March through September; worker and male abundance peak in early July.</p>			
<i>Danaus plexippus</i> monarch butterfly	CNDDDB: SA Cnty of SD Group: 2	<p>This species occurs throughout North America and migrates to wintering sites in central Mexico and along the California coast generally from August to October (Opler et al. 2006). This butterfly utilizes open habitats including fields, meadows, weedy areas, marshes, and roadsides. Caterpillar host plants include milkweeds (<i>Asclepius</i> sp.), and adult nectaring resources include a variety of flowers. In southern California, this butterfly may breed year round.</p>	No	Not Expected	Site does not support suitable habitat for wintering populations of monarch. Potential to nectar on flowering plants within the property.
AMPHIBIANS					
<i>Spea hammondi</i>	CNDDDB: SA	Breeding and egg laying occur almost	No	Not Expected	No suitable habitat within the BSA

Scientific Name Common Name	Sensitivity Codes and Status^{1, 2}	Habitat Preferences/Requirements³	Verified In BSA	Potential To Occur In BSA	Factual Basis for Determination of Occurrence Potential
western spadefoot toad	CDFW: SSC Cnty of SD Group: 2 North Cnty MSCP: CS MHCP: CS	exclusively in shallow, temporary pools formed by heavy winter rains, typically within grassland habitat.			or local vicinity. Historic record within 2 miles of the BSA (CNDDDB records from 1929 and 2004; records listed as “possibly extirpated”).
REPTILES					
<i>Anniella stebbinsi</i> Southern California legless lizard	CNDDDB: SA CDFW: SSC	Occurs from the coast to desert drainages in southern California and from the coast to the interior foothills in northern Baja California; absent from higher regions. Lives mostly underground, burrowing in loose sandy soil.	No	Low	Preferred habitat conditions and loose sandy soil not present onsite. Historic record within 2 miles of the BSA (CNDDDB record from 1952; records listed as “presumed extant”).
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	CNDDDB: SA CDFW: WL Cnty of SD Group: 2 MSCP: CS MHCP: CS	This species is a diurnal reptile from early spring to late summer that prefers washes and other sandy areas with patches of brush and rocks in coastal scrub and chaparral.	Yes	Observed	Individual observed on the project property during the 2024 biological investigation.
<i>Aspidoscelis tigris stejnegeri</i> coastal western whiptail	CNDDDB: SA CDFW: SSC Cnty of SD Group: 2	Primarily diurnal reptile that is most common in and around dense vegetation in a variety of habitats including chaparral, desert scrub, desert wash, alkali scrub, and grasslands.	No	Low	Preferred habitat conditions not present onsite. Frequent vegetation clearing eliminates sufficient cover. Historic record within 2 miles of the BSA (CNDDDB record from 2001; records listed as “presumed extant”).
<i>Crotalus ruber</i> red-diamond rattlesnake	CNDDDB: SA CDFW: SSC Cnty of SD Group: 2 North Cnty MSCP: CS	Occurs in chaparral, woodland, and arid desert habitats in rocky areas and dense vegetation; active from mid-spring to mid-fall.	No	Low	Preferred habitat conditions of dense vegetation are not present onsite. Rock outcrops lack sufficient crevices.
<i>Diadophis punctatus similis</i> San Diego ringneck snake	CNDDDB: SA Cnty of SD Group: 2	Often encountered during the day under boards and flat rocks in open, moist, relatively rocky areas within chaparral and grassland habitats.	No	Low	Preferred habitat conditions of mesic soils are not present onsite.
<i>Emys</i> (=Emmys =Clemmys)	CDFW: SSC	Permanent or nearly permanent bodies of	No	Not Expected	No suitable habitat present within

Scientific Name Common Name	Sensitivity Codes and Status ^{1, 2}	Habitat Preferences/Requirements ³	Verified In BSA	Potential To Occur In BSA	Factual Basis for Determination of Occurrence Potential
<i>marmorata pallida</i> Western (=southern pacific) pond turtle	CNDDDB: SA Cnty of SD Group: 1 MSCP: NE (Cnty of SD only), CS MHCP: CS	water below 600 ft. Require basking sites such as partially submerged logs, vegetation mats or open mud banks			the BSA or local area.
<i>Phrynosoma coronatum</i> (= <i>blainvillii</i>) coast (San Diego) horned lizard	CNDDDB: SA BLM: S CDFW: SSC Cnty of SD Group: 2 MHCP: CS	This species is endemic to southern California and northern Baja California, Mexico (USFWS 2006). This diurnal lizard occurs in a variety of habitats, including coastal sage scrub, chaparral, grassland, coniferous forest, oak woodland, riparian, and the margins of higher elevation desert, with an abundance of open areas for basking and obtaining prey (i.e., native ants and insects), and loose, fine soils that provide camouflage and allow burrowing for protection from predators.	No	Low	No suitable habitat within the BSA or local area. Historic record within 2 miles of the BSA (CNDDDB record from 1928; record listed as “possibly extirpated”).
BIRDS					
<i>Astur cooperii</i> Cooper's hawk	CNDDDB ⁴ : SA CDFW : WL Cnty of SD Group: 1 MSCP: CS MHCP: CS	Year-round resident of San Diego County that frequently nests in dense stands of live oak, riparian deciduous or other forest habitats located near water and along broken woodland habitat and edges, where it can perch under cover and hunt prey, including amphibians, reptiles, and small birds and mammals.	No	Low	No suitable nest sites within the BSA. However, there is a high potential for the species expected to forage throughout the local area.
<i>Agelaius tricolor</i> tricolored blackbird	CDFW: SSC CNDDDB ⁴ : SA Cnty of SD Group: 1 MSCP: NE (North Cnty SD), CS	Year-round resident that nests in colonies preferably in cattail marshes and forages in nearby grassland, pastures or agricultural fields. Breeds from mid-March through July. Wanders nomadically in flocks during the winter but is still often found near nesting sites.	No	Not Expected	No suitable habitat within the BSA or local vicinity. Historic record within 2 miles of the BSA (CNDDDB record from 1906; record listed as “possibly extirpated”).
<i>Aimophila ruficeps canescens</i>	CNDDDB: SA	Sedentary year-round resident that occurs in	No	Low	Species not detected within the

Scientific Name Common Name	Sensitivity Codes and Status^{1, 2}	Habitat Preferences/Requirements³	Verified In BSA	Potential To Occur In BSA	Factual Basis for Determination of Occurrence Potential
southern California rufous-crowned sparrow	CDFW: WL Cnty of SD Group: 1 MSCP: CS MHCP: CS	sparse, mixed chaparral and sage scrub habitats, often on rolling, herbage-covered hillsides with scattered shrubs and rocky outcrops; breeds from Mar-Jun, with nests built on the ground concealed at the base of grass or a shrub.			BSA during the 2024 biological investigation. Coastal sage scrub is present within the project parcel, but it is of low quality due to the frequent vegetation clearing. Historic record within 2 miles of the BSA (CNDDDB record from 1998; record listed as “presumed extant”).
<i>Athene cunicularia</i> burrowing owl	CNDDDB ^{4, 5} : SA CDFW: SSC MSCP: CS North Cnty MSCP: NE South Cnty MSCP: NE Cnty of SD Group: 1 MHCP: CS USFWS: BCC	Occurs in open dry grasslands, agricultural, rangelands and desert habitats as well as airports, golf courses, and vacant urban lots.	No	Low	No burrows or suitable crevices present within the BSA. Historic record within 2 miles of the BSA (CNDDDB record from 1924; record listed as “presumed extant”).
<i>Buteo swainsoni</i> Swainson’s hawk	CESA: ST CNDDDB ⁴ : SA MSCP: CS Cnty of SD Group ⁴ : 1 USFWS: BCC	Migrates through the desert in the fall and spring. Can be found staging in open desert, grasslands or cropland containing scattered, large trees or small groves.	No	Not Expected	No suitable habitat within the BSA or local vicinity. Historic record within 2 miles of the BSA (CNDDDB record from 1923; record listed as “possibly extirpated”).
<i>Spinus (=Carduelis) lawrencei</i> Lawrence’s goldfinch	CNDDDB ⁴ : SA USFWS: BCC	Year-round resident but highly nomadic. Will move to where food (seeds) is available. It prefers to nest in mountain woodlands often adjacent to a creek or meadow.	No	Low	Species preferred habitat conditions for nest establishment are not present within the BSA. Species could be detected within the BSA in transit.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ESA: FT CESA: SE CNDDDB ⁴ : SA MSCP: NE (Cnty of SD only) Cnty of SD Group: 1	Occurs in extensive stands of mature riparian woodland; rarely observed in San Diego County area	No	Not Expected	No suitable habitat within the BSA or local vicinity. Historic record within 2 miles of the BSA (CNDDDB record from 1936; record listed as “extirpated”).

