



Rincon Consultants, Inc.

1980 Orange Tree Lane
Suite 105
Redlands, California 92374

909 253 0705 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

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Project No: 20-09236

Ivan Flores, Assistant Planner
Development Services Department
City of Redlands
35 Cajon Street, Suite 20
Redlands, California 92374
Via email: iflores@cityofredlands.org

Subject: Biological Resources Assessment Memorandum for the Planned Development No. 4 Project, Redlands, California

Mr. Flores,

Rincon Consultants, Inc. (Rincon) is pleased to submit this Biological Resources Assessment Memorandum for the Planned Development No. 4 Project located along Mountain View Avenue in Redlands, California, hereinafter referred to as the "project site." The assessment was completed to document existing site conditions and determine potential impacts to special-status biological resources as required under the California Environmental Quality Act (CEQA).

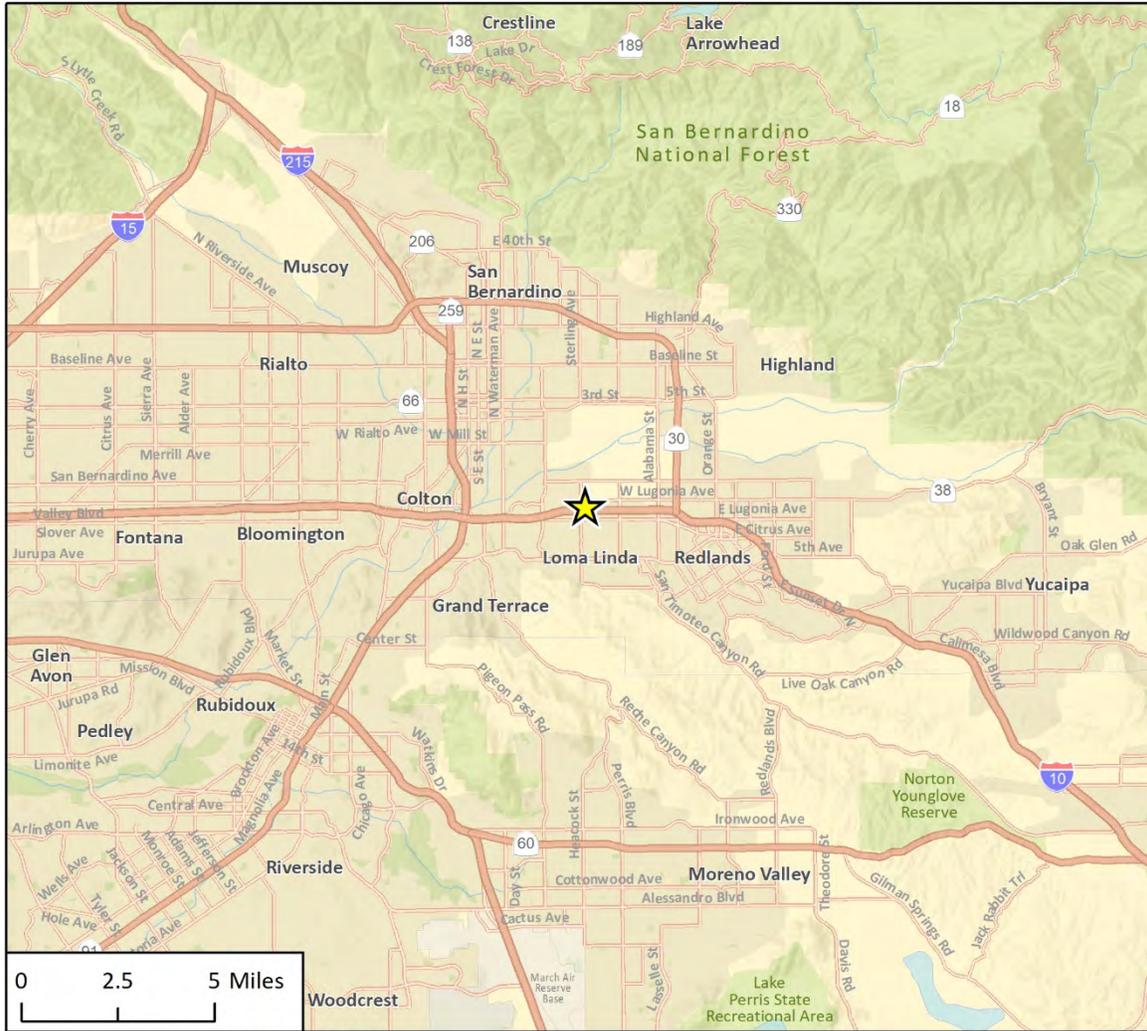
Project Description and Location

The project site is located along the east side of Mountain View Avenue, immediately north of Interstate 10, and southwest of a San Bernardino County flood control channel and railroad right-of-way. The project site is composed of 22.51 acres on three parcels, Assessor Parcel Numbers 0292-032-31-0000, 0292-032-36-0000, and 0292-032-48-0000. Refer to Figures 1 and 2 for regional and project location respectively. The Planned Development (proposed project) entails the following components:

- Construct two industrial buildings of 115,000 and 305,000 square feet, respectively, for a total of 420,000 square feet. Construct associated improvements (e.g. landscaping, parking lot, etc.). In total, 99 percent of the project site would be developed.
- Implement public improvements on adjacent right-of-way (e.g. Mountain View Avenue frontage).

