

April 2, 2025

BIRDSEYE PLANNING GROUP, LLC

Attention: *Ryan Birdseye* P.O. Box 1956 Vista, CA 92085

SUBJECT:

Habitat Assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis for the Proposed Project Located at 40475 Vista Murrieta in the City of Murrieta, Riverside County, California

Introduction

This report contains the findings of ELMT Consulting's (ELMT) habitat assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis for the proposed Project located at 40475 Vista Murrieta (project site or site) located in the City of Murrieta, Riverside County, California. The habitat assessment was conducted by biologist Rachael A. Lyons on December 27, 2023, to document baseline conditions and assess the potential for special-status plant and wildlife species to occur within the proposed project site that could pose a constraint to implementation of the proposed project. Special attention was given to the suitability of the on-site habitat to support special-status species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) and other electronic databases as potentially occurring on or within the general vicinity of the project site.

The Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map was queried to determine if the MSHCP identifies any potential survey requirements for the project. Further, the project site was reviewed against the MSHCP to determine if the site is located within any MSHCP areas including Criteria Cells (core habitat and wildlife movement corridors) or areas proposed for conservation. Based on the RCA MSHCP Information Map query and review of the MSHCP, it was determined that the project site is located within the Southwest Area Plan of the MSHCP but is not located within any Criteria Cells or MSHCP Conservation Areas. Further, it was determined that the project site is located within the designated survey areas for burrowing owl (*Athene cunicularia*) only.

Project Location

The project site is generally located north and east of Interstate 15, west of Interstate 215, and south of Clinton Keith Road in the City of Murrieta, Riverside County, California. The site is depicted on the Murrieta quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map within Section 0 of Township 7 South, Range 3 West. Specifically, the site is bounded to the east by Vista Murrieta, and lies north of Murrieta Hot Springs Road, and south and east of Los Alamos Road within Assessor Parcel

¹ As used in this report, "special-status" refers to plant and wildlife species that are federally, State, and MSHCP listed, proposed, or candidates; plant species that have been designated with a California Native Plant Society Rare Plant Rank; wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species; and specially protected natural vegetation communities as designated by the CDFW.

Numbers (APNs) 949-180-022, -023, and -025. Refer to Exhibits 1-3 in Attachment A.

Project Description

The project applicant, Viscar Terrace LP, is proposing to construct and operate the Viscar Terrace Apartments, a new 172-unit affordable housing community with related infrastructure improvements on a disturbed 5.74 gross acre (250,034 square feet) (5.61 net acre) site located at 40475 Vista Murrieta Road and 40600 Myers Lane in Murrieta, California (APN 949-180-022, -023, and -025). The site is located along the north side of Vista Murrieta Road, south of Los Alamos Road, east of Interstate 15, west of Interstate 215. The project site abuts two (2) rights-of-way: Vista Murrieta Road and Myers Lane. The site contains two single-family residences and related outbuildings and landscaping improvements. The project is zoned Office (O) and is located within a Transit Oriented Development (TOD) Overlay District. The General Plan land use designation is Office and Research Park (ORP) with a 0.6 – 2.5 Floor Area Ratio (FAR). The proposed residential project is a permitted use in the TOD Overlay District and subject to standards stipulated in Section 16.16.040 of the Murrieta Municipal Code. The minimum density is 30 units per acre or 169 units. The applicant is proposing 172 units which would equal approximately 30.56 units per acre.

The project would provide a total of 172 apartment units and amenities in four, three-story buildings and one four-story building. The four-story building includes up to 4,241 square feet of common area with clubhouse, multipurpose room, fitness center, and resident services space as well as outdoor recreational amenities including a barbeque/picnic area and playground/dog run area. An outdoor fitness course and ½ basketball court would also be provided on-site. The project would provide 78 one-bedroom units (616-663 square feet), 48 two-bedroom units (866 square feet), 38 three-bedroom units (1,175-1,199 square feet) and 8 four-bedroom units (1,300 square feet). Up to 40% of the units (68 units) are reserved for very low-income tenants. The remaining 60% (102 units) would be reserved for low- to moderate income tenants. Of the total, two units would be reserved for on-site managers. A total of 228 parking spaces would be provided. All spaces would be surface parking. The parking ratio would be 1.33 spaces per unit.

Primary access would be via a new driveway on the south side of the project via Vista Murrieta Road. A secondary emergency vehicle access (EVA) would be provided at the northwest corner of the site via Myers Lane which will also allow residents to exit the property in case of emergency. A new water line would be provided along Vista Murrieta Road to the southeast as well as along Sky Park Lane from the north to create a looped system. The proposed water pipeline would attach to the bridge/box culvert that crosses the unnamed drainage to Murrieta Creek north of the site.

The project site was divided into three drainage management areas. In the proposed post-developed condition, the majority of the onsite runoff flowing north will be collected by proposed drop inlets/curb opening catch basins and conveyed to proposed Continuous Deflection Separation (CDS) units for pretreatment via 18" storm drain pipes prior to infiltration/detention trench system for Low Impact Development (LID) treatment. Overflow will discharge via PVC overflow pipes connected to parkway drains onto the curb and gutter along Myers Lane. The majority of the onsite runoff flowing south will be collected by proposed drop inlets and conveyed to proposed CDS units for pretreatment via 15" storm drain pipes prior to discharging into proposed infiltration/detention trench system for infiltration/LID treatment. Overflow will discharge via PVC overflow pipes. New landscaping would be installed per Title 16.28



(Landscaping Standards) and Title 16.34.070.H (Development Standards for Off-Street Parking, Landscaping) of the Murrieta Municipal Code and the City's current policies.

The proposed project would install a new 12-inch water line in Vista Murrieta Road extending southwest of the site. The water line would connect to a new water line located at the intersection of Sparkman Court and Vista Murrieta Road. A second line will be installed within Vista Murrieta Road east of the site and connect to an existing water line located at the southwest corner of Vista Murrieta Road and Skypark Lane. This segment would cross under an unnamed drainage to Murrieta Creek using jack and bore. Vista Murrieta Road crosses the creek using an existing box culvert. The line would be installed under the existing box culvert within the Vista Murrieta Road corridor. This connection would complete a looped system for the project. The project would connect to an existing sewer line at the northwest corner of the site at the southern terminus of Myers Lane. All water/sewer infrastructure would be installed in trenches during grading and improvements to Vista Murrieta Road.

Electrical (Southern California Edison) and telecommunication (Frontier and Spectrum) service would initially connect to the existing overhead electrical infrastructure located along the north side of Vista Murrieta Road. All electrical lines located on-site would be undergrounded during grading. A total of four 1,600 ampere and one 3,000 ampere transformers would be installed on-site. The project would eventually underground all electrical and telecommunication service along the project frontage east of Carrigan Road and install a new electrical service line northeast of the site within the jack and bore trench required for the new water line as described above.

Construction is expected to begin in mid-2026 and be completed by mid-2027. Demolition would require removal of approximately 20,000 square feet of buildings (i.e., single-family residences, detached structures and outbuildings). The concrete driveway would be removed as would all existing underground utility lines (i.e., water, irrigation and wastewater drain lines), the septic tanks and leach fields. Grading would require 8,164 cubic yards of fill export. Construction activities are expected to occur five days per week, 8 hours per day, between 8:00 am and 5:00 pm.

Methodology

Literature Review

The first step in determining if a project is consistent with the above listed sections of the MSHCP is to conduct a literature review and records search for special-status biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project were determined through a query of the CDFWs CNDDB Rarefind 5, the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, United States Fish and Wildlife Service (USFWS) species listings, and species covered within the MSHCP and associated technical documents.

All available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the project site were reviewed to understand existing site conditions and note the extent of any disturbances that have occurred on the project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific



habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

- Environmental Protection Agency (EPA) Water Program "My Waters" data layers
- Google Earth Pro historic aerial imagery (1994-2023);
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey²;
- USFWS Critical Habitat designations for Threatened and Endangered Species;
- USFWS National Wetlands Inventory (NWI);
- Stephen's Kangaroo Rat Habitat Conservation Plan;
- Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map;
 and
- 2006 Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area.

The literature review provided a baseline from which to inventory the biological resources potentially occurring on the project site. The CNDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the project.

Field Investigation

Following the literature review, biologist Rachael A. Lyons inventoried and evaluated the condition of the habitat within the project site on December 27, 2023. Plant communities identified on aerial photographs during the literature review were verified by walking meandering transects through the plant communities and along boundaries between plant communities. In addition, aerial photography was reviewed prior to the site investigation to locate potential natural corridors and linkages that may support the movement of wildlife through the area. These areas identified on aerial photography were then walked during the field survey.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Plant species observed during the field survey were identified by visual characteristics and morphology in the field. Unusual and less familiar plant species were photographed during the field survey and identified in the laboratory using taxonomical guides. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site plant communities, and presence of potential jurisdictional drainage and/or wetland features were noted.

Soil Series Assessment

On-site and adjoining soils were researched prior to the field survey using the USDA NRCS Soil Survey for the Western Riverside area. In addition, a review of the local geological conditions and historical aerial

² A soil series is defined as a group of soils with similar profiles developed from similar parent materials under comparable climatic and vegetation conditions. These profiles include major horizons with similar thickness, arrangement, and other important characteristics, which may promote favorable conditions for certain biological resources.



photographs was conducted to assess the ecological changes that the project site has undergone.

Plant Communities

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were delineated on an aerial photograph, classified in accordance with those described in the MSHCP, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community in acres.

Plants

Common plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less-familiar plants were photographed in the field and identified in the laboratory using taxonomic guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

Wildlife

Wildlife species detected during field surveys by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides were used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America (Sibley 2003), A Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are fairly well standardized, scientific names are provided immediately following common names in this report (first reference only).

Jurisdictional Drainages and Wetlands

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction. In addition, ELMT reviewed jurisdictional waters information through examining historical aerial photographs to gain an understanding of the impact of land-use on natural drainage patterns in the area. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program "My Waters" data layers were also reviewed to determine whether any hydrologic features and wetland areas have been documented on or within the vicinity of the project site.

Topography and Soils

Project site elevation ranges from 1,148 to 1,209 feet above mean sea level. On-site topography is highly variable with significant areas of topographic relief occurring in the southeast portion of the project site. Based on the NRCS USDA Web Soil Survey, the project site is underlain by Arlington and Greenfield find sandy loams (2 to 8 percent slopes, eroded), Greenfield sandy loam (2 to 8 percent slopes, eroded), and Ramona and Buren loams (5 to 15 percent slopes, eroded). Refer to Exhibit 4, *Soils*, in Attachment A. Soils on-site have been mechanically disturbed and compacted from historic land uses (i.e., grading, weed



abatement, vehicular use, and on-site and surrounding development).