Scientific Name Common Name	Sensitivity Codes and Status ^{1, 2}	Habitat Preferences/Requirements ³	Verified In BSA	Potential To Occur In BSA	Factual Basis for Determination of Occurrence Potential
	BLM: S USFS: S USFWS: BCC				
<i>Elanus leucurus</i> white-tailed kite	CDFW: FP CNDDDB ⁴ : SA Cnty of SD Group: 1	Year-round resident; prefers riparian woodland, oak groves or sycamore groves adjacent to grasslands for foraging. Diet consists of the California vole or meadow mouse. Nests mid-February through June.	No	Low	No suitable habitat within the BSA.
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	ESA: FE CESA: SE CNDDDB: SA MSCP: NE (Cnty of SD), CS MHCP: CS Cnty of SD Group: 1	Summer resident, arriving by mid-May and remaining through mid-July. This bird is a riparian obligate and primarily occurs in densely vegetated riparian habitats, preferring streamside in areas that have water throughout the spring and summer.	No	Not Expected	No suitable habitat within the BSA or local area.
<i>Eremophila alpestris actia</i> California horned lark	CDFW: WL CNDDDB: SA Cnty of SD Group: 2	Year-round resident; prefers grasslands, disturbed areas and open habitats with sparse, low vegetation.	No	Low	Not expected to nest onsite due to lack of suitable ground conditions. However, species could forage within the BSA.
<i>Laterallus jamaicensis coturniculus</i> California black rail	CESA: ST CDFW: FP CNDDDB: SA MSCP: NE (Cnty of SD only) Cnty of SD Group: 2 USFWS: BCC	Extirpated from San Diego County in 1954 with only a few vagrants observed since then. Still occurs in Imperial Valley along the Colorado River. Occurs in tidal salt marshes and freshwater marshes.	No	Not Expected	No suitable habitat within the BSA or local vicinity. Historical record within 2 miles of the BSA (CNDDDB record from 1907; record listed as "presumed extant").
<i>Plegadis chihi</i> white-faced ibis	CDFW: WL CNDDDB ⁴ : SA MSCP: CS MHCP: CS Cnty of SD Group: 1	Year-round resident with increased numbers during the winter. Nests in freshwater marshes and forages in shallow water and wet grasslands.	No	Not Expected	No suitable habitat within the BSA or local vicinity. Historic record within 2 miles of the BSA (CNDDDB record from 1901; record listed as "presumed extant").
<i>Polioptila californica californica</i> coastal California gnatcatcher	ESA: FT CDFW: SSC	Year-round resident in coastal areas below 500 m (1,500 ft); prefers coastal sage scrub	Yes	Present	No gnatcatchers were detected within the BSA during the initial

Scientific Name Common Name	Sensitivity Codes and Status ^{1, 2}	Habitat Preferences/Requirements ³	Verified In BSA	Potential To Occur In BSA	Factual Basis for Determination of Occurrence Potential
	CNDDDB: SA MSCP: NE (Cnty of SD only); CS MHCP: CS Cnty of SD Group: 1	habitat that is dominated by <i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i> and <i>Artemisia californica</i> as well as open chaparral.			biological investigation on June 7, 2024. However, two gnatcatchers were observed flying together within the 100-foot mapping buffer during the biological survey on August 22, 2024. The birds were first heard calling from a distance, north of the Project parcel and ultimately seen flying to the Diegan coastal sage scrub habitat immediately adjacent to the Project parcel. They were detected for a very short period, perched on sage scrub plants as well as non-native mustard, and then observed flying to the north out of site. They were not detected within the Project parcel. It is presumed that the gnatcatchers were in transit or wandering from higher quality habitat. Protocol surveys were conducted by M&A in 2025; surveys were negative.
<i>Vireo bellii pusillus</i> least Bell's vireo	ESA: FE CESA: SE CNDDDB ⁴ : SA MSCP: NE (Cnty of SD only), CS MHCP: CS Cnty of SD Group: 1	Summer visitor to southern willow scrub habitat and mesquite thickets. Arrives in San Diego County by late March or early April and leaves by the end of September.	No	Not Expected	No suitable habitat within the BSA or local vicinity. Historic record within 2 miles of the BSA. CNDDDB record from 1930 listed as "possibly extirpated", record from 1999 listed as "presumed extant". USFWS record from 1999, located approximately 1.5 miles northeast of the BSA.

Scientific Name Common Name	Sensitivity Codes and Status ^{1, 2}	Habitat Preferences/Requirements ³	Verified In BSA	Potential To Occur In BSA	Factual Basis for Determination of Occurrence Potential
MAMMALS					
<i>Antrozous pallidus</i> pallid bat	CNDDDB: SA USFS: S CDFW: SSC North Cnty MSCP: CS East Cnty MSCP draft: CS Cnty of SD Group: 2	Nocturnal bat species that is a yearlong resident throughout California and occurs in a wide variety of habitats, including grasslands, shrublands, woodlands, and forests, but prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging, may forage up to 2.5 km (3 mi) from day roost.	No	Low	No suitable roosts within the BSA. Rock outcrops lack sufficient crevices. Species could forage within the local area. Historic record within 2 miles of the BSA (CNDDDB record from 1968; record listed as “presumed extant”).
<i>Chaetodipus californicus femoralis</i> Dulzura (California) pocket mouse	CNDDDB: SA CDFW: SSC Cnty of SD Group: 2	Nocturnal species that occurs in a variety of habitats, including coastal scrub, chaparral and grasslands, typically in brushy areas along grass-chaparral edge.	No	Low	No suitable habitat within the BSA or local area. Historic record within 2 miles of the BSA (CNDDDB record from 1961; record listed as “presumed extant”).
<i>Corynorhinus townsendii</i> Townsend’s western big-eared bat	CDFW: SSC CNDDDB: SA Cnty of SD Group: 2	Roosts in caves and abandoned mines but have also been reported to utilize buildings, bridges, rock crevices and hollow trees. Forages in forest/woodland habitats or along habitat edges within 15 km of roost site.	No	Not Expected	No suitable habitat within the BSA. No suitable roosts within the BSA. Rock outcrops lack sufficient crevices. Historic record within 2 miles of the BSA (CNDDDB record from 1932; record listed as “presumed extant”).
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	CNDDDB: SA CDFW: SSC Cnty of SD Group: 2	Nocturnal species that prefer rocky desert areas with high cliffs or rock outcrops. Habitats used include pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis.	No	Low	No suitable habitat within the BSA or local area. Historic record within 2 miles of the BSA (CNDDDB record from 1988; record listed as “presumed extant”).
<i>Nyctinomops macrotis</i> big free-tailed bat	CNDDDB: SA CDFW: SSC Cnty of SD Group: 2	Nocturnal species that prefers rugged, rocky canyons but has been found in urban areas; roosts in buildings, caves, and occasionally holes in trees, and feeds primarily on large moths.	No	Low	No suitable habitat within the BSA. Historic record within 2 miles of the BSA (CNDDDB record from 1988; record listed as “presumed extant”).

Scientific Name Common Name	Sensitivity Codes and Status^{1, 2}	Habitat Preferences/Requirements³	Verified In BSA	Potential To Occur In BSA	Factual Basis for Determination of Occurrence Potential
<i>Taxidea taxus</i> American badger	CNDDDB: SA CDFW: SSC MSCP: CS Cnty of SD Group: 2	Nocturnal and diurnal carnivore that is most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils for digging burrows for cover.	No	Not Expected	No suitable habitat within the BSA or local area. Historic record within 2 miles of the BSA (CNDDDB record from unknown date; record listed as “presumed extant”).