The project site is vacant with a history of agricultural use. Vegetation is dominated by non-native grasses with some weedy shrubs. Surrounding land uses include an adjacent flood control channel, railroad right-of-way, various industrial and commercial uses to the northeast and east; commercial (gas station), church, and medical (children's rehabilitation center) across Mountain View Avenue to the west; and Interstate 10 to the south.

Figure 1 Regional Location



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Project Location

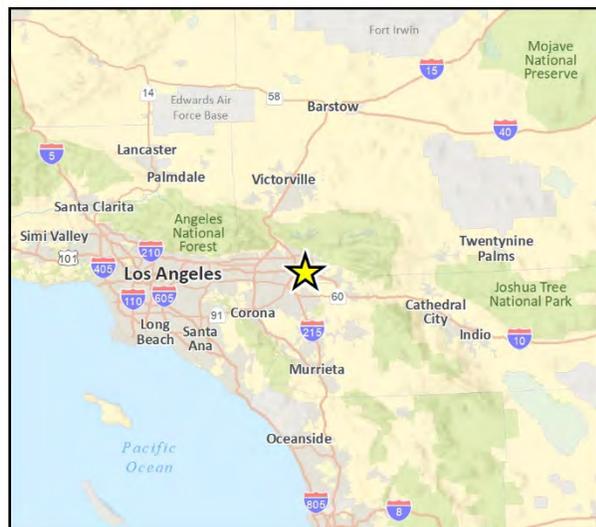


Fig. 2 Regional Location

Figure 2 Project Location





Methodology

Regulatory Overview

Regulated or special-status resources studied and analyzed herein include special-status plant and wildlife species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees. For the purpose of this report, potential impacts to biological resources were analyzed based on the following statutes:

Federal

- Federal Endangered Species Act (ESA)
- Federal Clean Water Act (CWA)
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act

State

- California Environmental Quality Act (CEQA)
- California Endangered Species Act (CESA)
- California Fish and Game Code (CFGC)
- Porter-Cologne Water Quality Control Act

Local

- City of Redlands Municipal Code

Literature Review

Prior to conducting the biological field survey, Rincon reviewed the project plans (provided by the client), aerial photographs and previous historical land use of the project site. Queries of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) (2020) and the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants (2020) were conducted to obtain comprehensive information regarding state and federally listed species as well as other special-status species considered to have potential to occur within a 5-mile radius of the project site. For CNPS query purposes, a 9-quadrangle search area centered on the project site was used, species with elevation ranges exceeding that of the project site were excluded, and plant species with a California Rare Plant Rank (CRPR) of 4 were excluded.

In addition, regionally occurring special-status biological resources and geological information related to the site were researched from the following sources:

- U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal (USFWS 2020a)
- USFWS Information, Planning, and Conservation System (USFWS 2020b)
- USFWS National Wetland Inventory (NWI) Mapper (USFWS 2020c)
- Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2020)



Field Survey

A field reconnaissance survey was conducted by Rincon Senior Biologist Ryan Gilmore on July 10, 2020, to document the existing site conditions and evaluate the potential for presence of sensitive biological resources including special-status plant and wildlife species, sensitive plant communities, potentially jurisdictional waters, wildlife corridors and nursery sites, and locally protected resources. Weather conditions during the survey included temperatures of 68 to 77 degrees Fahrenheit, winds of up to three miles per hour, sunny and clear skies. The biologist surveyed the entire project site and a 50-foot buffer (i.e., survey area) on foot where accessible.

The habitat requirements for each regionally occurring special-status species were assessed and compared to the type and quality of the habitats observed within the project site during the site visit. The survey was conducted to make an initial determination regarding the presence or absence of terrestrial biological resources including plants, birds, and other wildlife.

Based on the results of the site visit, literature review, and species known to occur regionally, Rincon assessed the potential for the proposed project to impact special-status species within the survey area. The potential presence of special-status species is based on the site visit and literature review and is intended to assess habitat suitability within the survey area only. Definitive surveys to confirm the presence or absence of special-status species were not performed and are not included in this analysis. The findings and opinions conveyed in this report are based exclusively on the methodology described above.

Existing Conditions

Land Cover

The entire survey area is a disturbed and fallow agricultural field covered primarily in non-native grasses. Disturbed habitats have been physically disturbed (by previous legal human activity) and are no longer recognizable as a native or naturalized vegetation association but continue to retain a soil substrate. Typically, vegetation of disturbed/agricultural areas is nearly exclusively composed of non-native ruderal plant species that take advantage of disturbance and which removes any capability of providing viable natural habitat (Oberbauer et al. 2008). Plant species observed include wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), horseweed (*Erigeron canadensis*), prickly lettuce (*Lactuca serriola*), Russian thistle (*Salsola tragus*), Johnson grass (*Sorghum halepense*), and cocklebur (*Xanthium strumarium*). Additionally, two non-native tree species were observed on the project site: ash (*Fraxinus* sp.) and eastern black walnut (*Juglans nigra*). While it is in the same genus as southern California black walnut (*Juglans californica*), which is native to California, eastern black walnut is a cultivar originating from the eastern United States and is not native to California. Eucalyptus (*Eucalyptus* sp.) trees are also present south of the project site, between it and Interstate 10. These tree species are common ornamental trees grown in agricultural environments throughout San Bernardino County. Refer to Attachment A for representative site photographs.