Existing Site Condition

The project site occurs in an area surrounded primarily by residential development. Undeveloped, vacant parcels occur in the vicinity of the site in all directions. The project site is bounded to the east by Vista Murrieta, and to the north, south and west by residential development. According to historic aerials, development has been present adjacent to the project site since at least 1978, with onsite development occurring as recently as 1985.

Vegetation

The project site supports two (2) land cover types that would be classified as disturbed and developed. Refer to Exhibit 5, *Vegetation*, and Attachment C, *Site Photographs*, for representative site photographs.

Disturbed land occurs throughout the entirety of the project site. Vegetative density is ranges from moderate to barren in correlation with the frequency of routine disturbance. Common plant species observed in the non-native grassland include red brome (*Bromus maditrensis*), doveweed (*Croton setigerus*), black mustard (*Brassica nigra*), Mediterranean mustard (*Hirschfeldia incana*), canary grass (*Phalaris canariensis*), redstemmed filaree (*Erodium cicutarium*), pigweed (*Amaranthus sp.*), red ironbark eucalyptus (*Eucalyptus sideroxylon*), and vinegarweed (*Trichostema lanceolatum*). Additionally, crop species such as grape (*Vitis vinifera*), pomegranate (*Punica granatum*), orange (*Citrus x sinesis*), almond (*Prunis dulcis*), walnut (*Juglans* sp.), and lemon (*Citrus limon*) have been installed throughout the disturbed areas onsite.

Development onsite includes residential structures, paved driveways, and hardscaping which occur within the central and southern areas of the project site. These areas are generally void of vegetation with the exception of installed ornamental species. Plant species present within the developed areas onsite include fig (*Ficus* sp.), palm (*Arecaceae* sp.), oleander (*Nerium* sp.), jacaranda (*Jacaranda mimosifolia*), bougainvillea (*Bougainvillea glabra*), Kentucky bluegrass (*Poa pratensis*), and Italian cypress (*Cupressus sempervirens*).

Wildlife

Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed or are expected to occur within the project site. The discussion is to be used a general reference and is limited by the season, time of day, and weather conditions in which the field survey was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation.

Fish

The MSHCP does not identify any covered or special-status fish species as potentially occurring within the project site. Further, no fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on or within the vicinity of the site. Therefore, no fish are expected to occur and are presumed absent.



Amphibians

The MSHCP does not identify any covered or special-status amphibian species as potentially occurring within the project site. The project site does not support hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species. Further, no amphibians were observed and all are presumed to be absent from the project site.

Reptiles

The MSHCP does not identify any covered or special-status reptilian species as potentially occurring within the project site. The site and surrounding area provide suitable foraging and cover habitat for reptile species adapted to routine anthropogenic disturbance. No reptilian species were observed during the field investigation. Reptilian species which may be expected to occur onsite include side-blotched lizard (*Uta stansburiana elegans*), alligator lizard (*Elgaria multicarinata webbii*), and Great Basin fence lizard (*Sceloporus occidentalis longipes*).

Birds

The project site and surrounding area provides suitable foraging and nesting habitat for local avian species, especially those adapted to routine anthropogenic disturbance. Bird species detected during the field survey include yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melozone crissalis*), house finch (*Haemorhous mexicanus*), song sparrow (*Melospiza melodia*), western meadowlark (*Sturnella neglecta*), killdeer (*Charadrius vociferus*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), Say's phoebe (*Sayornis saya*), Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), European starling (*Sturnus vulgaris*), and red-tailed hawk (*Buteo jamaicensis*).

<u>Mammals</u>

The MSHCP does not identify any covered or special-status mammalian species as potentially occurring within the project site. The site provides suitable foraging and cover habitat for mammalian species adapted to degraded conditions and routine anthropogenic disturbance. Mammalian species detected include California ground squirrel (*Otospermophilus beecheyii*) and domestic dog (*Canis lupus familiaris*). Other common mammalian species that could be expected to occur include possum (*Didelphis virginiana*) and raccoon (*Procyon lotor*).

Nesting Birds and Raptors

No active nests or birds displaying nesting behavior were observed during the field survey, which was conducted outside of the breeding season. Although subjected to routine disturbance, the plant communities and land cover types supported on-site, including ornamental vegetation and structures in the eastern portion, have the potential to provide suitable nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that area adapted to urban environments. Additionally, the eucalyptus trees which occur offsite adjacent to the northwest boundary have historically supported red-tailed hawk nests.

Nesting birds are protected pursuant to the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). If construction occurs between February 1st and August 31st, a pre-construction



clearance survey for nesting birds should be conducted prior to the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction.

Migratory Corridors and Linkages

Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The project site has not been identified as occurring in a wildlife corridor or linkage. The proposed project will be confined to existing areas that have been heavily disturbed and are isolated from regional wildlife corridors and linkages. The drainage feature to the north and west of the project site has the potential to provide local wildlife movement opportunities. However, the proposed project is not expected to impact the drainage offsite. As such, implementation of the proposed project is not expected to impact wildlife movement opportunities and impacts to wildlife corridors or linkages are not expected to occur.

Jurisdictional Areas

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge or fill materials into "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

One unnamed drainage was observed approximately 100 feet northwest of the project site (refer to Exhibit 6, *Drainage Features*, in Attachment A). This drainage conveys flows northeast to southwest north of the project site before eventually flowing into Murrieta Creek approximately 1.5 miles southwest of the project site. The drainage supports minimal riparian scrub vegetation within the channel and on its banks. No riparian vegetation was observed overhanging the project site. The vegetation observed immediately bordering the northwestern boundary of the project site, adjacent to the drainage feature, is a eucalyptus stand that does not qualify as riparian habitat.

The proposed project will be restricted to previously developed and disturbed areas within the project site and will avoid impacts to the adjacent, offsite drainage feature and habitat supported within the drainage feature. Further, the project site is separated from the drainage and associated habitat by a disturbed, vacant lot to the northwest and a eucalyptus tree stand. No impacts to the adjacent drainage feature will occur from project implementation. Standard Best Management Practices (BMPs) should be installed along the perimeter of the property (e.g., silt fencing) to ensure no indirect impacts occur during project construction.



Special-Status Biological Resources

The CNDDB was queried for reported locations of special-status plant and wildlife species as well as natural communities of special concern in the Murietta USGS 7.5-minute quadrangle. Only one quadrangle was queried due to the proximity of the project site to quadrangle boundaries. A search of published records within these quadrangles was conducted using the CNDDB Rarefind 5 online software and the CDFW BIOS database and the CNPS Inventory of Rare and Endangered Plants of California that supplied information regarding the distribution and habitats of vascular plants in the vicinity of the project site. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified thirty-six (36) special-status plant species, sixty-five (65) special-status wildlife species, and four (4) special-status plant communities as having potential to occur within the Murietta quadrangle. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability, and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity are presented in *Table D-1: Potentially Occurring Special-Status Biological Resources*, provided in Attachment D. Refer to Table D-1 for a determination regarding the potential occurrence of special-status plant and wildlife species within the project site.

Special-Status Plants

According to the CNDDB and CNPS, thirty-six (36) special-status plant species have been recorded in the Murietta quadrangle (refer to Attachment D). No plant species were observed within the project site during the field investigation. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site does not have the potential to support any special status species known to occur in the area and all are presumed to be absent.

Special-Status Wildlife

According to the CNDDB, sixty-five (65) special-status wildlife species have been reported in the Murietta quadrangle (refer to Attachment D). No special-status wildlife species were observed on-site during the field investigation. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site has a high potential to support Cooper's hawk (Accipiter cooperii); a moderate potential to support and Costa's hummingbird (Calypte costae); and a low potential to support sharp-shinned hawk (Accipiter striatus) and California horned lark (Eremophila alpestris actia). None of the aforementioned species are state or federally listed as Threatened or Endangered.

In order to ensure impacts to special-status avian species do not occur from implementation of the proposed project, a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance. With implementation of the pre-construction nesting bird clearance survey, impacts to special-status avian species will be less than significant and no mitigation will be required.

Critical Habitat

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species



or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located with federally designated Critical Habitat (refer to Exhibit 7, *Critical Habitat*, in Attachment A). The nearest designated Critical Habitat is located approximately 3.1 miles to the northwest of the site for coastal California gnatcatcher (*Polioptila californica californica*). Therefore, the loss or adverse modification of Critical Habitat will not occur as a result of the proposed project and consultation with the USFWS will not be required for implementation of the proposed project.

Western Riverside County MSHCP

The project site is located in the Southwest Area Plan of the MSHCP but is not located within any Criteria Cells or designated conservation areas (Exhibit 8, *MSHCP Conservation Areas*). Additionally, the project site is located within the MSHCP designated survey area for burrowing owl.

Since the City of Murrieta and Riverside County are permittees under the MSHCP and, while the project is not specifically identified as a Covered Activity under Section 7.1, *Covered Activities Outside Criteria Area and PQP Lands*, of the MSHCP, public and private development that are outside of Criteria Areas and Public/Quasi-Public (PQP) Lands are permitted under the MSHCP, subject to consistency with MSHCP policies that apply to area outside of Criteria Areas. As such, to achieve coverage, the project must be consistent with the following policies of the MSHCP:

- The policies for the protection of species associated with Riparian/Riverine areas and vernal pools as set forth in Section 6.1.2 of the MSHCP;
- The policies for the protection of Narrow Endemic Plant Species as set forth in Section 6.1.3;
- The Urban/Wildlands Interface Guidelines as set forth in Section 6.1.4; and
- The requirements for conducting additional surveys as set forth in Section 6.3.2

<u>Riparian/Riverine Areas</u>

As identified in Section 6.1.2 of the MSHCP, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*, riparian/riverine areas are defined as areas dominated by trees, shrubs, persistent emergent plants, or emergent mosses and lichens which occur close to or are dependent upon nearby freshwater, or areas with freshwater flowing during all or a portion of the year. Conservation of these areas is intended to protect habitat that is essential to a number of listed or special-status water-dependent fish, amphibian, avian, and plant species. If impacts to riparian/riverine habitat cannot be avoided, a



Determination of Biologically Equivalent or Superior Preservation (DBESP) must be developed to address the replacement of lost functions of habitats in regard to the listed species. This assessment is independent from considerations given to "waters of the U.S." and "waters of the State" under the CWA and the California Fish and Game Code.

One (1) drainage was observed, northwest and outside the boundaries of the project site. This drainage supports a mulefat scrub plant community and would qualify as riparian/riverine habitat under the MSHCP. The proposed project will stay within the existing disturbed and developed areas within the property, and not impacts will occur to the offsite drainage feature. As such, development of the proposed project will not result in impacts to riparian/riverine habitats and a DBESP will not be required for the loss of riparian/riverine habitat.