¹ References for Sensitivity Codes and Status: County 1997, Ogden et al. 1998, AMEC 2003, County 2010, CDFW 2024b – 2024e

² California Natural Diversity Database Special Plants/Animals = A general term that refers to all taxa inventoried by the CDFW CNDDDB, regardless of their legal or protection status; these taxa include species, subspecies, or varieties that fall into one of the above categories and/or one or more of the following categories: 1) Taxa officially listed or proposed for listing under the federal and/or state ESA; 2) Taxa which meet the criteria for listing, even if not currently included on any list, as described in Section 15380 of the CEQA Guidelines, which may include California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) Lists 1 and 2, and some List 3 plants; 3) Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), or U.S. Forest Service (USFS) Sensitive (S) Species; 4) Taxa considered SSC by the CDFW; 5) Taxa listed by the CNPS; 6) Taxa that are biologically rare, very restricted in distribution, declining throughout their range but are not currently threatened with extirpation, or have a critical, vulnerable stage in their life cycle that warrants monitoring; 7) Populations in California that may be peripheral to the major portion of a taxon’s range, but are threatened with extirpation in California; 8) Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands, valley shrubland habitats, vernal pools, etc.); and 9) In addition to the above taxa, those taxa designated as a special status, sensitive, or declining species by other state or federal agencies, or non-governmental organization (NGO) [e.g., The World Conservation Union (IUCN) Conservation Dependent (CD), Critically Endangered (CR), Data Deficient (DD), Endangered (EN), Least Concern (LC), Near Threatened (NT), Vulnerable (V) species; California Department of Forestry and Fire Protection (CDF) Sensitive (S) species; National Marine Fisheries Service (NMFS) Species of Concern (SC); American Fisheries Society (AFS) Endangered (EN), Threatened (TH), Vulnerable (VU) species; Xerces Society (XERCES) Critically Imperiled (CI), Data Deficient (DD), Imperiled (IM), Vulnerable (VU) invertebrate species; USFWS Birds of Conservation Concern (BCC); American Bird Conservancy (ABC) U.S. Watch List of Birds of Conservation Concern (WLBC); Marine Mammal Commission (MMC) Marine Mammal Species of Special Concern (SSC); and The Western Bat Working Group (WBWG) High (H), Low-Medium (LP), Medium (M), Medium-High (MH) Priority species].

³ References for Habitat Preferences/Requirements: (plants) Reiser 2001, CNPS 2024; (butterflies) Faulkner and Klein 2004, Opler 2024, CDFW 2023; (amphibians and reptiles) Stebbins 2003, CDFW 2010; (birds) Birds of the World 2022 and CDFW 2010; (mammals) CDFW 2010.

⁴ CNDDDB only tracks the nesting locations of these bird species; the location of the nest or any indication of breeding (i.e., territorial males, adults carrying nest material, adults carrying food, the presence of newly fledged young, etc.) is acceptable evidence of nesting. County of San Diego listing is for breeding populations only.

⁵ CNDDDB only tracks the wintering range of these bird species. County of San Diego listing is for wintering populations only.

REFERENCES

- AMEC Earth & Environmental, Inc., Conservation Biology Institute, Onaka Planning & Economics, and The Rick Alexander Company. 2003a. Volume I, Final MHCP Plan. Prepared for the Multiple Habitat Conservation Program. Administered by SANDAG for the Cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. 9 Sections + Attachments A and B.
- Birds of the World. 2022. Edited by S. M. Billerman, B. K. Keeney, P. G. Rodewald, and T. S. Schulenberg. Cornell Laboratory of Ornithology, Ithaca, NY, USA. On-line Subscription. Available from: <https://birdsoftheworld.org/bow/home>
- California Department of Fish and Wildlife (CDFW). 2010. Life History Accounts and Range Maps [Internet]. California Wildlife Habitat Relationships System. Edited by Zeiner DC, et al. 1988-1990, updated. Available from: <https://map.dfg.ca.gov/imaps/cwhr/cwhrlife.html>
- _____. 2023. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species.
- _____. 2024b July. State and Federally Listed Endangered & Threatened Animals of California [Internet]. Natural Diversity Database. Available from: <https://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>
- _____. 2024c July. State and Federally Listed Endangered & Threatened Plants of California [Internet]. Natural Diversity Database. Available from: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>
- _____. 2024d July. Special Vascular Plants, Bryophytes, and Lichens List [Internet]. Natural Diversity Database. Quarterly publication. Available from: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>
- _____. 2024e July. Special Animals [Internet]. Natural Diversity Database. Available from: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>
- California Native Plant Society (CNPS). 2024. Inventory of Rare and Endangered Plants (on-line edition) [Internet]. California Native Plant Society. Sacramento, CA. Available from: <http://www.rareplants.cnps.org/>.
- County of San Diego. 1997. South County MSCP Subarea Plan. 4 Sections + appendices. Prepared in conjunction with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife. Available from: http://dplu-mscp.sdcounty.ca.gov/4_sub_ar_pl/4_sbarpl.html.

- _____. 2010 Sep 15. Guidelines for Determining Significance and Report Format and Content Requirements [for] Biological Resources, Fourth Revision [Internet]. Land Use and Environment Group; Department of Planning and Land Use; Department of Public Works. 33pp. + Attachments A through C Available from: http://www.sdcounty.ca.gov/dplu/docs/Biological_Guidelines.pdf.
- Faulkner, D., and M. Klein. 2004. San Diego's Sensitive Butterflies, A Workshop Focusing on Nine Local Species. 60 pp.
- Ogden, in conjunction with the Resource Agencies, Local Jurisdictions, and members of environmental, building and development communities [Internet]. 1998. Final Multiple Species Conservation Program MSCP Plan. 8 sections + attachments. Available from: http://dplu-mscp.sdcounty.ca.gov//2_bmo/2FinalMSCPProgramPlan.pdf.
- Opler, P.A., K. Lotts, T. Naberhaus, coordinators. 2024. Butterflies and Moths of North America [Internet]. Bozeman, MT: Big Sky Institute. Available from: <http://www.butterfliesandmoths.org/>.
- Reiser, C.H. 2001 February. Rare Plants of San Diego County. Aquafir Press. 2001 edition. 299 pp.
- Stebbins, R.C. 2003. Peterson Field Guide: Western Reptiles and Amphibians. 3rd Edition.

**APPENDIX E. CDFW CNDDDB RECORDS OF SPECIAL STATUS SPECIES
WITHIN TWO MILES OF THE BSA**

Appendix E. CNDDB Records Search within 2 miles of the Biological Study Area (June 2024)