Soils

The project site contains a single soil type: Hanford sandy loam 0 to 2 percent slopes. Hanford soils are well drained soils typically formed on alluvial fans. The majority of the project is undeveloped and has a history of agricultural use. Hanford soils are considered prime farmland when irrigated (NRCS 2020).



General Wildlife

The project site provides little habitat for wildlife species due to its developed and disturbed nature, lack of native vegetation and high levels of surrounding human activity. The ash and walnut trees in the survey area could provide habitat for common nesting birds protected under the CFGC Section 3503 and the MBTA. Species observed on site during the survey included white-throated swift (*Aeronautes saxatalis*), red-tailed hawk (*Buteo jamaicensis*), rock pigeon (*Columba livia*), American crow (*Corvus brachyrhynchos*), American kestrel (*Falco sparverius*), house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), lesser goldfinch (*Spinus psaltria*), European starling (*Sturnus vulgaris*), western kingbird (*Tyrannus verticalis*), and mourning dove (*Zenaida macroura*). Two reptile species were observed: gopher snake (*Pituophis melanoleucus*) and western fence lizard (*Sceloporus occidentalis*). Mammal species observed consisted of pocket gopher (*Thomomys* sp.) and California ground squirrel (*Otospermophilus beecheyi*).

Impact Analysis

Special-Status Species

Special-status species are those plants and wildlife listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the Federal ESA; those considered "Species of Concern" by the USFWS; those listed or candidates for listing as Rare, Threatened, or Endangered by the CDFW under the CESA; wildlife designated as "Fully Protected" by the CFGC; wildlife listed as "Species of Special Concern" (SSC) by the CDFW; and CDFW Special Plants, specifically those with CRPR of 1B, 2, and 3 in the CNPS Inventory of Rare and Endangered Vascular Plants of California.

Furthermore, biological resources are ranked globally (G) and State-wide (S) 1 through 5 (more critical to less critical with those ranked as G or S 1 through 3 being considered as sensitive).

Local, state, and federal agencies regulate special-status species and may require an assessment of their presence or potential presence to be conducted on site prior to the approval of proposed development on a property. This section discusses special-status biological resources observed on the project site and evaluates the potential for the project site to support other special-status biological resources. A list of special-status plant and wildlife species with potential to occur on site was developed based on a review of a 5-mile search of the CNDDDB (2020) and a 9-quad search of the CNPS' online Inventory of Rare and Endangered Vascular Plants of California (2020) and can be found in Attachment B.

Pursuant to Appendix G of the CEQA Guidelines, the proposed project would have a significant effect on biological resources if it would:

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.*

The CNDDDB/CNPS query results include 47 special-status plant species within five miles (9-quad for CNPS) of the project site. Special-status plant species typically have specialized habitat requirements, including plant community types, soils and elevational ranges. Of the 47 species, 25 are not expected to occur based on the project site's location and clear lack of suitable habitat (e.g., mountains, desert, elevational ranges), and are not discussed further in this report. For the 22 remaining species: based on prior and ongoing disturbance at the site from disking, prevalence of non-native species, and isolation



from larger stands of natural habitat, the project site does not contain suitable habitat for special-status plant species and all are classified as having no potential to occur on site (Attachment B). No special-status plant species were observed during the site reconnaissance survey. As a result, special-status plant species are not expected to occur on the site; therefore, impacts to special-status plant species would not occur.

The CNDDDB query results include 34 special-status wildlife species within five miles of the project site. The potential for special-status wildlife species to occur on the site was assessed based on known distribution, habitat requirements, and existing site conditions. No special-status wildlife species were determined to have a moderate or higher potential to occur on site (Attachment B) and similarly none were detected within or immediately surrounding the survey area during the site reconnaissance survey. The lack of potential for special-status wildlife species occurrence is based on low habitat quality of the disturbed agricultural areas of the site, lack of native vegetation, isolation from other suitable habitat due to developed land uses surrounding the site, and the presence of significant highway noise from adjacent Interstate 10.

Two wildlife species were determined to have a low potential to occur on the site: California horned lark (*Eremophila alpestris actia*), CDFW Watch List, and burrowing owl (*Athene cunicularia*; BUOW), CDFW SSC (Attachment B). Low quality or marginal foraging and/or nesting habitat for both species is present on the project site. Fallow grain fields are among the preferred habitats for California horned lark; this species is typically a ground nester and is capable of nesting on bare ground, which is present within the site. BUOW could potentially occur in fallow agriculture fields where burrows and California ground squirrels are present, such as the project site. However, the low habitat quality and the low potential for these species to occur are due to the site's isolation from other suitable habitat, the developed land uses surrounding the site, the high level of existing disturbance, and the presence of significant highway noise from adjacent Interstate 10, which would likely deter individuals from long-term use of the site. No horned larks, BUOW, or sign of either species (e.g., pellets or white wash) were observed during the reconnaissance survey.