Vernal Pools and Fairy Shrimp Habitat

One of the factors for determining the suitability of the habitat for fairy shrimp would be demonstrable evidence of seasonal ponding in an area of topographic depression that is not subject to flowing waters. These astatic pools are typically characterized as vernal pools. More specifically, vernal pools are seasonal wetlands that occur in depression areas without a continual source of water. They have wetland indicators of all 3 parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season. The determination that an area exhibits vernal pool characteristics and the definition of the watershed supporting vernal pool hydrology is made on a case-by-case basis. Such determinations should be considered the length of time the areas exhibit upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. The seasonal hydrology of vernal pools provides for a unique environment, which supports plants and invertebrates specifically adapted to a regime of winter inundation, followed by an extended period when the pool soils are dry.

Vernal pools are seasonally inundated, ponded areas that only form in regions where specialized soil and climatic conditions exist. During fall and winter rains typical of Mediterranean climates, water collects in shallow depressions where downward percolation of water is prevented by the presence of a hard pan or clay pan layer (duripan) below the soil surface. Later in the spring when rains decrease and the weather warms, the water evaporates and the pools generally disappear by May. The shallow depressions remain relatively dry until late fall and early winter with the advent of greater precipitation and cooler temperatures. Vernal pools provide unusual "flood and drought" habitat conditions to which certain plant and wildlife species have specifically adapted as well as invertebrate species such as fairy shrimp.

The MSHCP lists two general classes of soils known to be associated with listed and special-status plant species; clay soils and Traver-Domino Willow association soils. The specific clay soils known to be associated with listed and special-status species within the MSHCP plan area include Bosanko, Auld, Altamont, and Porterville series soils, whereas Traver-Domino Willows association includes saline-alkali soils largely located along floodplain areas of the San Jacinto River and Salt Creek. Without the appropriate soils to create the impermeable restrictive layer, none of the special-status plant or wildlife species associated with vernal pools can occur on the project site. None of these soils have been documented within the project site.



A review of recent and historic aerial photographs (1994-2023) of the project site did not provide visual evidence of an astatic or vernal pool conditions within the project site. No ponding was observed, further supporting the fact that the drainage patterns currently occurring on the project site do not follow hydrologic regimes needed for vernal pools. From this review of historic aerial photographs and observations during the field investigations, it can be concluded that there is no indication of vernal pools or suitable fairy shrimp habitat occurring within the proposed project site. Therefore, the project is consistent with Section 6.1.2 of the MSHCP.

Narrow Endemic Plant Species

Section 6.1.3 of the MSHCP, *Protection of Narrow Endemic Plant Species*, states that the MSHCP database does not provide sufficient detail to determine the extent of the presence/distribution of Narrow Endemic Plant Species within the MSHCP Plan Area. Additional surveys may be needed to gather information to determine the presence/absence of these species to ensure that appropriate conservation of these species occurs. Based on the RCA MSHCP Information Map query and review of the MSHCP, it was determined that the project site is not located within the designated survey area for any Narrow Endemic Plant Species. Therefore, no additional surveys will be required.

Additional Survey Needs and Procedures

In accordance with Section 6.3.2 of the MSHCP, *Additional Survey Needs and Procedures*, additional surveys may be needed for certain species in order to achieve coverage for these species. The query of the RCA MSHCP Information Map and review of the MSHCP determined that the project site is located within the designated survey area for burrowing owl as depicted in Figure 6-4 within Section 6.3.2 of the MSHCP. No other special-status wildlife species surveys were identified.

Burrowing Owl

Burrowing owl is currently designated as a California Species of Special Concern. The burrowing owl is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with level to gently-sloping areas characterized by open vegetation and bare ground. The western burrowing owl (*A.c. hypugaea*), which occurs throughout the western United States including California, rarely digs its own burrows and is instead dependent upon the presence of burrowing mammals (i.e., California ground squirrels, coyotes, and badgers) whose burrows are often used for roosting and nesting. The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. They also require low growth or open vegetation allowing line-of-sight observation of the surrounding habitat to forage and watch for predators. In California, the burrowing owl breeding season extends from the beginning of February through the end of August.

Under the MSHCP burrowing owl is considered an adequately conserved covered species that may still require focused surveys in certain areas as designated in Figure 6-4 of the MSHCP. The project site occurs within the MSHCP burrowing owl survey area and a habitat assessment was conducted for the species to ensure compliance with MSHCP guidelines for the species. In accordance with the MSHCP Burrowing Owl Survey Instructions (2006), survey protocol consists of two steps, Step I – Habitat Assessment and



Step II – Locating Burrows and Burrowing Owls. The following section describes the methodology followed during the burrowing owl habitat assessment conducted for this project.

• <u>Step I – Habitat Assessment:</u> Step 1 of the MSHCP habitat assessment for burrowing owl consists of a walking survey to determine if suitable habitat is present on-site. An initial habitat assessment was conducted on December 27, 2023. Upon arrival at the project site, and prior to initiating the assessment survey, binoculars were used to scan all suitable habitats on and adjacent to the property, including perch locations, to establish owl presence.

All suitable areas of the project site were surveyed on foot by walking slowly and methodically while recording/mapping areas that may represent suitable owl habitat on-site. Primary indicators of suitable burrowing owl habitat in western Riverside County include, but are not limited to, native and non-native grassland, interstitial grassland within shrub lands, shrub lands with low density shrub cover, golf courses, drainage ditches, earthen berms, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas. Burrowing owls typically use burrows made by fossorial mammals, but they often utilize man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, wood debris piles, openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or in close proximity to man-made structures.

According to the MSHCP guidelines, if suitable habitat is present, the biologist should also walk the perimeter of the property, which consists of a 150-meter (approximately 500 feet) buffer zone around the project site boundary. If permission to access the buffer area cannot be obtained, the biologist shall not trespass, but visually inspect adjacent habitats with binoculars. In addition to surveying the entire Project Site all bordering natural habitats located immediately adjacent to the Project Site were assessed. Results from the habitat assessment indicate that suitable resources for burrowing owl are present throughout the Project Site. Accordingly, if suitable habitat is documented on-site or within adjacent habitats, both Step II, focused surveys and the 30-day preconstruction surveys are required in order to comply with the MSHCP guidelines.

- Step II Locating Burrows and Burrowing Owls: Concurrent with the initial habitat assessment, a
 detailed focused burrow survey was conducted and included documentation of appropriately sized
 natural burrows or suitable man-made structures that may be utilized by burrowing owl as part of
 the MSHCP protocol, which is described below under Part A, Focused Burrow Survey. The
 MSHCP protocol indicates that no more than 100 acres should be surveyed per day/per biologist.
 - O Part A Focused Burrow Survey: A systematic survey for burrows, including burrowing owl sign, was initially conducted by walking across all suitable habitats mapped within the project site. Pedestrian survey transects were spaced to allow 100% visual coverage of the ground surface. The distances between transect centerlines were no more than 30 meters (approximately 100 feet) apart, and owing to the terrain, often much smaller. Transect routes were also adjusted to account for topography and in general ground surface visibility. Areas providing potential habitat for burrowing owls were surveyed for suitable burrows, consisting of natural and non-natural substrates in areas with low, open vegetation. All burrows encountered were examined for shape, scat, pellets, white-wash,



feathers, tracks, and prey remains. Suitable burrows/sites, including rock piles and non-natural substrates, were thoroughly examined for signs of presence.

Despite a systematic search of the project site, no burrowing owls or sign (i.e., pellets, feathers, castings, or whitewash) were observed during the field investigation. Portions of the project site are vegetated with a variety of low-growing plant species that allow for line-of-sight observation favored by burrowing owls. However, no small mammal burrows that have the potential to provide suitable burrowing owl nesting habitat (>4 inches in diameter) were observed within the boundaries of the site. Additionally, the site supports and is surrounded by tall trees and power poles that provide perching opportunities for large raptors (i.e., red-tailed hawk [*Buteo jamaicensis*]) that can prey on burrowing owls. Being that no appropriate burrows or burrowing owl habitat was found, Part B-Focused Burrowing Owl surveys are not required. Therefore, the project is consistent with Section 6.3.2.

A 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities (e.g. vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities, the project proponent will immediately inform the Wildlife Agencies and the Regional Conservation Authority (RCA) and will need to coordinate further with RCA and the Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance. If ground-disturbing activities occur, but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrowing owl is found, the same coordination described above will be necessary.

Urban/Wildlands Interface Guidelines

Section 6.1.4 of the MSHCP, *Guidelines Pertaining to Urban/Wildlands Interface*, is intended to address indirect effects associated with development in proximity to MSHCP Conservation Areas. The Urban/Wildlife Interface Guidelines are intended to ensure that indirect project-related impacts to the MSHCP Conservation Area, including drainage, toxics, lighting, noise, invasive plant species, barriers, and grading/land development, are avoided or minimized. The project site is not located within or immediately adjacent to any Criteria Cells, corridors, or linkages. The urban/Wildlands Interface Guidelines do not apply to this project, and, therefore, the project is consistent with Section 6.1.4 of the MSHCP.

Stephen's Kangaroo Rat Habitat Conservation Plan

Separate from the consistency review against the policies of the MSHCP, Riverside County established a boundary in 1996 for protecting the Stephens' kangaroo rat (*Dipodomys stephensi*), a federally endangered and state threatened species. The Stephens' kangaroo rat is protected under the Stephens' Kangaroo Rat Habitat Conservation Plan (County Ordinance No. 663.10; SKR HCP). As described in the MSHCP Implementation Agreement, a Section 10(a) Permit, and California Fish and Game Code Section 2081 Management Authorization were issued to the Riverside County Habitat Conservation Agency (RCHCA) for the Long-Term SKR HCP and was approved by the USFWS and CDFW in August 1990 (RCHCA 1996). Relevant terms of the SKR HCP have been incorporated into the MSHCP and its Implementation Agreement. The SKR HCP will continue to be implemented as a separate HCP; however, to provide the greatest conservation for the largest number of Covered Species, the Core Reserves established by the SKR



HCP are managed as part of the MSHCP Conservation Area consistent with the SKR HCP. Actions shall not be taken as part of the implementation of the SKR HCP that will significantly affect other Covered Species. Take of Stephens' kangaroo rat outside of the boundaries but within the MSHCP area is authorized under the MSHCP and the associated permits.

The project site is located within the Mitigation Fee Area of the SKR HCP. Therefore, the applicant will be required to pay the SKR HCP Mitigation Fee prior to development of the project site.

Conclusion

Based on the literature review and field survey, implementation of the project will have no significant impacts on federally, State, or MSHCP listed species known to occur in the general vicinity of the project site. Additionally, the project will have no effect on designated Critical Habitat because none exists within the area. One drainage feature was observed near the project boundary, to the north and west during the investigation; however, this drainage feature will not be impacted from project implementation. Additionally, the project site is not located within or adjacent to any criteria cell. Therefore, the proposed project is consistent with Section 6.1.2 of the MSHCP. With completion of recommendations, and payment of the MSHCP Local Development Mitigation Fee, and Stephen's kangaroo rat mitigation fee, development of the project site is fully consistent with the MSHCP.