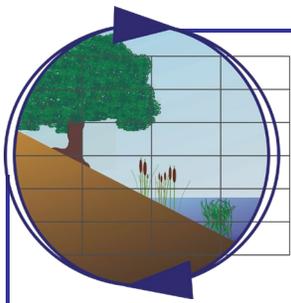
Scientific Name	Common Name	Key Quad Name	Accuracy	Presence	Occ Type	Occ Rank	Site Date	Elm Date	Owner Management	Federal Status	State Status	Rare Plant Rank	CDFW Status	Taxon Group	Project Survey Area
<i>Spea hammondi</i>	western spadefoot	Escondido	1 mile	Possibly Extirpated	Natural/Native occurrence	None	19290613	19290613	UNKNOWN	Proposed Threatener	None		SSC	Amphibians	No
<i>Spea hammondi</i>	western spadefoot	Escondido	80 meters	Possibly Extirpated	Natural/Native occurrence	None	20040224	20040224	PVT-SDGE	Proposed Threatener	None		SSC	Amphibians	No
<i>Agelaius tricolor</i>	tricolored blackbird	Escondido	5 miles	Possibly Extirpated	Natural/Native occurrence	None	1906XXXX	1906XXXX	UNKNOWN	None	Threatened		SSC	Birds	Yes
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	Escondido	1 mile	Extirpated	Natural/Native occurrence	None	19320702	19320702	UNKNOWN	Threatened	Endangered			Birds	No
<i>Plegadis chihi</i>	white-faced ibis	Escondido	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	1901XXXX	1901XXXX	UNKNOWN	None	None		WL	Birds	No
<i>Vireo bellii pusillus</i>	least Bell's vireo	Escondido	1 mile	Possibly Extirpated	Natural/Native occurrence	None	19300528	19300528	CITY OF ESCONDIDO	Endangered	Endangered			Birds	No
<i>Buteo swainsoni</i>	Swainson's hawk	Escondido	1 mile	Possibly Extirpated	Natural/Native occurrence	None	19230422	19230422	UNKNOWN	None	Threatened			Birds	No
<i>Athene cunicularia</i>	burrowing owl	Escondido	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	19240510	19240510	UNKNOWN	None	None		SSC	Birds	No
<i>Laterallus jamaicensis coturniculus</i>	California black rail	Escondido	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	1907XXXX	1907XXXX	UNKNOWN	None	Threatened		FP	Birds	No
<i>Polioptila californica californica</i>	coastal California gnatcatcher	Escondido	1 mile	Possibly Extirpated	Natural/Native occurrence	None	19280510	19280510	UNKNOWN	Threatened	None		SSC	Birds	No
<i>Polioptila californica californica</i>	coastal California gnatcatcher	Valley Center	non-specific area	Presumed Extant	Natural/Native occurrence	Good	20000601	20000601	CALTRANS ROW	Threatened	None		SSC	Birds	No
<i>Polioptila californica californica</i>	coastal California gnatcatcher	Escondido	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	20010822	20010822	UNKNOWN, PVT	Threatened	None		SSC	Birds	No
<i>Vireo bellii pusillus</i>	least Bell's vireo	Valley Center	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	19990620	19990620	CITY OF ESCONDIDO	Endangered	Endangered			Birds	No
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	Valley Center	1/10 mile	Presumed Extant	Natural/Native occurrence	Good	19980703	19980703	PVT	None	None		WL	Birds	No
<i>Centromadia parryi ssp. australis</i>	southern tarplant	Escondido	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	19160813	19160813	UNKNOWN	None	None	1B.1		Dicots	No
<i>Arctostaphylos rainbowensis</i>	Rainbow manzanita	Valley Center	80 meters	Presumed Extant	Natural/Native occurrence	Good	20070810	20070810	PVT	None	None	1B.1		Dicots	No
<i>Comarostaphylis diversifolia ssp. diversifolia</i>	summer holly	Valley Center	80 meters	Presumed Extant	Natural/Native occurrence	Good	20070810	20070810	PVT	None	None	1B.2		Dicots	No
<i>Bombus pensylvanicus</i>	American bumble bee	Escondido	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	19820729	19820729	UNKNOWN	None	None			Insects	No
<i>Antraozus pallidus</i>	pallid bat	Escondido	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	19680417	19680417	UNKNOWN	None	None		SSC	Mammals	No
<i>Lasiurus xanthinus</i>	western yellow bat	Escondido	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	19840224	19840224	UNKNOWN	None	None		SSC	Mammals	No
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	Escondido	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	19320305	19320305	UNKNOWN	None	None		SSC	Mammals	No
<i>Lasiurus cinereus</i>	hoary bat	Escondido	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	19661204	19661204	UNKNOWN	None	None			Mammals	No
<i>Taxidea taxus</i>	American badger	Escondido	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	XXXXXXX	XXXXXXX	UNKNOWN	None	None		SSC	Mammals	No
<i>Chaetodipus californicus femoralis</i>	Dulzura pocket mouse	Escondido	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	19610825	19610825	UNKNOWN	None	None			Mammals	No
<i>Nyctinomops macrotis</i>	big free-tailed bat	Escondido	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	19881206	19881206	UNKNOWN	None	None		SSC	Mammals	No
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	Escondido	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	19881010	19881010	UNKNOWN	None	None		SSC	Mammals	No
<i>Phrynosoma blainvillii</i>	coast horned lizard	Escondido	1 mile	Possibly Extirpated	Natural/Native occurrence	None	19290613	19290613	UNKNOWN	None	None		SSC	Reptiles	No
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	Escondido	1 mile	Possibly Extirpated	Natural/Native occurrence	None	197211XX	197211XX	UNKNOWN	None	None		WL	Reptiles	No
<i>Anniella stebbinsi</i>	Southern California legless lizard	Escondido	1 mile	Presumed Extant	Natural/Native occurrence	Poor	19520415	19520415	UNKNOWN	None	None		SSC	Reptiles	No
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	Escondido	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	200104XX	200104XX	UNKNOWN	None	None		SSC	Reptiles	No

APPENDIX F. USFWS RECORDS OF SPECIAL STATUS SPECIES WITHIN TWO MILES OF THE BSA

Appendix F. USFWS Records Search within 2 miles of the Biological Study Area (June 2024)

Scientific Name	Common Name	Species	Species Code	Survey Date	Occurrence	Surveyor	Doc Source	Site Name	Location	Accuracy	Mapping Source	Project Survey Area
<i>Polioptila californica californica</i>	coastal California gnatcatcher	CAGN	B08X	20010815	2	ROGERS G.L.	MERKEL & ASSOCIATES INC.	ESCONDIDO RESEARCH AND TECHNOLOGY CENTER	ESCONDIDO	Within a 160 m diameter	4	No
<i>Polioptila californica californica</i>	coastal California gnatcatcher	CAGN	B08X	20000601	2	JAMES R.	ROBERT JAMES	COUNTRY CLUB LANE	ESCONDIDO	Within a 160 m diameter	4	No
<i>Vireo bellii pusillus</i>	least Bell's vireo	LBV	B067	19990620	2	BOUSCAREN C.	PACIFIC SOUTHWEST BIOLOGICAL SERVICES	THE SYCAMORES	ESCONDIDO	Within a 160 m diameter	4	No
<i>Polioptila californica californica</i>	coastal California gnatcatcher	CAGN	B08X	20061020	1	ROGERS G.L.	PACIFIC SOUTHWEST BIOLOGICAL SERVICES		ESCONDIDO	Within a 160 m diameter	4	No
<i>Polioptila californica californica</i>	coastal California gnatcatcher	CAGN	B08X	20180604	1	BELLON K./ LO H./ SINGLETON L./ KURNOW J.	HELIX ENVIRONMENTAL PLANNING	LINDLEY TANK PROJECT	CITY OF ESCONDIDO	Within a 160 m diameter	4	No

**APPENDIX G. 2025 FOCUSED CROTCH'S BUMBLE BEE SURVEY REPORT FOR THE PARKVIEW
TOWNHOMES PROJECT**



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July 10, 2025

M&A #24-039-01

Mr. Kerry Garza
Touchstone Communities
9815 Mira Mesa Boulevard
San Diego, CA 92131

**Re: 2025 Focused Crotch's Bumble Bee Survey Report for the Parkview Townhomes Project,
Located in the City of Escondido, San Diego County, California**

Dear Mr. Garza:

SUMMARY

Merkel & Associates, Inc. conducted a habitat assessment and three focused surveys between June and July 2025 for Crotch's bumble bee (*Bombus crotchii*), for the purpose of determining the presence or absence of this species on the Parkview Townhomes Project site. The surveys were conducted in accordance with the California Department of Fish and Wildlife *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (2023). No Crotch's bumble bee or other bumble bee species were detected within the survey area.

INTRODUCTION

On behalf of Touchstone Communities, Merkel & Associates, Inc. (M&A) conducted a habitat assessment and three focused surveys for Crotch's bumble bee (*Bombus crotchii*), a candidate species under the California Endangered Species Act (CESA), for the purpose of determining the presence or absence of this species on the Parkview Townhomes Project site. The surveys were conducted in accordance with the California Department of Fish and Wildlife (CDFW) *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (Survey Guidelines) (2023) which also recommends reporting all results to CDFW.

The approximate 4.96-acre Project site is located on private property at 550 W. El Norte Parkway within the City of Escondido (Assessors Parcel Number 226-380-48), San Diego County (Figure 1). The property is located within Section 9, Township 12 South, Range 2 West of the San Bernardino Base and Meridian; U.S. Geological Survey (USGS) Valley Center, California Quadrangle (Figure 2). The latitude and longitude of the approximate center of the Project site is 33.145636, -117.099725.