The project proposes the removal of vegetation that may provide low quality habitat for California horned lark and BUOW. As such, the project may result in loss of such habitat, as well as potential injury or death to individuals. It should be noted that California horned lark and BUOW are not geographically restricted to the vicinity of the project site and the loss of low quality habitat would not significantly affect the species. Direct impacts (e.g., injury or mortality) or indirect impacts (e.g., noise, dust) to BUOW or California horned lark would be significant. Even though BUOW has a low potential to occur on the project site, implementation of a pre-construction BUOW clearance survey is recommended to ensure avoidance of impacts. Similarly, a pre-construction nesting bird survey is recommended to avoid impacts to California horned lark (discussed below). Given that other, regionally-occurring special-status species are not expected to occur on the project site, and with the implementation of recommended pre-construction surveys, the proposed project would have a less-than-significant effect on any candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

As noted above, trees and vegetation on the project site could provide suitable nesting habitat for common avian species that were observed during the reconnaissance survey, as well as California horned lark. Bird nests and eggs are protected under the CFGC Section 3503 and the MBTA. Common species such as mourning dove and house finch have the potential to nest in shrubs, even in highly disturbed settings. California horned lark is capable of nesting on bare ground. Direct impacts (e.g.,



injury or mortality) to nesting birds or indirect impacts (e.g., noise, dust) that disrupt nesting behavior and reproductive success would be significant. Implementation of recommended pre-construction nesting bird surveys, discussed below, would reduce impacts to nesting birds to a less-than-significant level.

Sensitive Plant Communities

Pursuant to Appendix G of the CEQA Guidelines, the proposed project would have a significant effect on biological resources if it would:

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.*

The entire project site is a disturbed agricultural field that is frequently subject to human activity including disking. No natural habitat areas are present on the project site. Therefore, the project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. No impact would occur.

Jurisdictional Wetlands and Waterways

Pursuant to Appendix G of the CEQA Guidelines, the proposed project would have a significant effect on biological resources if it would:

- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*

The entire project site is a disturbed agricultural field that has frequently been subject to human activity including disking. An earthen bottom flood control channel is located adjacent to the project site and separated from it by a chain-link fence. While a formal jurisdictional delineation was not performed, the channel is classified as riverine by the NWI (USFWS 2020c), and may potentially be under the jurisdiction of various regulatory agencies, including the CDFW, U.S. Army Corps of Engineers, and the Regional Water Quality Control Board, as a federal and state water. The project does not propose any construction or operational activities that would directly impact the channel. Indirect impacts from potential storm water runoff, dust, or spills of hazardous materials during or after construction, would be less than significant as a result of the project's required compliance with a National Pollutant Discharge Elimination System (NPDES) Construction General Permit, and preparation and implementation of a Storm Water Pollution Prevent Plan (SWPPP) and best management practices. As a result, impacts would be less than significant.

Wildlife Movement

Pursuant to Appendix G of the CEQA Guidelines, the proposed project would have a significant effect on biological resources if it would:

- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.*

The project site is located in a developed urban area and surrounded by urbanized uses on all sides including commercial and residential development and heavily travelled paved roadways including



Interstate 10. The entire project site is a disturbed agricultural field that is frequently subject to human activity including disking. The project site contains no natural habitat areas, nor does it provide connection to any natural habitat areas. Potential wildlife movement along the flood control channel located to the north and east of the site could occur; however, project construction and operation activities are not anticipated to affect the flood control channel. Therefore, the project would not interfere with the movement of any native wildlife species. No impact would occur.

Local Policies and Ordinances

Pursuant to Appendix G of the CEQA Guidelines, the proposed project would have a significant effect on biological resources if it would:

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

City of Redlands Municipal Code Ordinance 12.52 protects native trees that exceed 8 inches diameter measured at 4.5 feet above natural grade. The ash and eastern black walnut trees on the project site, and the eucalyptus trees adjacent to the site, are not native to California. Rather, as noted above, these species are commonly planted in agricultural areas throughout San Bernardino County. As a result, they do not meet the City of Redlands Municipal Code criteria to be considered protected trees. Therefore, should project activities remove or otherwise impact the trees, such actions would not conflict with local policies or ordinances protecting biological resources. No impact would occur.

Adopted or Approved Plans

Pursuant to Appendix G of the CEQA Guidelines, the proposed project would have a significant effect on biological resources if it would:

- f) *Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Conservation Community Plan (NCCP), or other approved local, regional, or state habitat conservation plan.*

The project is not located within any HCP, NCCP, or other approved local, regional, or state habitat conservation plan area. Therefore, the project would not conflict with any existing conservation plans. No impact would occur.

Recommended Actions

Burrowing Owl Pre-construction Clearance Survey

A qualified wildlife biologist should conduct a pre-construction survey of proposed impact areas to confirm presence/absence of BUOW individuals no more than 30 days prior to construction. The survey methodology will be consistent with the methods outlined in the CDFW *Staff Report on Burrowing Owl Mitigation* (2012). If no active breeding or wintering owls are identified, no further mitigation is required.