Recommendations

Migratory Bird Treaty Act and Fish and Game Code Compliance

Vegetation within and surrounding the project site has the potential to provide refuge cover from predators, perching sites and favorable conditions for avian nesting that could be impacted by construction activities associated with the project. Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season. Consequently, if avian nesting behaviors are disrupted, such as nest abandonment and/or loss of reproductive effort, it is considered "take" and is potentially punishable by fines and/or imprisonment.

If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting



behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Burrowing Owl Pre-Construction Clearance Survey

A 30-day pre-construction burrowing owl survey shall be conducted prior to any ground disturbing activities to avoid direct take of burrowing owls, in accordance Objectives 6 of the Species Account for the Burrowing Owl included in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

Please do not hesitate to contact Tom McGill at (951) 285-6014 or tmcgill@elmtconsulting.com or Travis McGill at (909) 816-1646 or travismcgill@elmtconsulting.com should you have any questions regarding this report.

Sincerely,

Thomas J. McGill, Ph.D.

Managing Director

Travis J. McGill

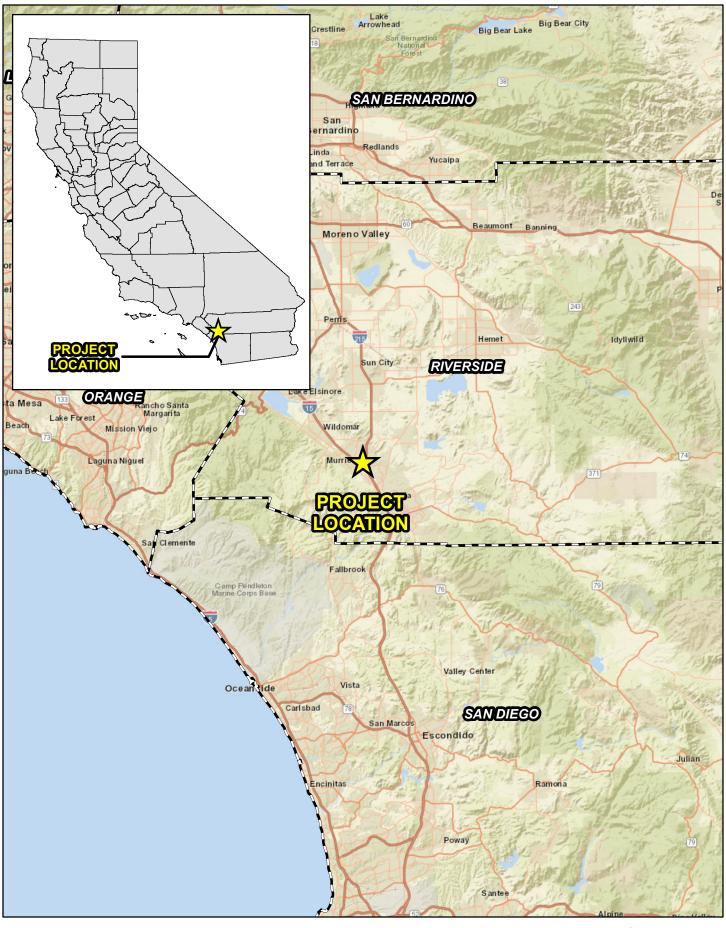
Director

Attachments:

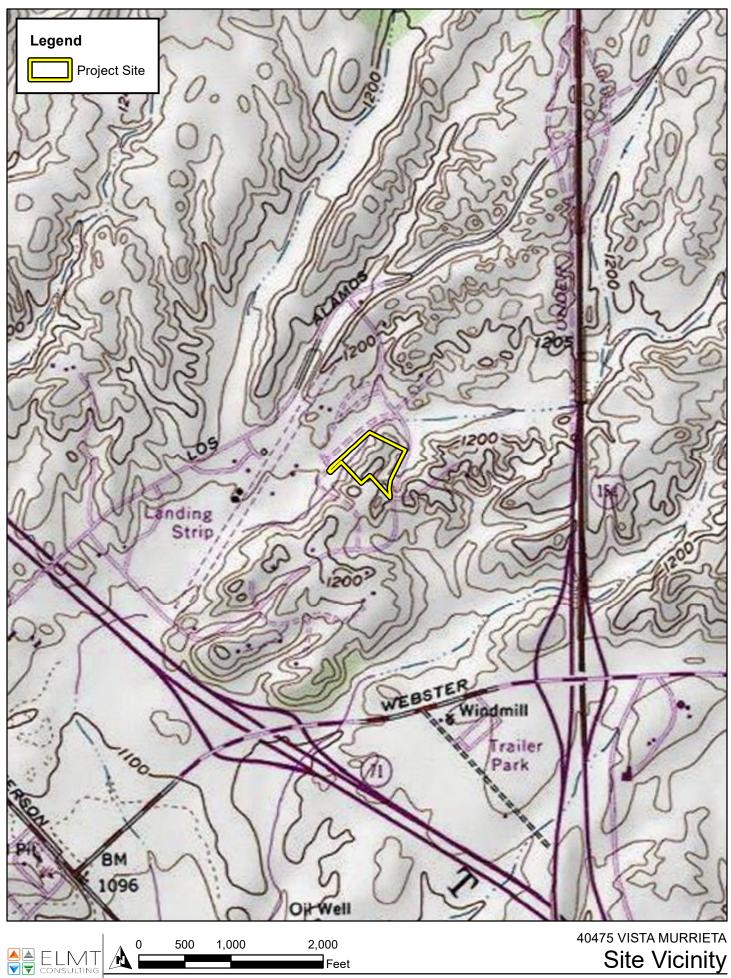
- A. Project Exhibits
- B. Site Plan
- C. Site Photographs
- D. Potentially Occurring Special-Status Biological Resources
- E. Regulations