The Project site is located on a south facing hillside with existing driveway access off W. El Norte Parkway. The site is bound to the west, east, and south by mixed development consisting of residential development, gas stations, hotel, and small commercial office space and to the north by the City of Escondido Rod McLeod Park. The Park is an approximate 18-acre park of mostly passive recreation use. Immediately abutting the Project site to the west is a small undeveloped lot owned by San Diego Gas & Electric (SDG&E), which supports a northeast-trending overhead utility corridor. These undeveloped portions of the Project parcel are subject to frequent vegetation clearing via mowing, weed whipping, or similar means.

The Project proposes to remove an existing single-family home and construct a new townhome development on the parcel. Construction is expected to occur immediately upon acquisition of all project approvals; construction is tentatively scheduled for 2026.

CROTCH'S BUMBLE BEE

Crotch's bumble bee is one of several candidate bumble bee species for listing under CESA. Of the species under consideration, only Crotch's bumble bee occurs in San Diego County. Crotch's bumble bee is generally distributed through wildlands and rural areas in low to middle elevations (sea level to at least 6,000 feet) of California and exploits a wide range of habitats including native and exotic grasslands, coastal marshes, scrub and chaparral, oak-juniper woodlands, pinon woodlands, and desert transition vegetation (on western margins of the Mojave and Colorado deserts). However, there are records of Crotch's bumble bee within urban sites as well.

Bumble bees including the Crotch's bumble bee are generalist foragers and have been reported visiting a wide variety of flowering plants to feed on pollen and nectar resources (Xerces Society 2018, Koch et al. 2012). Crotch's bumble bee has a short tongue and thus may be best suited to forage at open flowers with short corollas. The plant families most commonly associated with Crotch bumble bee sightings in California include but are not limited to Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, Hydrophyllaceae, Asclepiadaceae, and Boraginaceae (Thorp et al. 1983). Example plant genera that the Crotch's bumble bee have been reported to feed on include but are not limited to milkweed (*Asclepias* spp.), phacelia (*Phacelia* spp.), and sage (*Salvia* spp.) (Williams et al. 2014) as well as snapdragon (*Antirrhinum* spp.), clarkia (*Clarkia* spp.), bush poppy (*Dendromecon* spp.), California poppy (*Eschscholzia californica*), and buckwheat (*Eriogonum* spp.) (Koch et al. 2012).

Community science platforms such as Bumble Bee Watch and iNaturalist also provide a space for collaborative efforts to track bumble bee records. Example plant genera that Crotch's bumble bee have been reported to feed on per verified Bumble Bee Watch records spanning 2017 to 2025 include (by Family): Fabaceae – vetch (*Vicia villosa*), deerweed (*Acmispon glaber*), and *Robinia pseudoacacia*; Apocynaceae – kotolo milkweed (*Asclepias eriocarpa*); Asteraceae – everlasting (*Pseudognaphalium* sp.); Lamiaceae – black sage (*Salvia mellifera*), white sage (*Salvia apiana*), Cleveland sage (*Salvia clevelandii*), *Salvia* “Poza Blue” (hybrid of *S. clevelandii* and *S. leucophylla*), and lobster bush (*Plectranthus neochilus*); Plantaginaceae – keckiella (*Keckiella antirrhinoides*); Polygonaceae – California buckwheat (*Eriogonum fasciculatum*); Orobanchaceae – bird's beak (*Cordylanthus rigidus*); and Scrophulariaceae – butterfly bush (*Buddleja* sp.) (Bumble Bee Watch 2025a).

Nesting occurs primarily underground, often in abandoned holes made by rodents or occasionally abandoned bird nests or other cavities (e.g., brush piles, rock piles, fallen logs, holes in building foundations, rubble or abandoned furniture, etc.) typical of most bumble bee species (Xerces Society 2018; Osborne et al. 2008; Koch et al. 2012; CDFW 2023).

Queens emerge first, in the late winter/early spring (approx. February) to establish a colony. As the spring season progresses, workers (small female non-reproductive bees) are produced with increasing numbers and escalate the provisioning of the colony, which continues to grow until in

early to mid-summer when new males are produced along with the new generation of future queens (gynes). Workers and males live for only a few weeks while the queen generally dies at the end of the season. Mated gynes (future founding queens) overwinter in soil cavities (Xerces 2023; CDFW 2023), emerge in the late winter/early spring to begin new colonies, provisioning their young with pollen and nectar.

METHODS

Historical and currently available biological literature and data pertaining to the Project area were reviewed prior to initiation of the field investigation. This review included examination of CDFW California Natural Diversity Database (CNDDDB) special status bumble bee records for the project vicinity (CDFW 2024) as well as community science data of special status bumble bees for the Project vicinity (i.e., iNaturalist 2025, Research Grade only; Bumble Bee Watch 2025a, Pending and Research Grade).

M&A conducted the initial habitat assessment for Crotch's bumble bee on June 7, 2024, during the initial biological investigation and habitat mapping effort for the proposed Project. During this initial investigation, it was determined that there was at least a moderate potential for Crotch's bumble bee and/or American bumble bee (*Bombus pensylvanicus* [as well as Sonoran bumble bee *B. sonorou*s per Bumble Bee Watch 2025b]), a CNDDDB Special Animal to forage onsite based on potential nectar resources. As part of the current 2025 investigation, M&A conducted a ground-truthing effort on June 5, 2025, and confirmed that nectar resources, albeit sporadic, occur throughout portions of the Project parcel as well as the 100-foot buffer. Overall, there is approximately 3.4 acres of suitable bumble bee habitat.

M&A conducted three focused surveys for Crotch's bumble bee between June and July 2025 (Table 1). The surveys were conducted by qualified biologists in accordance with CDFW's Survey Guidelines (2023) which recommends that surveys occur at least two weeks apart during the Colony Active Period (i.e., April – August). Surveys were conducted on-foot, during the day, at least one hour after sunrise and at least two hours before sunset. They were conducted during optimal conditions when there was sunny to partly sunny skies with temperatures that were greater than 65° Fahrenheit and low wind (sustained winds less than 8 miles per hour). Suitable floral resource habitat was identified within the survey area. For each survey, the floral resources were evaluated and visually surveyed with the aid of binoculars, at the estimated rate of one person-hour of searching per approximately three acres of suitable habitat.

Table 1. Survey Dates, Times, and Conditions

Survey No.	Date	Time	Approx. Acres per Hour/Day	Biologist	Conditions (cloud cover, temperature, wind speed from start-end)
1	2025 June 5	1600–1715	2.72 per hour/ 3.4 per day	Amanda Gonzales	50%–90% cloud cover, 6–7 mph wind, 68°–68° F
2	2025 June 19	0945–1045	3.4 per hour/ 3.4 per day	Brandon Stidum	10%–0% cloud cover, 5–5 mph wind, 71°–73° F
3	2025 July 3	0830–0930	3.4 per hour/ 3.4 per day	Amanda Gonzales	10%–0% cloud cover, 2–6 mph wind, 63°–66° F

Biologists walked meandering transects throughout suitable habitat with a goal of observing bumble bees in passing and observing bumble bee nest sites associated with small mammal burrows. Only photographs were taken to verify species presence. No capture, netting, or collection of bumble bees occurred. A portion of the survey area extended offsite into the 100-foot buffer; this offsite area was evaluated from the edge of the Project site as well as from public right-of-way and/or other areas open to the public, aided by binoculars.

RESULTS

Literature Search

There are no CDFW CNDDDB, Bumble Bee Watch or iNaturalist records for Crotch's bumble bee occurring within two miles of the survey area. The closest record of this species to the survey area is approximately 2.4 miles to the west in the City of San Marcos (iNaturalist 2025, Research Grade Jun. 2, 2024 record) and secondarily 3.2 miles to the southwest within a residential area in the City of Escondido (iNaturalist 2025, Research Grade Aug. 5, 2024 record). Further, there are no American bumble bee records within two miles of the survey area; most Bumble Bee Watch and iNaturalist records for this species are at least 10 miles to the west.