If BUOW is detected onsite, the following mitigation measures are recommended to be implemented in accordance with the CDFW *Staff Report on Burrowing Owl Mitigation* (2012):

- A qualified wildlife biologist should be onsite during initial ground-disturbing activities in potential BUOW habitat.

- No ground-disturbing activities should be permitted within a buffer no less than 200 meters (656 feet) from an active burrow, depending on the level of disturbance, unless otherwise authorized by CDFW. Occupied burrows should not be disturbed during the nesting season (February 1 to August 31), unless a qualified biologist verifies through noninvasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival.
- During the nonbreeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs no closer than 50 meters (165 feet) from the burrow, depending on the level of disturbance, and the if site is not directly affected by the project activity. A smaller buffer may be established in consultation with CDFW. If active winter burrows are found that would be directly affected by ground-disturbing activities, owls can be excluded from winter burrows according to recommendations made in the *Staff Report on Burrowing Owl Mitigation (2012)*.
- Burrowing owls should not be excluded from burrows unless or until a Burrowing Owl Exclusion Plan is developed based on the recommendations made in the CDFW *Staff Report on Burrowing Owl Mitigation (2012)*.
- Compensatory mitigation for lost breeding and/or wintering habitat should be implemented on or off site through implementation of a Mitigation Land Management Plan based on the CDFW *Staff Report on Burrowing Owl Mitigation (CDFW 2012)* guidance.
- Mitigation lands should be on, adjacent or proximate to the impact site where possible and where habitat is sufficient to support BUOW present.

Pre-construction Nesting Bird Surveys

Migratory or other common nesting birds, while not designated as special-status species, are protected by the CFGC and MBTA and may nest in ornamental trees and shrubs on site. Construction of the project thus has the potential to directly (by destroying a nest) or indirectly (construction noise, dust, and other human disturbances that may cause a nest to fail) impact nesting birds protected under the CFGC and MBTA. The following measure is recommended to maintain compliance with the CFGC Section 3503 and the MBTA with respect to nesting birds:

- If vegetation trimming or removal activities take place during the bird nesting season (generally February 1 through August 31, but variable based on seasonal and annual climatic conditions), nesting bird surveys are recommended to be performed by a qualified biologist within seven days prior to such activities to determine the presence/absence, location, and status of any active nests on site or within 100 feet of the site.
- If nesting birds are found on site, a construction buffer of appropriate size (as determined by the qualified biologist) should be implemented around the active nests and demarcated with fencing or flagging. Nests should be monitored at a minimum of once per week by the qualified biologist until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance should occur within this buffer until the qualified biologist confirms that the breeding/nesting is complete, and all the young have fledged. If project activities must occur within the buffer, they should be conducted at the discretion of the qualified biologist.
- If no nesting birds are observed during pre-construction surveys, no further actions would be necessary.



Thank you for the opportunity to support this important project. Please contact the undersigned if you have any questions.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in blue ink that reads "Brenna Vredevelde".

Brenna Vredevelde
Senior Biologist/Project Manager

A handwritten signature in black ink that reads "Steven J. Hongola".

Steven J. Hongola
Principal Biologist

Attachments

Attachment A Site Photographs

Attachment B CNDDDB/CNPS Query Results and Special-Status Species Occurrence Potentials



References

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Attachment A

Site Photographs



Photograph 1. Overview of site from northwest corner, facing south.



Photograph 2. Overview of site from northwest corner, facing southeast.



Photograph 3. Overview of site from northwest corner, facing east.



Photograph 4. Overview of non-regulated, non-native black walnut, facing southeast.



Photograph 5. Overview of site and channel from southeast corner, facing northwest.



Photograph 6. Overview of site from southeast corner, facing west.



Photograph 7. Overview of site from southeast corner, facing northwest.



Photograph 8. Overview of site from center of the site, facing south. Note eucalyptus trees outside of the project site.



Photograph 9. Overview of non-regulated, non-native ash tree, facing east.



Photograph 10. Overview of site from southwest corner, facing south.



Photograph 11. Overview of site from southwest corner, facing north.



Photograph 12. Overview of grasses and datura jimson weeds.