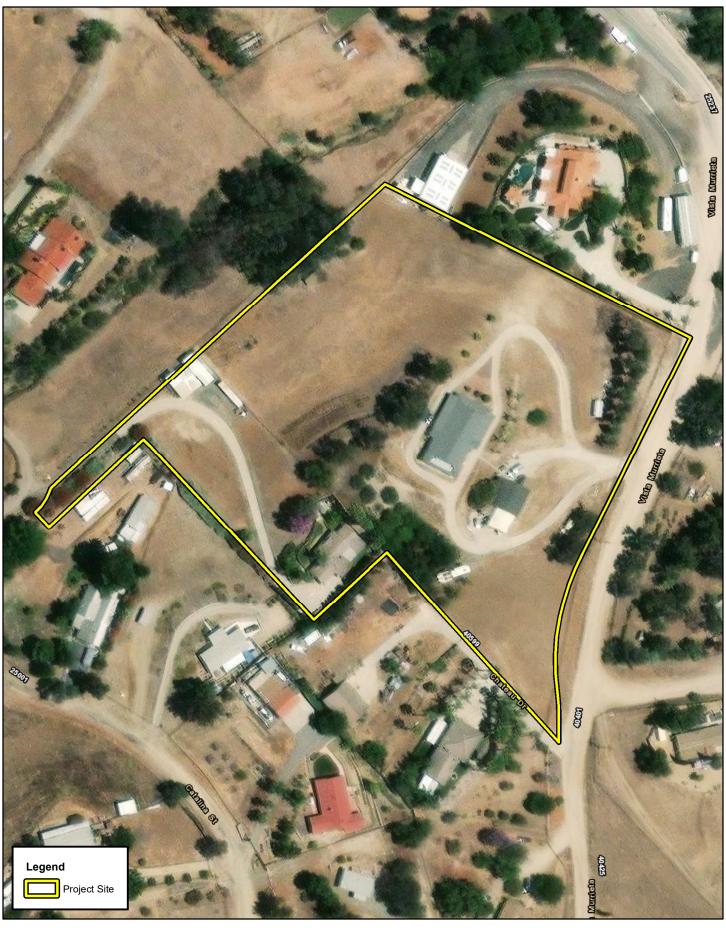
Attachment A

Project Exhibits

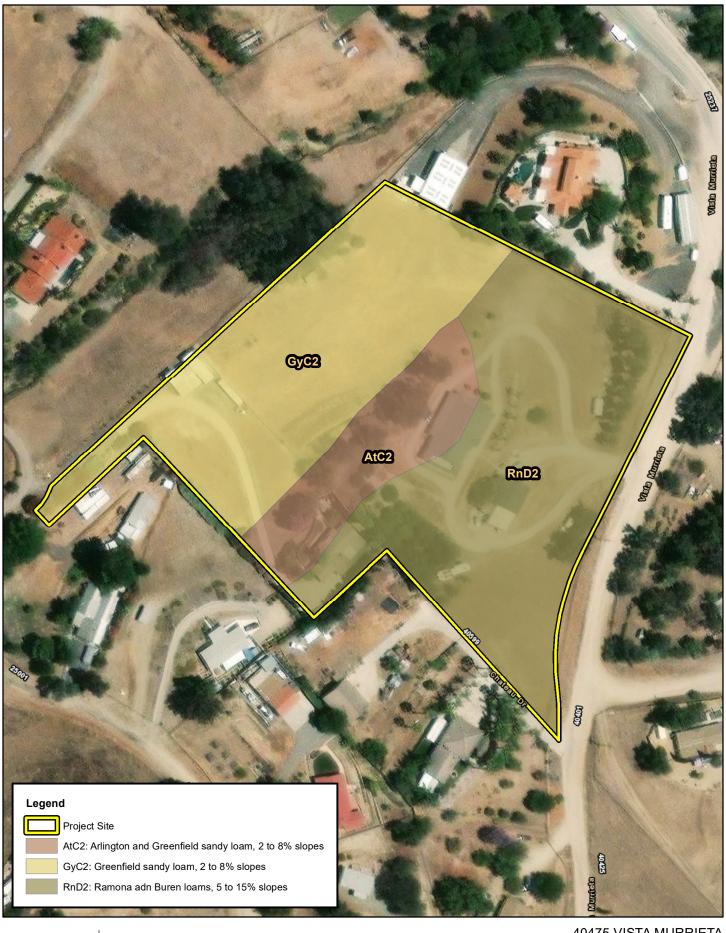


40475 VISTA MURRIETA Regional Vicinity





40475 VISTA MURRIETA
Project Site

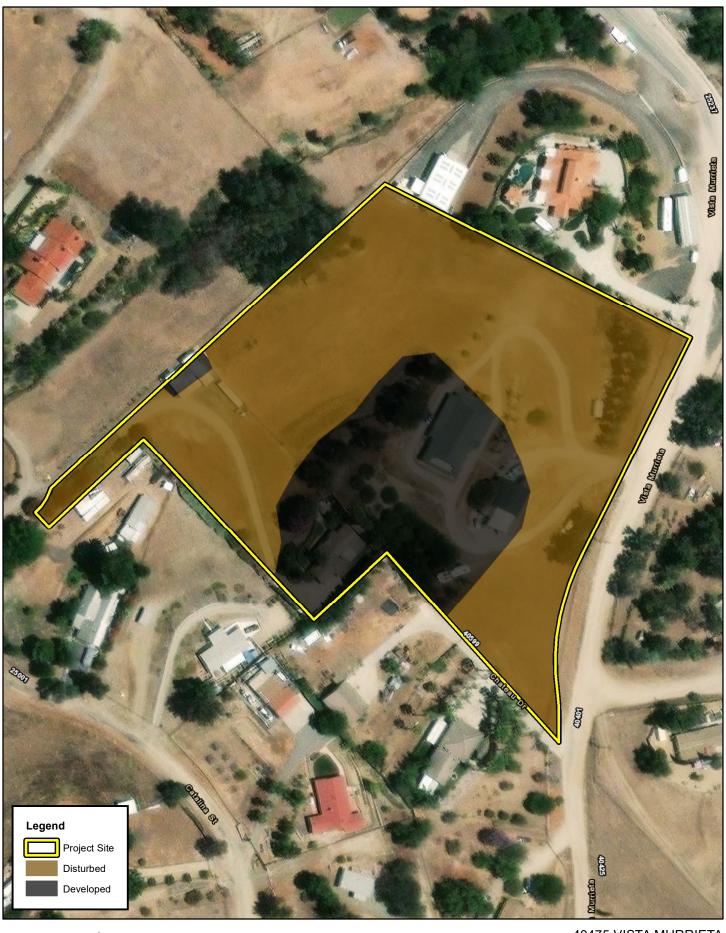


CONSULTING

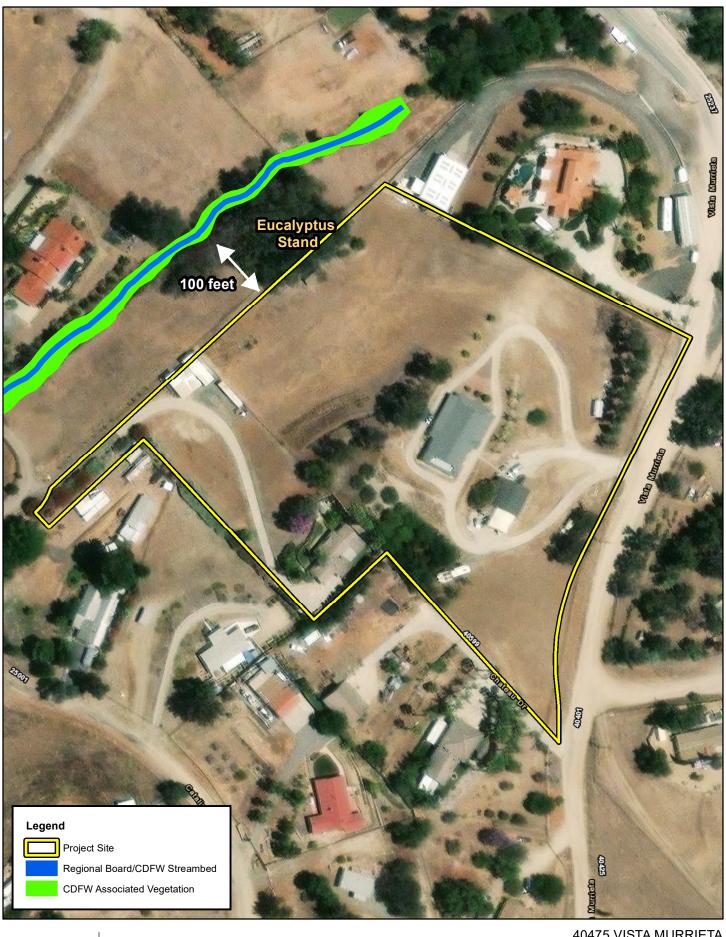


40475 VISTA MURRIETA

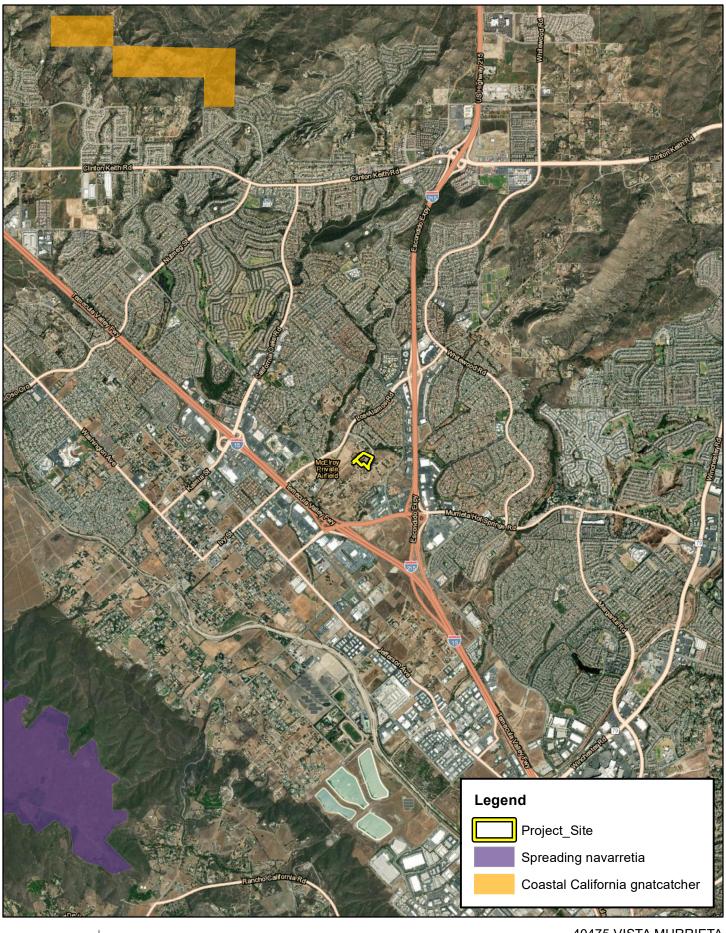
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40475 VISTA MURRIETA
Vegetation

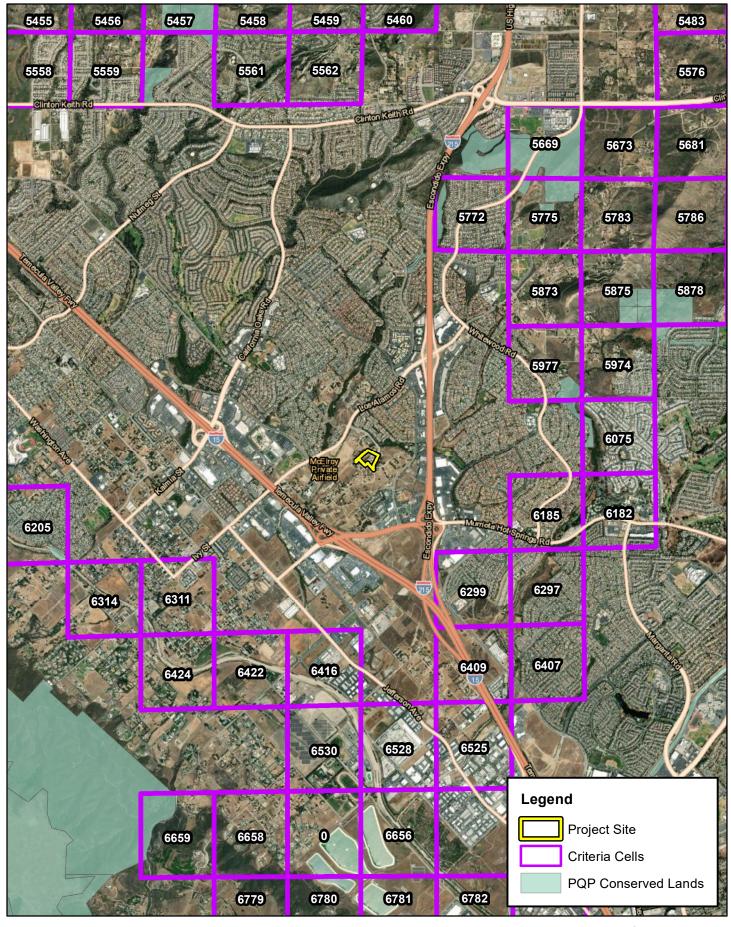


40475 VISTA MURRIETA
Drainage Features



40475 VISTA MURRIETA

Critical Habitat







40475 VISTA MURRIETA

Attachment B

Site Plan



EPTDESIGN

AO ARCHITECTS 144 NORTH ORANGE ST., ORANGE, CA 92866

(714) 639-9860



Attachment C

Site Photographs



Photograph 1: From the northeast corner of the project site, looking northwest along the northeastern boundary.



Photograph 2: From the northeast corner of the project site, looking southwest along the southeastern boundary.





Photograph 3: From the middle of the northeastern boundary, looking southeast.



Photograph 4: From the middle of the northeastern boundary, looking southwest through the project site.

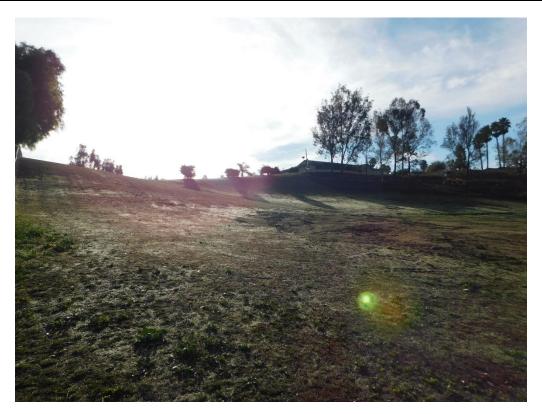


Photograph 5: From the middle of the northeastern boundary, looking northwest.



Photograph 6: From the northern corner of the project site, looking southwest along the northwestern boundary. The eucalyptus trees pictured separate the site from the unnamed drainage to the west.. Fenceline separates the project site from the adjacent drainage feature north of the project site.





Photograph 7: From the northwestern corner of the project site, looking southeast.



Photograph 8: From the middle of the northwestern boundary, looking east through the project site.





Photograph 9: From the southeast corner of the project site, looking west along the southern boundary.



Photograph 10: From the southeast corner of the project site, looking north along the eastern boundary.



Photograph 11: From the southwest corner of the project site, looking north along the western boundary.



Photograph 12: From the middle of the southern boundary, looking north through existing development within the project site.



Photograph 13: From the middle of the project site, looking west toward the western boundary.