Habitat Assessment

Overall, the 10.10-acre survey area, which includes the 4.96-acre Project parcel and a 5.14-acre, 100-foot buffer, supports approximately 3.4 acres of suitable bumble bee habitat. This is comprised of areas mapped as Diegan coastal sage scrub and disturbed Diegan coastal sage scrub (1.4 acres) as well as portions of the areas mapped as disturbed habitat and urban/development (approximately 2.0 acres), all of which support some foraging resources (Figure 3). Below is a brief description of the vegetation communities.

Three vegetation types have been identified within the Project parcel: urban/developed, disturbed habitat, and disturbed Diegan coastal sage scrub. Urban/developed has been mapped for the existing residential structures, driveway, and ornamental landscape while disturbed habitat has been mapped for most of the property, primarily located on the east side of the driveway. During the survey, the disturbed habitat was dominated by weedy, non-native forbs including short-pod mustard (*Hirschfeldia incana*) and tocalote (*Centaurea melitensis*) with an inclusion of some native species including California encelia (*Encelia californica*). Disturbed Diegan coastal sage scrub has been mapped for a portion of the property on the west side of the driveway. This area is dominated by California encelia which provided approximately 45 percent cover. Non-native forbs comprise most of the remaining cover between shrubs. These undeveloped portions of the property are subject to frequent vegetation clearing via mowing, weed whipping, or similar means. Five vegetation types have been mapped within the 100-foot buffer, urban/developed, disturbed habitat, eucalyptus woodland, Diegan coastal sage scrub and disturbed Diegan coastal sage scrub.

Overall, the cover of flowering plant species and preferred nectar sources was low throughout the survey area. Flowering plant species were recorded during each survey, and the results are presented in Table 2. Annual maintenance of the onsite property occurred just prior to Survey No. 3. Suitable nesting substrate for Crotch's bumble bee was noted within the Project site, which included leaf litter around the residence. In addition, there is an active California ground squirrel (*Otospermophilus beecheyi*) population on the property of which their burrows provide suitable

nesting opportunity. However, regular vegetation maintenance on-site is expected to reduce nesting potential.

Table 2. Flowering Plant Species Observed During Focused Surveys

Family	Scientific Name*	Common Name	Survey # ¹
DICOTYLEDONS			
Aizoaceae	<i>Carpobrotus edulis</i> *	freeway iceplant	1, 2, 3
	<i>Malephora purpureo-crocea</i>	purple malephora	1, 2, 3
Anacardiaceae	<i>Schinus molle</i> *	pepper tree	1, 2, 3
Asteraceae	<i>Artemisia californica</i>	California sagebrush	1
	<i>Baccharis sarothroides</i>	broom baccharis	1, 2
	<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i> *	Italian thistle	1, 2, 3
	<i>Centaurea melitensis</i> *	tocalote, Maltese star-thistle	1, 2, 3
	<i>Encelia californica</i>	California encelia	1, 2
	<i>Glebionis coronaria</i> *	garland, crown daisy	1, 2
	<i>Heterotheca grandiflora</i>	telegraph weed	1
	<i>Isocoma menziesii</i> var. <i>menziesii</i>	Menzies's goldenbush	1, 2
	<i>Oncosiphon piluliferum</i> *	stinknet	1, 2
	<i>Sonchus asper</i> ssp. <i>asper</i> *	prickly sow thistle	1, 2
Brassicaceae	<i>Hirschfeldia incana</i> *	summer field mustard	1, 2
	<i>Lepidium virginicum</i> ssp. <i>virginicum</i> *	Virginia peppergrass	1, 2
	<i>Lobularia maritima</i> *	common sweet alyssum	1, 2
Cactaceae	<i>Opuntia littoralis</i>	coast prickly-pear	1, 2
Convolvulaceae	<i>Calystegia macrostegia</i>	Southern California morning-glory	1, 2
Crassulaceae	<i>Aeonium arboreum</i> *	shrubby aeonium	1, 2
Cucurbitaceae	<i>Cucurbita foetidissima</i>	buffalo gourd, calabazilla	1, 2
Fabaceae	<i>Erythrostemon gilliesii</i> *	yellow bird of paradise	1, 2
	<i>Lupinus hirsutissimus</i>	stinging lupine	1, 2
	<i>Melilotus indicus</i> *	sourclover	1, 2
Geraniaceae	<i>Erodium cicutarium</i> *	red-stem filaree	1, 2
Lamiaceae	<i>Marrubium vulgare</i> *	horehound	1, 2
	<i>Salvia apiana</i>	white sage	1, 2
Lythraceae	<i>Punica granatum</i> *	pomegranate	1, 2
Myrtaceae	<i>Melaleuca citrina</i> *	crimson bottlebrush	1, 2
Nyctaginaceae	<i>Bougainvillea</i> sp.*	bougainvillea	1, 2
Oleaceae	<i>Fraxinus uhdei</i> *	shamel ash	1
	<i>Olea europaea</i> *	olive	1, 2
Plumbaginaceae	<i>Limonium perezii</i> *	Perez's sea lavender	1, 2
	<i>Plumbago auriculata</i> *	cape leadwort, blue	1, 2

		plumbago	
Polygonaceae	<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i>	coastal California buckwheat	1, 2, 3
Scrophulariaceae	<i>Leucophyllum frutescens</i> *	Texas sage, cenizo	1, 2
Solanaceae	<i>Datura wrightii</i>	western jimsonweed	1, 2
	<i>Nicotiana glauca</i> *	tree tobacco	1, 2
	<i>Solanum douglasii</i>	Douglas' nightshade	1, 2
Verbenaceae	<i>Lantana camara</i> *	lantana	1, 2
MONOCOTYLEDONS			
Arecaceae	<i>Washingtonia robusta</i> *	Mexican fan palm	1, 2
Poaceae	<i>Bromus diandrus</i> *	ripgut grass	1, 2
	<i>Bromus madritensis</i> ssp. <i>rubens</i>	red brome, foxtail chess	1, 2
	<i>Pennisetum</i> sp.	fountain grass	1, 2

* Non-native species

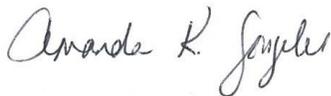
¹ Bumble bee focused survey # during which observation of flowering species took place.

Focused Surveys

Bee species observed during the survey effort were honey bee (*Apis mellifera*) and carpenter bee (*Xylocopa* sp.). No *Bombus* species were observed. Crotch's bumble bee or Crotch's bumble bee nests were not detected during the survey effort and are presumed to be absent from the Project site.

If you have any questions concerning this report, please do not hesitate to contact me at (858) 560-5465 or agonzales@merkelinc.com.