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Attachment B

CNDDDB/CNPS Query Results and Special-Status Species Occurrence Potentials

CNDDDB/CNPS Query Results and Special-Status Species Occurrence Potentials

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Plants and Lichens				
<i>Arenaria paludicola</i> marsh sandwort	FE/SE G1/S1 1B.1	Marshes and swamps. Growing up through dense mats of <i>Typha</i> , <i>Juncus</i> , <i>Scirpus</i> , etc. in freshwater marsh. Sandy soil. 3-170 m. Perennial herb. Blooms May-Aug.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No marshes or swamp habitat present.
<i>Astragalus hornii</i> var. <i>hornii</i> Horn's milk-vetch	None/None GUT1/S1 1B.1	Salty flats and lake shores. 60-300 m. Annual/perennial herb. Blooms May-Sep	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No salty flats and lake shores present.
<i>Berberis nevini</i> Nevin's barberry	None/None G3/S1S2 1B.2	Chaparral, foothill woodland, and coastal sage scrub associated with riparian habitat. <650 m. Perennial shrub. Blooms Mar-May	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No chaparral, foothill woodland, and coastal sage scrub habitat present.
<i>Carex comosa</i> bristly sedge	None/None G5/S2 2B.1	Freshwater wetlands and lake margins. < 400 m. Perennial grasslike herb (rhizomatous). Blooms Jul- Sep	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No freshwater wetland or lake margin habitat present.
<i>Centromadia pungens</i> ssp. <i>laevis</i> smooth tarplant	None/None G3G4T2/S2 1B.1	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland. Alkali meadow, alkali scrub; also in disturbed places. 5- 1170 m. Annual herb. Blooms Apr-Sep	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No chenopod scrub, meadows and seeps, playas, riparian woodland or alkali soils present.
<i>Chloropyron</i> <i>maritimum</i> ssp. <i>maritimum</i> salt marsh bird's-beak	FE/SE G4?T1/S1 1B.2	Marshes and swamps, coastal dunes. Limited to the higher zones of salt marsh habitat. 0-10 m. Annual herb. Blooms Mar- Oct.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No marshes, swamps, coastal dunes habitat present.
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	None/None G3T2/S2 1B.1	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m. Annual herb. Blooms Apr- Jun	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No coastal scrub, chaparral, cismontane woodland, valley and foothill grassland habitat present.

City of Redlands
Planned Development No. 4 Project

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian dodder	None/None G5T4?/SH 2B.2	Chaparral (openings), Cismontane woodland, Marshes and swamps. – <500 m. Annual herb or vine (parasitic). Blooms Jul- Oct	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No marshes or swamps habitat present.
<i>Dodecahema</i> <i>leptoceras</i> slender-horned spineflower	FE/SE G1/S1 1B.1	Chaparral and coastal scrub. Alluvial fans. 200 - 700 m. Annual herb. Blooms May-Jun	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No chaparral and coastal scrub habitat present.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River woollystar Orcutt's pincushion	FE/SE G4T1/S1 1B.1	Chaparral, Coastal scrub (alluvial fan). sandy or gravelly. 91 - 610 m. Perennial herb. Blooms Apr-Sep	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No chaparral and coastal scrub habitat present.
<i>Galium californicum</i> ssp. <i>primum</i> Alvin Meadow bedstraw	None/None G5T2/S2 1B.2	Chaparral and yellow pine forest. 1350-1700 m. Perennial herb. Blooms Mar-Jul	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No chaparral or yellow pine forest habitat present. Project site located outside of known elevation range for the species.
<i>Helianthus nuttallii</i> ssp. <i>parishii</i> Los Angeles sunflower	None/None G5TH/SH 1A	Marshes and swamps (coastal salt and freshwater). 35-1525 m. Perennial rhizomatous herb. Blooms Aug-Oct	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No marshes or swamps habitat present.
<i>Imperata brevifolia</i> California satintail	None/None G4/S3 2B.1	Chaparral, coastal sage scrub, creosote scrub. Wetland habitats. <500 m. Perennial grass. Blooms Sep-May	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No chaparral, coastal sage scrub, creosote scrub habitat present.
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper- grass	None/None G5T3/S3 4.3	Chaparral and coastal scrub. Dry soils, shrubland. 4-1435 m. Annual herb. Blooms Jan-Jul	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No chaparral or coastal scrub habitat present.
<i>Lycium parishii</i> Parish's desert-thorn	None/None G4/S1 2B.3	Creosote scrub and coastal sage scrub. <1000 m. Perennial shrub. Blooms Mar-Apr	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No creosote scrub or coastal scrub habitat present.
<i>Malacothamnus</i> <i>parishii</i> Parish's bush-mallow	None/None GXQ/SX 1A	Chaparral and coastal scrub. 300-400 m. Perennial deciduous shrub. Blooms Jun-Jul	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No chaparral or coastal scrub habitat present.
<i>Nasturtium gambelii</i> Gambel's water cress	FE/ST G1/S1 1B.1	Marshes and swamps (freshwater or brackish). 5 - 330 m. Perennial rhizomatous herb. Blooms Apr-Oct	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No marshes or swamp habitat present.

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Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
<i>Ribes divaricatum</i> var. <i>parishii</i> Parish's gooseberry	None/None G5TX/SX 1A	Coastal scrub, moist woodland, and wetland riparian. Mesic. 60 - 301 m. Perennial shrub. Blooms Mar-Apr	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No coast scrub, moist woodland, or wetland habitat present.
<i>Senecio aphanactis</i> chaparral ragwort	None/None G3/S3 4.3	Chaparral, coastal bluff scrub. Rocky slopes. 400-1500 m. Perennial herb. Blooms May-Jul	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No chaparral, coastal bluff scrub, or rocky slope habitat present.
<i>Sidalcea neomexicana</i> salt spring checkerbloom	None/None G4/S2 2B.2	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Alkali springs and marshes. 3-2380 m. Perennial herb. Blooms Mar-Jun	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No alkali springs or marshes present.
<i>Sphenopholis obtusata</i> prairie wedge grass	None/None G5/S2 2B.2	Cismontane woodland, meadows and seeps. Open moist sites, along rivers and springs, alkaline desert seeps. 15-2625 m. Perennial herb. Blooms Apr-Jul	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No cismontane woodland or seeps present.
<i>Symphotrichum defoliatum</i> San Bernardino aster	None/None G2/S2 1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland. Vernal mesic grassland or near ditches, streams and springs; disturbed areas. 2-2040 m. Perennial rhizomatous herb. Blooms Jul-Nov	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No cismontane woodland, coastal scrub, marshes, or swamps present.
Invertebrates				
<i>Bombus crotchii</i> Crotch bumble bee	None/SCE G3G4/S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No preferred plant food genera for this species present. Single CNDDDB record from 1933 located approximately 1.75 southwest of the project site.