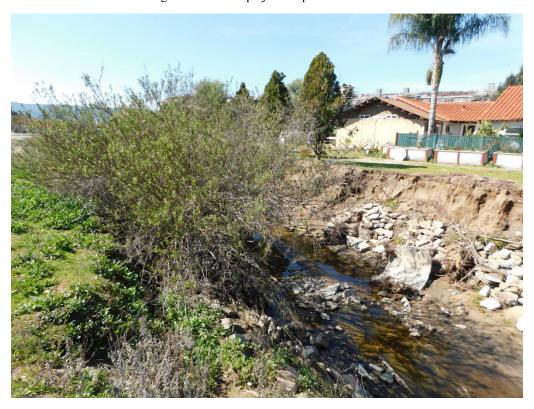


Photograph 14: From the middle of the western boundary, looking north at the existing fence line and the eucalyptus trees that separate the site and the drainage to the west.





Photograph 15: Eucalyptus stand that occurs between the western boundary of the project site and the unnamed drainage outside of the project footprint



Photograph 16: From the southern banks of the unnamed drainage which lies approximately 100 feet north west of the project site.





Photograph 17: Offsite drainage leading to the culvert under Skypark Lane, north of the project site.



Photograph 18: Triple cell box culvert, which conveys flows beyond Skypark Lane to the southwest, and outside of the project site.

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Photograph 19: Drainage feature immediate north of the project site, outside of the project footprint.



Photograph 20: Drainage feature north of and outside of the project footprint.

Attachment D Potentially Occurring Special-Status Biological Resources

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Status	Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
		WILDLIFE SPECIES			
Accipiter cooperii Cooper's hawk	Fed: None CA: WL	Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	Yes	No	High Suitable foraging habitat is found within and surrounding the project site. Suitable nesting opportunities occur nearby.
Accipiter striatus sharp-shinned hawk	Fed: None CA: WL	Found in pine, fir and aspen forests. They can be found hunting in forest interior and edges from sea level to near alpine areas. Can also be found in rural, suburban, and agricultural areas, where they often hunt at bird feeders. Typically found in southern California in the winter months.	Yes	No	Low Marginal foraging habitat is found within and surrounding the project site. This species does not nest in the region.
Agelaius tricolor tricolored blackbird	Fed: None THR; SSC	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate (freshwater marsh dominated by cattails, willows, and bulrushes [Schoenoplectus sp.]), and either flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Aimophila ruficeps canescens southern California rufous- crowned sparrow	Fed: None CA: WL	Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (<i>Artemisia californica</i>), but they can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	Status	Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
Ammodramus savannarum grasshopper sparrow	Fed: None CA: SSC	Occurs in grassland, upland meadow, pasture, hayfield, and old field habitats. Optimal habitat contains short- to medium-height bunch grasses interspersed with patches of bare ground, a shallow litter layer, scattered forbs, and few shrubs. May inhabit thickets, weedy lawns, vegetated landfills, fence rows, open fields, or grasslands.	Yes (e)	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Aquila chrysaetos golden eagle	Fed: None CA: FP; WL	Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Ardea alba great egret	Fed: None CA: None	Yearlong resident throughout California, except for the high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures.	No	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Ardea herodias great blue heron	Fed: None CA: None	Forages along streams, marshes, lakes, and meadows. Nests colonially in tall trees (typically Eucalyptus sp.), on cliffsides, or in isolated spots in marshes.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Arizona elegans occidentalis California glossy snake	Fed: None CA: SSC	Inhabits arid scrub, rocky washes, grasslands, and chaparral habitats.	No	No	Presumed Absent: No suitable habitat is present within the project site.
Artemisiospiza belli belli Bell's sparrow	Fed: None CA: WL	Generally prefers semi-open habitats with evenly spaced shrubs $1-2$ meters in height. Dry chaparral and coastal sage scrub. Less common in tall dense, old chaparral.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Asio flammeus short-eared owl	Fed: None CA: SSC	Suitable habitats include salt- and freshwater marshes, irrigated alfalfa or grain fields, and ungrazed grasslands and old pastures. Tule marsh or tall grasslands with cover 30 to 50 cm in height can support nesting pairs.	No	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.



Scientific Name Common Name	Status		Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
Aspidoscelis hyperythra orangethroat whiptail		None WL	Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Aspidoscelis tigris stejnegeri coastal whiptail		None SSC	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Athene cunicularia burrowing owl		None SSC	Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Dependent upon fossorial mammals for burrows, most notably ground squirrels.	Yes (c)	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Bombus crotchii Crotch bumblebee		None CE	Colonial species that lives almost exclusively from coastal California east towards the Sierra-Cascade Crest and can be found uncommonly in western Nevada and south through Baja California. Inhabits grassland and scrub habitats in hotter and drier climates than most other bumblebee species and is only capable of tolerating a narrow range of climatic conditions. This species usually nests underground, often in abandoned rodent dens.	No	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Bombus pensylvanicus American bumble bee		None None	Prefers farmlands, meadows, grasslands, and open fields. Nests below grass or underground. Feeds on pollen of a wide variety of flowering plants including vetches, clovers, goldenrods, and many crop species.	No	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Botaurus lentiginosus American bittern	_	None None	Often breed in shallow wetlands dominated by tall emergent vegetation, including cattail marshes, wet meadows, bogs, and shrubby marshes and occasionally hayfields.	Yes (a)	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.



Scientific Name Common Name	Status	Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
Branchinecta lynchi vernal pool fairy shrimp	Fed: THI CA: Non	other enhemeral habits including alkali nools seasonal drainages	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Branchinecta sandiegonensis San Diego fairy shrimp	Fed: ENI CA: Non	Endenne to southern Camorina and restricted to vernal pools and	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Buteo regalis ferruginous hawk	Fed: Non CA: WL	Occurs primarily in open grasslands and fields, but may be found in sagebrush flats, desert scrub, low foothills, or along the edges of pinyon-juniper woodland. Feeds primarily on small mammals and typically found in agricultural or open fields.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Buteo swainsoni Swainson's hawk	Fed: Non CA: THE	trees in juniper-sage flats, riparian areas, and in oak savannah in	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Calypte costae Costa's hummingbird	Fed: Non CA: Non	desert mannings in the scholar and riogave	No	No	Moderate Limited foraging and nesting habitat are present within and surrounding the project site.
Chaetodipus californicus femoralis Dulzura pocket mouse	Fed: Non CA: SSC	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.	No	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.



Scientific Name Common Name	Statu	18	Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
Chaetodipus fallax fallax northwestern San Diego pocket mouse	Fed: CA:	None None	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Circus hudsonius northern harrier	Fed: CA:	None SSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Crotalus ruber red-diamond rattlesnake	Fed: CA:	None SSC	It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Diadophis punctatus modestus San Bernardino ringneck snake	Fed: CA:	None None	Common in open, relatively rocky areas within valley-foothill grasslands, mixed chaparral, and annual grassland habitats.	No	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Dipodomys merriami parvus San Bernardino kangaroo rat	Fed: CA:	END CE; SSC	Primarily found in Riversidian alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May occur at lower densities in Riversidian upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to Riversidian alluvial fan sage scrub habitats. Tend to avoid rocky substrates and prefer sandy loam substrates for digging of shallow burrows.	Yes (c)	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.



Scientific Name Common Name	Status	Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
Dipodomys simulans Dulzura kangaroo rat	Fed: None CA: None	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Dipodomys stephensi Stephens' kangaroo rat	Fed: THR CA: THR	Occur in arid and semi-arid habitats with some grass or brush. Prefer open habitats with less than 50% protective cover. Require soft, well-drained substrate for building burrows and are typically found in areas with sandy soil.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Elanus leucurus white-tailed kite	Fed: None CA: FP	Occurs in low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Uses trees with dense canopies for cover.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Empidonax traillii willow flycatcher	Fed: None CA: END	A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats (2,000 to 8,000 ft) in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows.	No	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Empidonax traillii extimus southwestern willow flycatcher	Fed: END CA: END	Occurs in riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys, canyon bottoms, or around ponds and lakes. These areas typically have standing or running water, or are at least moist.	Yes (a)	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Emys marmorata western pond turtle	Fed: None CA: SSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Found at elevations from sea level to over 5,900 feet (1,800 m).	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.



Scientific Name Common Name	Status	Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
Eremophila alpestris actia California horned lark	Fed: None CA: WL	Generally found in shortgrass prairies, grasslands, disturbed fields, or similar habitat types along the coast or in deserts. Trees are shrubs are usually scarce or absent. Generally rare in montane, coniferous, or chaparral habitats. Forms large flocks outside of the breeding season.	Yes	No	Low marginal foraging and habitat are present within and surrounding the project site. No nesting habitat present.
Eumops perotis californicus western mastiff bat	Fed: None CA: SSC	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Euphydryas editha quino Quino checkerspot butterfly	Fed: END CA: None	Range is now limited to a few populations in Riverside and San Diego counties. Common in meadows and upland sage scrub/chapparal habitat.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Falco columbarius merlin	Fed: None CA: WL	Nest in forested openings, edges, and along rivers across northern North America. Found in open forests, grasslands, and especially coastal areas with flocks of small songbirds or shorebirds.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Falco mexicanus prairie falcon	Fed: None CA: WL	Commonly occur in arid and semiarid shrubland and grassland community types. Also occasionally found in open parklands within coniferous forests. During the breeding season, they are found commonly in foothills and mountains which provide cliffs and escarpments suitable for nest sites.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Falco peregrinus anatum American peregrine falcon	Fed: DL CA: DL; FP	Uncommon winter resident of the inland region of southern California. Active nesting sites are known along the coast north of Santa Barbara, in the Sierra Nevada, and in other mountains of northern California. Breeds mostly in woodland, forest, and coastal habitats. Riparian areas and coastal and inland wetlands are important habitats yearlong, especially in nonbreeding seasons.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.



Scientific Name Common Name	Status	Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
Gila orcuttii arroyo chub	Fed: None CA: SSC	Warm streams of the Los Angeles Plain, which are typically muddy torrents during the winter, and clear quiet brooks in the summer, possibly drying up in places. They are found both in slow-moving and fast-moving sections, but generally deeper than 40 cm.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Icteria virens yellow-breasted chat	Fed: None CA: SSC	Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Breeding habitat must be dense to provide shade and concealment. It winters south the Central America.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Lanius ludovicianus loggerhead shrike	Fed: None CA: SSC	Often found in broken woodlands, shrublands, and other habitats. Prefers open country with scattered perches for hunting and fairly dense brush for nesting.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Lepus californicus bennettii San Diego black-tailed jackrabbit	Fed: None CA: None	Occurs in diverse habitats, but primarily is found in arid regions supporting shortgrass habitats. Openness of open scrub habitat is preferred over dense chaparral.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Linderiella occidentalis California linderiella	Fed: None CA: None	Typically resides in fairly large, deep, vegetated vernal pools in the grasslands. It occurs in a variety of geological substrates, mainly at elevations between 131-551 feet.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Linderiella santarosae Santa Rosa Plateau fairy shrimp	Fed: None CA: None	Found in long-lived, cool-water Southern Basalt Flow vernal pools with low to moderate dissolved solids. Known only to exist in a few vernal pools within the Santa Rosa Plateau.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Lynx rufus pallescens pallid bobcat	Fed: None CA: None	Found on the western edge of the great basin habitat in extreme northeast California. Live in a variety of habitats including forests, deserts, mountains, swamps and farmland.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.