Sincerely,



Amanda K. Gonzales
Associate Principal/Project Manager



Brandon L. Stidum
Senior Biologist



Keith W. Merkel
Principal Consultant

Attachment 1. Site Photographs

REFERENCES

- Bumble Bee Watch. 2025a. The Xerces Society, Wildlife Preservation Canada, York University, University of Ottawa, The Montreal Insectarium, The London Natural History Museum, BeeSpotter. Data accessed from Bumble Bee Watch, a collaborative website to track and conserve North America's bumble bees. Available from <http://www.bumblebeewatch.org/app/#/bees/lists>. Accessed: 2025
- _____. 2025b. *Bombus pensylvanicus* is a CNDDDB Special Animal. Per Bumble Bee Watch dataset and per e-mail coordination with Mr. Leif Richardson in July 2025, *Bombus sonorou*s may be a subspecies of *Bombus pensylvanicus*. However, additional taxonomic research is needed. For purposes of this report, we have assumed that the bumble bee in San Diego County could be called either name, *Bombus pensylvanicus* or *Bombus sonorou*s.
- California Department of Fish and Wildlife (CDFW). 2023. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species. June 6, 2023. 14pp. Available from: <https://wildlife.ca.gov/Conservation/Survey-Protocols377281281-invertebrates>
- _____. 2024. California Natural Diversity Database (CNDDDB). Biogeographic Data Branch. RareFind; GIS shapefile update, March 2024. Sacramento, California.
- iNaturalist. 2025. Available from <https://www.inaturalist.org>. Accessed Research Grade Only 2025.
- Koch, J., J. Strange, and P. Williams. 2012. Bumble Bees of the Western United States. A product of the U.S. Forest Service and the Pollinator Partnership with funding from the National Fish and Wildlife Foundation. Available from: <https://www.pollinator.org/shop/books>
- Osborne, J.L., A.P. Martin, C.R. Shortall, A.D. Todd, D. Goulson, M.E. Knight, R.J. Hale, and R.A. Sanderson. 2008. Quantifying and comparing bumble bee nest densities in gardens and countryside habitats. *Journal of Applied Ecology* 45:784-792.
- Thorp, R.W., D.S. Horning, Jr., and L.L. Dunning. 1983. Bumble bees and cuckoo bumble bees of California (Hymenoptera: Apidae). *Bulletin of the California Insect Survey* 23:1-79.
- U.S. Geological Survey (USGS). 1998. California Quadrangle Maps; California Digital Raster Graphics, 7.5 Minute (0) Series, Albers NAD 27. Teale Data Center. Sacramento, California. Accessed: 2024.
- Williams, P.H., R.W. Thorp, L.L. Richardson, and S R. Colla. 2014. The Bumble bees of North America: An Identification guide. Princeton University Press, Princeton.
- Xerces Society. 2018. A Petition to the State of California Fish and Game Commission to List the Crotch bumble bee (*Bombus suckleyi*), and western bumble bee (*Bombus occidentalis occidentalis*) as Endangered under the the California Endangered Species Act. Submitted by The Xerces Society for Invertebrate Conservation, Defenders of Wildlife Center for Food Safety. October 2018. 119 pp.

PREPARER(S) AND PERSONS/ORGANIZATIONS CONTACTED

Merkel & Associates, Inc.

Amanda Gonzales, Associate Principal with 24 years of professional biological experience (biologist with M&A since 2003); Project Field Biologist and Primary Report Author; Trained Bumble Bee Surveyor for the Bumble Bee Watch, participated in virtual and in-person trainings hosted by the Xerces Society between 2023 and 2025, active bumble bee volunteer with records for Crotch's bumble bee and other non-sensitive bumble bee species uploaded to Bumble Bee Watch and iNaturalist. Other certifications include Certified Wetland Delineator, Trained CRAM Practitioner, and Authorized to Independently Conduct Protocol Surveys for the Coastal California Gnatcatcher and Southwestern Willow Flycatcher.

Brandon Stidum, Senior Biologist with 20 years of professional biological experience (biologist with M&A since 2014); Field Biologist; Experienced Bumble Bee Surveyor and has participated in virtual trainings hosted by the Xerces Society in 2025, active bumble bee volunteer with records uploaded to iNaturalist. Other certifications include Certified Wetland Delineator, Trained CRAM Practitioner, and Authorized to Independently Conduct Protocol Surveys for the Coastal California Gnatcatcher

Brad M. Kelly, GIS Specialist with 23 years professional GIS experience (GIS Specialist with M&A since 2003). Project Graphics Preparation and Numeric Analyses.

Jenny Nicholson, Administrative Support. Project Report Quality Control.

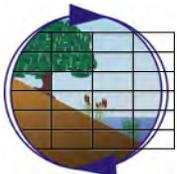
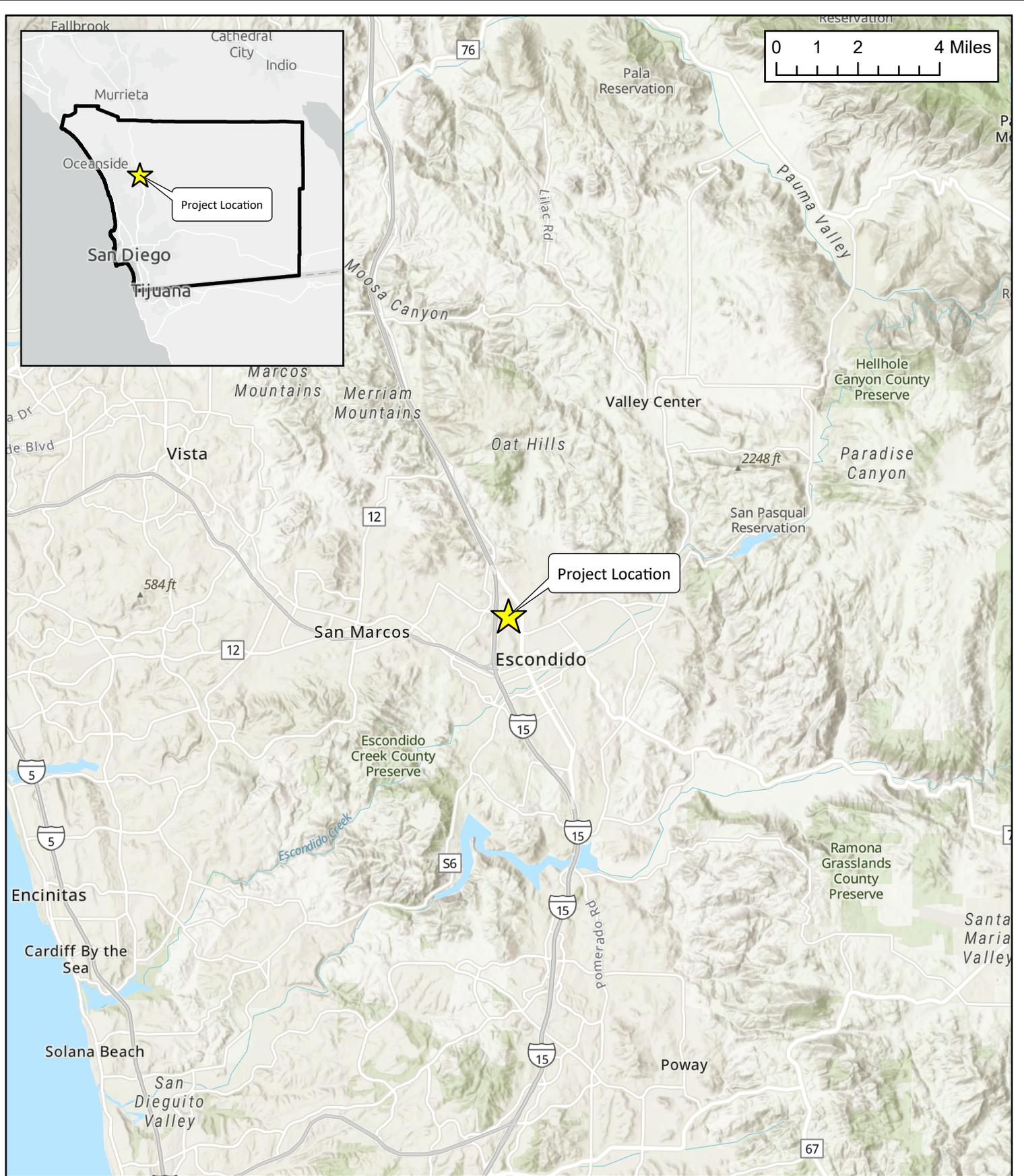
Keith W. Merkel, Principal Consultant/Principal Ecologist.