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Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
<i>Carolella busckana</i> Busck's galls moth	None/None G4T2T3/S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No preferred habitat for this species is not present. Single CNDDDB record located approximately 1.75 southwest of the project site
<i>Euphydryas editha quino</i> quino checkerspot butterfly	FE/None G5T1T2/S1S2	Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties. Hills and mesas near the coast. The primary larval host plants are <i>P. erecta</i> , <i>P. patagonica</i> , and <i>Antirrhinum coulterianum</i> .	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No chaparral and coastal sage shrublands habitat present.
<i>Rhaphiomidas terminatus abdominalis</i> Delhi Sands flower-loving fly	FE/None G1T1/S1	Found only in areas of the Delhi Sands formation in southwestern San Bernardino & northwestern Riverside counties. Requires fine, sandy soils, often with wholly or partly consolidated dunes & sparse vegetation. Oviposition req. shade.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No dune habitat with sparse vegetation habitat present.
Fish				
<i>Oncorhynchus mykiss irideus</i> pop. 10 steelhead - southern California DPS	FE/None G5T1Q/S1	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	None	No aquatic habitat present.
Amphibians				
<i>Spea hammondi</i> western spadefoot	None/None G3/S3 SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No vernal pools present.

CNDDDB/CNPS Query Results and Occurrence Potentials

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Reptiles				
<i>Anniella stebbinsi</i> southern California legless lizard	None/None G3/S3 SSC	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No high moisture soils present.
<i>Arizona elegans occidentalis</i> California glossy snake	None/None G5T2/S2 SSC	Grassland, some sage scrub.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No sage scrub habitat present. Grasslands present heavily disturbed and recently disked.
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	None/None G5/S2S3 WL	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No sandy areas, brush, or rocky habitat present.
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	None/None G5T5/S3 CDFW_SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Ground may be firm soil, sandy, or rocky.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No woodland or riparian habitat present.
<i>Charina umbratica</i> southern rubber boa	None/ST G2G3/S2S3	Manzanita with lots of dead pine and rock outcrops.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No manzanita, dead pine, or rock outcrop habitat present.
<i>Crotalus ruber</i> red-diamond rattlesnake	None/None G4/S3 SSC	Chaparral, woodland, grassland, & desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No rocky areas and dense vegetation habitat present.

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Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
<i>Phrynosoma blainvillii</i> coast horned lizard	None/None G3G4/S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No brushy scattered habitat present.
Birds				
<i>Agelaius tricolor</i> tricolored blackbird	None/ST G2G3/S1S2 SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No riparian habitat present.
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	None/None G5T3/S3 WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No rocky hillsides with grass and forb patches habitat present.
<i>Athene cunicularia</i> burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Low	Project site is a disturbed agricultural field and surrounded by existing development on all sides. While California ground squirrel burrows were observed during the reconnaissance survey, no evidence of burrowing owl detected. Two CNDDDB records from 1983 and 2006 located approximately 2.6 miles north of the project site.
<i>Buteo swainsoni</i> Swainson's hawk	None/ST G5/S3	Requires large areas of plains, dry grasslands for foraging.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No large areas of plains, dry grasslands for foraging within the project site.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FT/SE G5T2T3/S1	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No suitable riparian habitat present within the project site. Single CNDDDB record from 1930 located approximately 2.2 northwest of the project site

CNDDDB/CNPS Query Results and Occurrence Potentials

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
<i>Eremophila alpestris actia</i> California horned lark	None/None G5T4Q/S4 WL	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Low	Project site is a disturbed agricultural field and surrounded by existing development on all sides. Fallow grain field habitat present within the project site. Single CNDDDB record from 2001 located 0.9 miles north of the project site.
<i>Falco columbarius</i> merlin	None/None G5/S3S4 WL	Open conifer woodlands, prairie groves, foothills, marshes, and large areas of open country.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No suitable open conifer woodlands, prairie groves, foothills, marshes habitat present within the project site.
<i>Laterallus jamaicensis coturniculus</i> California black rail	None/ST G3G4T1/S1 WL	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No suitable riparian habitat present within the project site.
<i>Polioptila californica californica</i> coastal California gnatcatcher	FT/ None G4G5T2Q/S2 SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No coastal sage scrub habitat present.
<i>Vireo bellii pusillus</i> least Bell's vireo	FE/SE G5T2/S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No riparian habitat present.
Mammals				
<i>Antrozous pallidus</i> pallid bat	None/None G5/S3 SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	None	Project site is developed/disturbed and surrounded by existing development on all sides. No suitable open, dry habitats with rocky areas for roosting present within the project site.