Scientific Name Common Name	Sta	tus	Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
Neotoma lepida intermedia San Diego desert woodrat	Fed: CA:	None SSC	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Prefers moderate to dense canopies, and especially rocky outcrops.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Nycticorax nycticorax black-crowned night heron	Fed: CA:	None None	Fairly common, yearlong resident in lowlands and foothills throughout most of California, including the Salton Sea and Colorado River areas, and very common locally in large nesting colonies. Feeds along the margins of lacustrine, large riverine, and fresh and saline emergent habitats and rarely, on kelp beds in marine sub tidal habitats. Nests and roosts in dense-foliaged trees and dense emergent wetlands.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Pandion haliaetus osprey	Fed: CA:	None WL	Remain close to still or slow-moving bodies of water including oceans, rivers, lakes, mangroves, coastal wetlands, lagoons, reefs, estuaries and marshes. Generally nest in high places, such as trees, power poles, or cliffs.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Perognathus longimembris brevinasus Los Angeles pocket mouse	Fed: CA:	None SSC	Occurs in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but instead will seek refuge under weeds and dead leaves instead.	Yes (c)	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Phrynosoma blainvillii coast horned lizard	Fed: CA:	None SSC	Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e. fire, floods, roads, grazing, fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Plegadis chihi white-faced ibis	Fed: CA:	None WL	Prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded partures and croplands. Nests in dense, fresh emergent wetland.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.



Scientific Name Common Name	Status	Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
Polioptila californica californica coastal California gnateatcher	Fed: THR CA: SSC	Obligate resident of sage scrub habitats that are dominated by California sagebrush (<i>Artemisia californica</i>). This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. Ranges from the Ventura County, south to San Diego County and northern Baja California and it is less common in sage scrub with a high percentage of tall shrubs. Prefers habitat with more low-growing vegetation.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Rana draytonii California red-legged frog	Fed: THR CA: SSC	Found mainly near ponds in humid forests, woodlands, grasslands, coastal scrub, and streamsides with plant cover. Most common in lowlands or foothills. Frequently found in woods adjacent to streams. Occurs along the coast ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Setophaga petechia yellow warbler	Fed: None CA: SSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Spea hammondii western spadefoot	Fed: None CA: SSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washed, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rainpools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Spinus lawrencei Lawrence's goldfinch	Fed: None CA: None	Open woodlands, chaparral, and weedy fields. Closely associated with oaks. Nests in open oak or other arid woodland and chaparral near water.	No	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.
Streptocephalus woottoni Riverside fairy shrimp	Fed: END CA: None	Restricted to deep, long-lived vernal pools, ephemeral ponds, and human-derived depressions such as drainage ditches. All known habitat lies within annual grasslands which may be interspersed with chaparral or coastal sage scrub vegetation.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.



Scientific Name Common Name	Status	Habitat	Covered by MSHCP	Observed On-site	Potential to Occur			
Taricha torosa Coast Range newt	Fed: None CA: SSC	Found in coastal areas and coastal range mountains in oak forests, woodlands, or rolling grasslands. In the terrestrial phase they live in moist to dry habitats under woody or leafy debris, in rock crevices, and in animal burrows.	Yes	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.			
Taxidea taxus American badger	Fed: None CA: SSC	Primarily occupy grasslands, parklands, farms, tallgrass and shortgrass prairies, meadows, shrub-steppe communities and other treeless areas with sandy loam soils where it can dig more easily for its prey. Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones.	No	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.			
Thamnophis hammondii two-striped gartersnake	Fed: None CA: SSC	Inhabits streams and ponds in chaparral, oak woodland, and forest habitats up to 8,000 feet elevation. Semi-aquatic in nature, but can occur in a variety of habitats-including urban areas-where there is water present.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.			
Vireo bellii pusillus least Bell's vireo	Fed: END CA: END	Primarily occupy Riverine riparian habitat that typically feature dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.	Yes (a)	No	Presumed Absent There is no suitable habitat present within or adjacent to the project site.			
Xanthocephalus xanthocephalus yellow-headed blackbird	Fed: None CA: SSC	Uncommon yearlong resident of southern California throughout freshwater emergent wetlands, and moist, open areas along agricultural areas, and mudflats of lacustrine habitats. Prefers to nest in dense wetland vegetation characterized by cattails, tules, or other similar plant species along the border of lakes and ponds.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.			
	PLANT SPECIES							
Abronia villosa var. aurita chaparral sand-verbena	Fed: None CA: None CNPS: 1B.1	Grows in sandy soils in chaparral, coastal sage scrub, and coastal dune habitats. Grows in elevation from 262 to 5,249 feet. Blooming period ranges from January to September.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.			



Scientific Name Common Name	Status	Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
Almutaster pauciflorus alkali marsh aster	Fed: None CA: None CNPS: 2B.1	Grows in alkaline soils within meadows and seeps habitats. Found at elevations ranging from 785 to 2,625 feet. Blooming period is from June to October.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Amsinckia douglasiana Douglas' fiddleneck	Fed: None CA: None CNPS: 4.2	Endemic to coastal Santa Monica Mountains and Santa Ynez Mountains of southern California. Found in foothill woodland and valley grassland communities. May be restricted to Monterey shale substrates generally on sloping sites. Blooms from March to May.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Arctostaphylos rainbowensis Rainbow manzanita	Fed: END CA: END CNPS: 1B.1	Grows within chaparral habitats. Found at elevations ranging from 675 to 2,200 feet. Blooming period is from December to March.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Atriplex parishii Parish's brittlescale	Fed: None CA: None CNPS: 1B.1	Habitat types include chenopod scrub, playas, and vernal pools. Found at elevations ranging from 82 to 6,234 feet. Blooming period is from June to October.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Brodiaea santarosae Santa Rosa Basalt brodiaea	Fed: None CA: None CNPS: 1B.2	Can be found in the Santa Rosa basalt area of the Santa Ana mountains in southern California. Grows in open grassland communities, sometimes in areas with abundant, tall, non-native grasses in soils derived from the Santa Rosa basalt rock formation. Grows in a range of moisture conditions, from vernal pool edges to relatively dry soils, and even disturbed roadside areas. Blooms from May to June.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Calochortus catalinae Catalina mariposa-lily	Fed: None CA: None CNPS: 4.2	Grows in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Found at elevations ranging from 49 to 2,297 feet. Blooming period is from February to June.	No	No	Presumed absent. No suitable habitat is present within or adjacent to the project site.



Scientific Name Common Name	Stati	us	Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
Calochortus weedii var. intermedius intermediate mariposa-lily	Fed: CA: CNPS:	None None 1B.2	Found in coastal and peninsular ranges, Grows in heavy rocky soils from sea level to 6,200 feet. Blooms from June to July.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Centromadia pungens ssp. laevis smooth tarplant	Fed: CA: CNPS:	None None 1B.1	Found in alkaline soils within chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland habitats. Found at elevations ranging from 0 to 2,100 feet. Blooming period is from April to September.	Yes (d)	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Chorizanthe parryi var. parryi Parry's spineflower	Fed: CA: CNPS:	None None 1B.1	Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet. Blooming period is from April to June.	Yes (e)	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Chorizanthe polygonoides var. longispina long-spined spineflower	Fed: CA: CNPS:	None None 1B.2	Typically found on clay lenses which are largely devoid of shrubs. Can be found on the periphery of vernal pool habitat and even on the periphery of montane meadows near vernal seeps. Found at elevations ranging from 98 to 5,020 feet. Blooming period is from April to July.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Clinopodium chandleri San Miguel savory	Fed: CA: CNPS:	None None 1B.2	Known to grow in shady areas of riparian habitat, but can also be found in coastal sage scrub, foothill woodland, chaparral, and valley grassland communities. Blooms from May to July.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Convolvulus simulans small-flowered morning-glory	Fed: CA: CNPS:	None None 4.2	Grows in clay soils within serpentinite seeps, chaparral, coastal scrub, valley and foothill grassland habitats. Found at elevations ranging from 98 to 2,297 feet. Blooming period is from March to July.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Deinandra paniculata paniculate tarplant	Fed: CA: CNPS:	None None 4.2	Sandy (sometimes), Vernally Mesic (usually) areas in Coastal scrub, Valley and foothill grassland, and Vernal pools. Found at elevations ranging from 80 to 3,085 feet. Blooming period is from April to November.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.



Scientific Name Common Name	Status		Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
Eryngium aristulatum var. parishii San Diego button-celery	Fed: CA: CNPS:	END END 1B.1	Grows in clay soils and surface and non-surface hard pan. Restricted to vernal pools and areas adjacent to and around vernal pools. Blooms from April to June.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Erythranthe diffusa Palomar monkeyflower	Fed: CA: CNPS:	None None 4.3	Grows in sandy or gravelly soils in chaparral and lower montane coniferous forest habitats. Found at elevations ranging from 4,003 to 6,004 feet. Blooming period ranges from April to June.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Harpagonella palmeri Palmer's grapplinghook	Fed: CA: CNPS:	None None 4.2	Occurs on clay soils in chaparral, coastal scrub, and valley and foothill grasslands. Found at elevations ranging from 66 to 3,133 feet. Blooming period is from March to May.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Holocarpha virgata ssp. elongata curving tarplant	Fed: CA: CNPS:	None None 4.2	Grows within chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats. Found at elevations ranging from 195 to 3,610 feet. Blooming period is from May to November.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Hordeum intercedens bobtail barley	Fed: CA: CNPS:	None None 3.2	Found in coastal dunes, coastal scrub, vernal pools, and valley and foothill grassland habitats. Found at elevations ranging from 16 to 3,281 feet. Blooming period is from March to June.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Juglans californica southern California black walnut	Fed: CA: CNPS:	None None 4.2	Occurs in alluvial soils in chaparral, cismontane woodland, coastal scrub, and riparian woodlands. From 15 to 5,875 feet in elevation. Blooming period is from May to June.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Juncus acutus ssp. leopoldii southwestern spiny rush	Fed: CA: CNPS:	None None 4.2	Found in coastal dunes (mesic), meadows and seeps (alkaline seeps), and marshes and swamps (coastal salt). Found at elevations ranging from 0 to 3,115 feet. Blooming period is from May to July.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.