APPENDIX A. FIGURES

Figure 1. Regional Setting Map

Figure 2. USGS Topography Map

Figure 3. Biological Resources Map

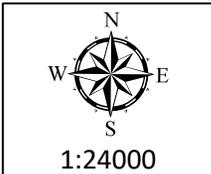
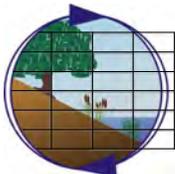
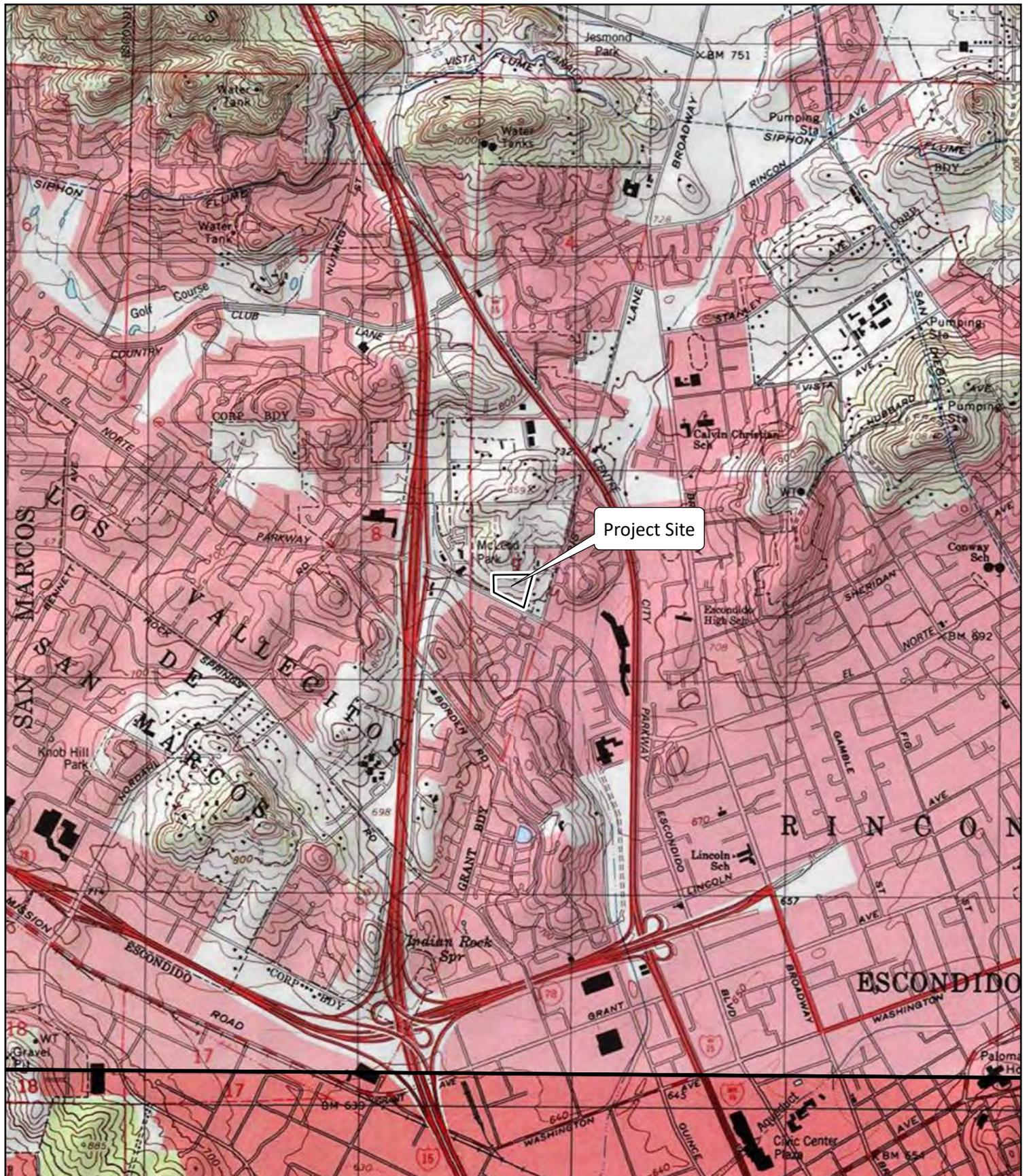


Regional Setting Map
Parkview Townhomes Project

Aerial Source: NearMap 2023

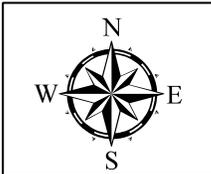
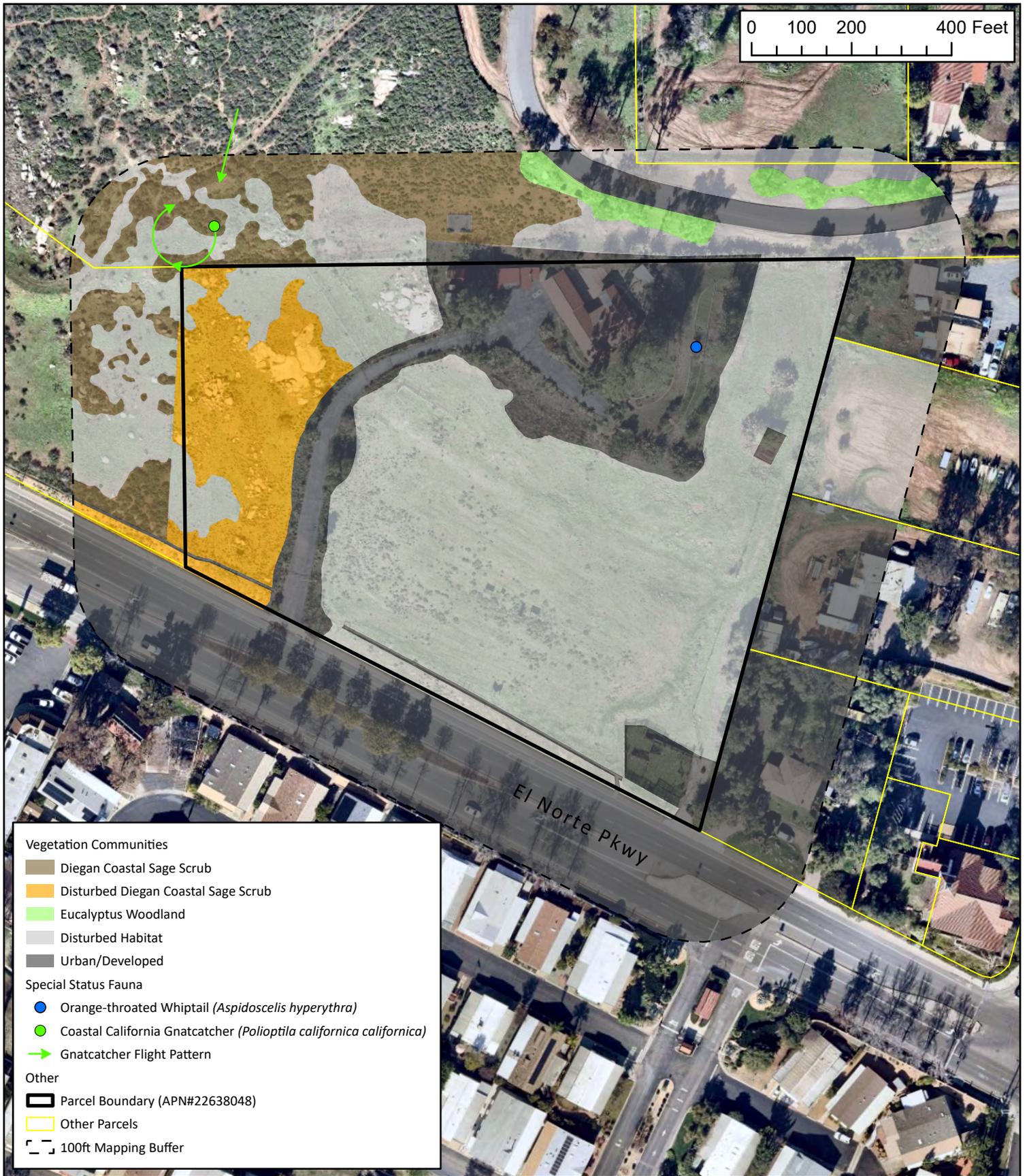
Created on August 23, 2024

Figure 1



USGS Quadrangle Map
Parkview Townhomes Project
Source: USGS 7.5' Valley Center, CA Quadrangle

Figure 2



Biological Resources Map
Parkview Townhomes Project

Aerial Source: NearMap 2023 Created on August 23, 2024

Figure 3

APPENDIX B. SITE PHOTOGRAPHS



Photo Point 1. Overview of the project site. Photo taken from the northwest corner of the project parcel and directed south. Photo taken on 6/5/2025.



Photo Point 2. Photo taken from Photo Point 1 but directed southwest, into the buffer. Photo taken on 6/5/2025.



Photo Point 3. Overview of the project site. Photo taken from the existing residence/driveway and directed southwest. Photo taken on 6/5/2025.



Photo Point 4. Overview of the eastern project site. Photo taken from the northeastern portion of the site and directed east. Photo taken on 6/5/2025.