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Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
<i>Chaetodipus fallax</i> fallax Northwestern San Diego pocket mouse	None/None G5T3T4/S3S4 SSC	Sage scrub/non-native annual grassland dominated by California buckwheat, <i>Avena barbata</i> , <i>Bromus madritensis</i> , <i>Ruber</i> , and others.	None	Project site is developed/disturbed and surrounded by existing development on all sides. No suitable sage scrub/non-native annual grassland habitat present within the project site.
<i>Dipodomys merriami</i> <i>parvus</i> San Bernardino kangaroo rat	FE/None G5T1/S1 SSC	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains. Needs early to intermediate seral stages.	None	Project site is developed/disturbed and surrounded by existing development on all sides. No suitable alluvial scrub vegetation habitat present within the project site.
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	FE/ST G3/S2	Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover. Prefers buckwheat, chamise, and filaree. Will burrow into firm soil.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No preferred food sources buckwheat, chamise, and filaree not present. Closest CNDDB records are located approximately 3 to 4 miles south of the project in the hill country south of the City of Redlands.
<i>Eumops perotis</i> <i>californicus</i> western mastiff bat	None/None G5T4/S3S4 SSC	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, large trees and tunnels.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No cliffs, large trees, or tunnels for roosting present. Large eucalyptus outside the project to the south adjacent the Interstate-10 located in a high noise zone.
<i>Lasiurus xanthinus</i> western yellow bat	None/None G5/S3 SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No large trees or palms for roosting present. Large eucalyptus outside the project to the south adjacent the Interstate-10 located in a high noise zone. No open water sources useful for foraging present.
<i>Neotoma lepida</i> <i>intermedia</i> San Diego desert woodrat	None/None G5T3T4/S3S4 SSC	Riversidean desert scrub, chamise chaparral, red shank chaparral, non- native grassland, riversidean alluvial fan sage scrub, freshwater seep and southern willow scrub.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No scrub habitat present. No sources for the creation of woodrat middens present.
<i>Nyctinomops</i> <i>femorosaccus</i> pocketed free-tailed bat	None/None G4/S3 SSC	Found in arid lowland valleys. Roosts in caves, tunnels, mines, and other man-made structures.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No caves, tunnels, mines, and other man-made structures.

CNDDB/CNPS Query Results and Occurrence Potentials

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
<i>Onychomys torridus ramona</i> southern grasshopper mouse	None/None G5T3/S3 SSC	Chamise chaparral, non-native grassland.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. Single CNDDB record from 1923 located approximately 3.6 miles southwest of the project site.
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	None/None G5T1T2/S1S2 SSC	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin. Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead. Open sandy wash with alluvial fan sage scrub, surrounded by agricultural and fallow fields.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. Two CNDDB records from 1916 and 2006. Closest record from 2006 located approximately 2.4 northwest of the project site. No alluvial fan sage scrub or coast sage scrub habitat present.
<i>Taxidea taxus</i> American badger	None/None G5/S3 SSC	Treeless habitats with sandy soil suitable for burrowing. Active at night. Prefer to live in dry, open grasslands fields, and pastures.	None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. Two CNDDB records present within 5 miles of the site. One record is undated. The second record is from 1908. No burrows for large mammals observed.
Sensitive Natural Communities				
Southern Riparian Scrub	None/None G3/S3.2		None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No natural habitat present.
Southern Sycamore Alder Riparian Woodland	None/None G4/S4		None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No natural habitat present.
Riversidian Alluvial Fan Sage Scrub	None/None G1/S1.1		None	Project site is a disturbed agricultural field and surrounded by existing development on all sides. No natural habitat present.

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Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Status: Federal/State				
FE = Federal Endangered				CRPR (CNPS California Rare Plant Rank):
FT = Federal Threatened				1A = Presumed Extinct in California
PFT = Proposed Federal Threatened				1B = Rare, Threatened, or Endangered in California and elsewhere
FDL = Federal Delisted				2 = Rare, Threatened, or Endangered in California, but more common elsewhere
SE = State Endangered				3 = Need more information (a Review List)
SCE = State Candidate Endangered				4 = Plants of Limited Distribution (a Watch List)
ST = State Threatened				CRPR Threat Code Extension:
SR = State Rare				.1 = Seriously endangered in California (>80% of occurrences threatened / high degree and immediacy of threat)
SDL = State Delisted				.2 = Fairly endangered in California (20-80% of occurrences threatened)
SSC = CDFW Species of Special Concern				.3 = Not very endangered in California (<20% of occurrences threatened)
FP = CDFW Fully Protected				
WL = CDFW Watch List				
Other Statuses:				
G1 or S1	Critically Imperiled Globally or Subnationally (state)			
G2 or S2	Imperiled Globally or Subnationally (state)			
G3 or S3	Vulnerable to extirpation or extinction Globally or Subnationally (state)			
G4/5 or S4/5	Apparently secure, common and abundant			
GH or SH	Possibly Extirpated – missing; known from only historical occurrences but still some hope of rediscovery			
Additional notations may be provided as follows:				
T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)				
Q – Questionable taxonomy that may reduce conservation priority				
? – Inexact numeric rank				