Scientific Name Common Name	Status		Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
Juncus luciensis Santa Lucia dwarf rush	Fed: CA: CNPS:	None None 1B.2	Occurs in wetland habitats within wetland and riparian communities. Can be found in vernal pools, depressions in meadows, wet sandy soil of seepage areas on sandstone, and stream banks at elevations ranging from 984 to 6,234 feet. Blooms from April to July.	No	No	Presumed absent. No suitable habitat is present within or adjacent to the project site.
Lasthenia glabrata ssp. coulteri Coulter's goldfields	Fed: CA: CNPS:	None None 1B.1	Prefers playas, vernal pools, and coastal salt marshes and swamps. Found at elevations ranging from 3 to 4,003 feet. Blooming period is from February to June.	Yes (d)	No	Presumed absent. No suitable habitat is present within or adjacent to the project site.
Lathyrus splendens pride-of-California	Fed: CA: CNPS:	None None 4.3	Occurs in highly vegetated chaparral. Found at elevations to 3,444 feet. Blooming period is from March to June.	No	No	Presumed absent. No suitable habitat is present within or adjacent to the project site.
Lepidium virginicum var. robinsonii Robinson's pepper-grass	Fed: CA: CNPS:	None None 4.3	Dry soils in chaparral and coastal sage scrub. Found at elevations ranging from 5 to 2,905 feet. Blooming period is from January to July.	No	No	Presumed Absent Suitable soils are not present within the project site.
Microseris douglasii ssp. platycarpha small-flowered microseris	Fed: CA: CNPS:	None None 4.2	Occurs in clay soils in cismontane woodland, coastal scrub, valley and foothill grasslands, and around vernal pools. Found at elevations ranging from 49 to 3,510 feet. Blooming period is from March to May.	No	No	Presumed Absent Suitable soils are not present within the project site.
Myosurus minimus ssp. apus little mousetail	Fed: CA: CNPS:	None None 3.1	Occurs in alkaline soils in valley and foothill grassland and vernal pools. Found at elevations ranging from 66 to 2,100 feet. Blooming period is from March to June.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.
Navarretia fossalis spreading navarretia	Fed: CA: CNPS:	THR None 1B.1	Found in chenopod scrub, shallow freshwater marshes and swamps, playas, and vernal pools. Grows in elevation from 98 to 2,149 feet in elevation. Blooming period ranges from April to June.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.



Scientific Name Common Name	Status	Habitat	Covered by MSHCP	Observed On-site	Potential to Occur	
Navarretia prostrata prostrate vernal pool navarretia	Fed: None CA: None CNPS: 1B.2	Grows in moist or wet places including alkaline floodplains and vernal pools. Blooms from April to July.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.	
Orcuttia californica California Orcutt grass	Fed: END CA: END CNPS: 1B.1	Primarily restricted to the southern basaltic claypan vernal pools at the Santa Rosa Plateau, and alkali vernal pools at Skunk Hollow, and at Salt Creek. Grows in elevations ranging from 45 to 2,165 feet above msl. Blooming period is from April to August.	Yes	No	Presumed absent No suitable habitat is present within or adjacent to the project site.	
Polygala cornuta var. fishiae Fish's milkwort	Fed: None CA: None CNPS: 4.3	Occurs in chaparral, cismontane woodland, and riparian woodland. Found at elevations ranging from 328 to 3,281 feet. Blooming period is from May to August.	No	No	Presumed absent No suitable habitat is present within or adjacent to the project site.	
Pseudognaphalium leucocephalum white rabbit-tobacco	Fed: None CA: None CNPS: 2B.2	Gravelly, sandy areas in Chaparral, Cismontane woodland, Coastal scrub, and Riparian woodland habitats. Grows in elevation from 3 to 6,890 feet in elevation. Blooming period ranges from July to December.	No	No	Presumed Absent There is no suitable habitat present within the project site.	
Quercus engelmannii Engelmann oak	Fed: None CA: None CNPS: 4.2	Grows along the foothills from Pasadena through Baja California. Requires elevations of 500 to 4,000 feet. Found in mesas, savannas, and woodlands above the dry coastal plain.	Yes	Yes	Presumed Absent There is no suitable habitat present within the project site.	
Symphyotrichum defoliatum San Bernardino aster	Fed: None CA: None CNPS: 1B.2	Streambanks and mesic areas in Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Marshes and swamps, Meadows and seeps, Valley and foothill grassland (vernally mesic). Found at elevations ranging from 5 to 6,695 feet. Blooming period is from July to November.	No	No	Presumed Absent Suitable soils are not present within the project site.	
CDFW SENSITIVE HABITATS						
Southern Coast Live Oak Riparian Forest	CDFW Sensitive Habitat	Open to locally dense evergreen riparian woodlands dominated by <i>Quercus agrifolia</i> . This type appears to be richer in herbs and poorer in understory shrubs than other riparian communities. Bottomlands and outer floodplains along larger streams, on finegrained, rich alluvium. Canyons and valleys of coastal southern California.	NA	No	Absent Habitat not observed within or adjacent to the project site.	



Scientific Name Common Name	Status	Habitat	Covered by MSHCP	Observed On-site	Potential to Occur
Southern Interior Basalt Flow Vernal Pool	CDFW Sensitive Habitat	Generally shallow depressions that hold water seasonally. This type is characterized by their position on top of massive basalt flows, where soils are very thin over solid bedrock.	N/A	No	Absent Habitat not observed within or adjacent to the project site.
Southern Sycamore Alder Riparian Woodland	CDFW Sensitive Habitat	Occurs below 2,000 meters in elevation, sycamore and alder often occur along seasonally-flooded banks; cottonwoods and willows are also often present. Poison oak, mugwort, elderberry and wild raspberry may be present in understory.	NA	No	Absent Habitat not observed within or adjacent to the project site.
Valley Needlegrass Grassland	CDFW Sensitive Habitat	Characterized by continuous vegetative cover of common needlegrass species (<i>Nasella</i> spp.). Occurs over a wide variety of topographies, in deep soils with high clay content, loamy, sandy, or silty derived mudstone, sandstone, or serpentine substrates.	N/A	No	Absent Habitat not observed within or adjacent to the project site.

U.S. Fish and Wildlife Service (Fed) - Federal

END- Federal Endangered THR- Federal Threatened

California Department of Fish and Wildlife (CA) - California

END- California Endangered THR- California Threatened Candidate- Candidate for listing under the California **Endangered Species Act** FP- California Fully Protected SSC- Species of Special Concern WL- Watch List

California Native Plant Society (CNPS) California Rare Plant Rank

- 1B Plants Rare, Threatened, or Endangered in California and Elsewhere
- 2B Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- 3 Plants About Which More Information is 0.3- Not very Needed - A Review List
- 4 Plants of Limited Distribution A Watch List

CNPS Threat Ranks

- 0.1- Seriously threatened in California
- 0.2- Moderately threatened in California
- threatened in California

Western Riverside County MSHCP

Yes-Fully covered No- Not covered

Yes (a)- May require surveys under MSHCP Section 6.1.2

Yes (b)- May require surveys under MSHCP Section 6.1.3

Yes (c)- May require surveys under MSHCP Section 6.3.2

Yes (d)- May require surveys under MSHCP Section 6.3.2

Yes (e)- Conditionally covered pending the achievement of speciesspecific conservation measures



Attachment E

Regulations

Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Regulations

Endangered Species Act of 1973

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (ESA). Section 9 of the ESA prohibits "take" of threatened or endangered species. "Take" under the ESA is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct." The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the ESA, the United States Fish and Wildlife Service (USFWS) may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an ESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) makes it unlawful to pursue, capture, kill, possess, or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).



The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered "take." This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

State Regulations

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines "endangered" and "rare" species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, "endangered" species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while "rare" species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

California Endangered Species Act (CESA)

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in "take" of individuals (defined in CESA as; "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by CDFW. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the



absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

Fish and Game Code

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it 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 MBTA.

Native Plant Protection Act

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

California Native Plant Society Rare and Endangered Plant Species

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

California Rare Plant Rank

- 1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere
- 1B- Plants Rare, Threatened, or Endangered in California and Elsewhere



- 2A- Plants Presumed Extirpated in California, But More Common Elsewhere
- 2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- 3- Plants about Which More Information is Needed A Review List
- 4- Plants of Limited Distribution A Watch List

Threat Ranks

- .1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- 3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

Local Policies

Western Riverside County MSHCP

The MSHCP is a comprehensive, multi-jurisdictional HCP focusing on conservation of species and their associated habitats in western Riverside County. The goal of the MSHCP is to maintain biological and ecological diversity within a rapidly urbanizing region.

The approval of the MSHCP and execution of the Implementing Agreement (IA) by the wildlife agencies allows signatories of the IA to issue "take" authorizations for all species covered by the MSHCP, including state- and federal-listed species as well as other identified sensitive species and/or their habitats. Each city or local jurisdiction will impose a Development Mitigation Fee for projects within their jurisdiction. With payment of the mitigation fee to the County and compliance with the survey requirements of the MSHCP where required, full mitigation in compliance with the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), CESA, and FESA will be granted. The Development Mitigation Fee varies according to project size and project description. The fee for industrial development is \$7,382 per acre (County Ordinance 810.2). Payment of the mitigation fee and compliance with the requirements of Section 6.0 of the MSHCP are intended to provide full mitigation under CEQA, NEPA, CESA, and FESA for impacts to the species and habitats covered by the MSHCP pursuant to agreements with the USFWS, the CDFW, and/or any other appropriate participating regulatory agencies and as set forth in the IA for the MSHCP.



There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

Federal Regulations

Section 404 of the Clean Water Act

In accordance with the Revised Definition of "Waters of the United States"; Conforming (September 8, 2023), "waters of the United Sates" are defined as follows:

(a) Waters of the United States means:

- (1) Waters which are:
 - (i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
 - (ii) The territorial seas; or
 - (iii) Interstate waters;
- (2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under <u>paragraph (a)(5)</u> of this section;
- (3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;
- (4) Wetlands adjacent to the following waters:
 - (i) Waters identified in paragraph (a)(1) of this section; or
 - (ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;
- (5) Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section
- (b) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(2) through (5) of this section:
 - (1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;
 - (2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted



cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;

- (3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;
- (4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;
- (5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
- (6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;
- (7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and
- (8) Swales and erosional features (*e.g.*, gullies, small washes) characterized by low volume, infrequent, or short duration flow.
- (c) In this section, the following definitions apply:
 - (1) *Wetlands* means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.
 - (2) Adjacent means having a continuous surface connection
 - (3) *High tide line* means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.
 - (4) *Ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.



(5) *Tidal waters* means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

Section 401 of the Clean Water Act

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

State Regulations

Fish and Game Code

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

- (1) substantially obstruct or divert the natural flow of a river, stream, or lake;
- (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
- (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.



Porter Cologne Act

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state's authority over isolated and insignificant waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although "waste" is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.

