

Appendix C-2 - Burrowing Owl Focused Survey Report

NEW TEMPLE PROJECT

RIVERSIDE COUNTY, CALIFORNIA
Assessor Parcel Number 266-320-025

Burrowing Owl Focused Survey Report

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August 2020

NEW TEMPLE PROJECT

RIVERSIDE COUNTY, CALIFORNIA

Burrowing Owl Focused Survey Report

The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.



Travis J. McGill
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August 2020

Table of Contents

Section 1	Introduction.....	1
1.1	Project Location.....	1
1.2	Project Description.....	1
Section 2	Species Background.....	5
2.1	Species Background.....	5
2.2	Regulatory Framework.....	5
2.2.1	MSHCP Section 6.3.2 Additional Survey Needs and Procedures – Burrowing Owl ...	6
Section 3	Methodology.....	7
Section 4	Results.....	10
4.1	Existing Conditions.....	10
4.2	Burrowing Owl Focused Survey.....	Error! Bookmark not defined.
Section 5	Conclusion and Recommendations.....	14
Section 6	References.....	15

EXHIBITS

Exhibit 1:	Regional Vicinity.....	2
Exhibit 2:	Site Vicinity.....	3
Exhibit 3:	Project Site.....	4
Exhibit 4:	Survey Area and Suitable Habitat.....	9
Exhibit 5:	Vegetation.....	11
Exhibit 6:	CNDDB BUOW Observations.....	13

APPENDIX

Appendix A	Site Photographs
Appendix B	Fauna Compendium

Section 1 Introduction

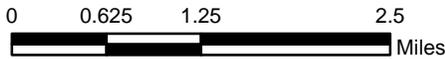
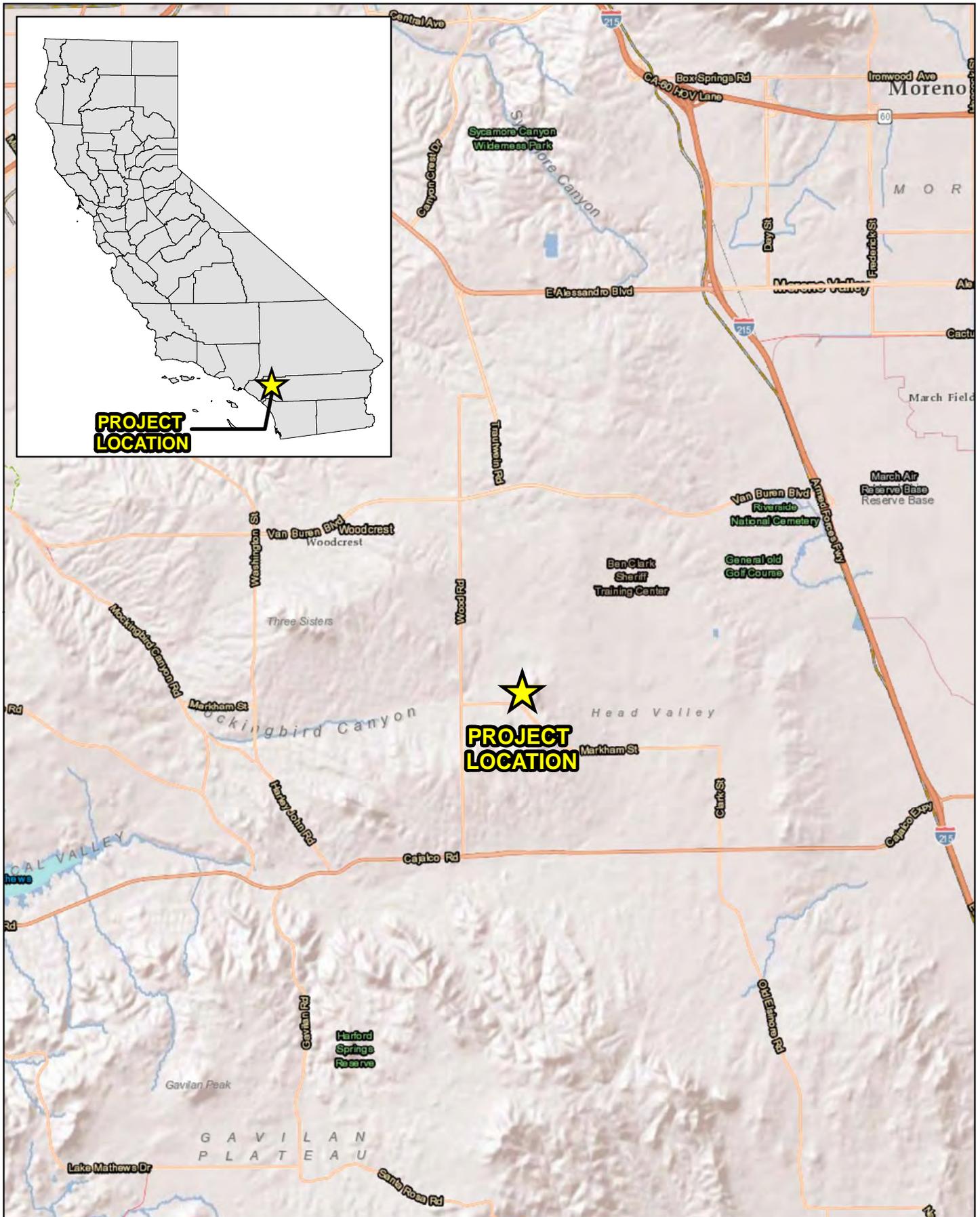
ELMT Consulting (ELMT) conducted a focused burrowing owl (*Athene cunicularia*) survey for the New Temple Project (project or project site) located within Assessor Parcel Number (APN) 266-320-025, Riverside County, California. Biologist Jacob H. Lloyd Davies surveyed the project site in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (Environmental Programs Department, 2006). Four (4) separate focused burrowing owl surveys were conducted on July 24, July 30, August 5, and August 10, 2020. The surveys were conducted to document the presence/absence of burrowing owl on the project site.

1.1 PROJECT LOCATION

The project site is generally located west of Interstate 215, east of Interstate 15, north of State Route 74, and south of State Route 91 in unincorporated Riverside County, California. The project site is depicted on the Steele Peak quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map within section 32 of Township 3 South, Range 4 West. Specifically, the project site is bordered to the west by Cole Avenue, to the north by Landin Avenue, to south by Markham Street, approximately 0.25 mile west of Barton Street within APN 266-320-025. Refer to Exhibits 1- 3.

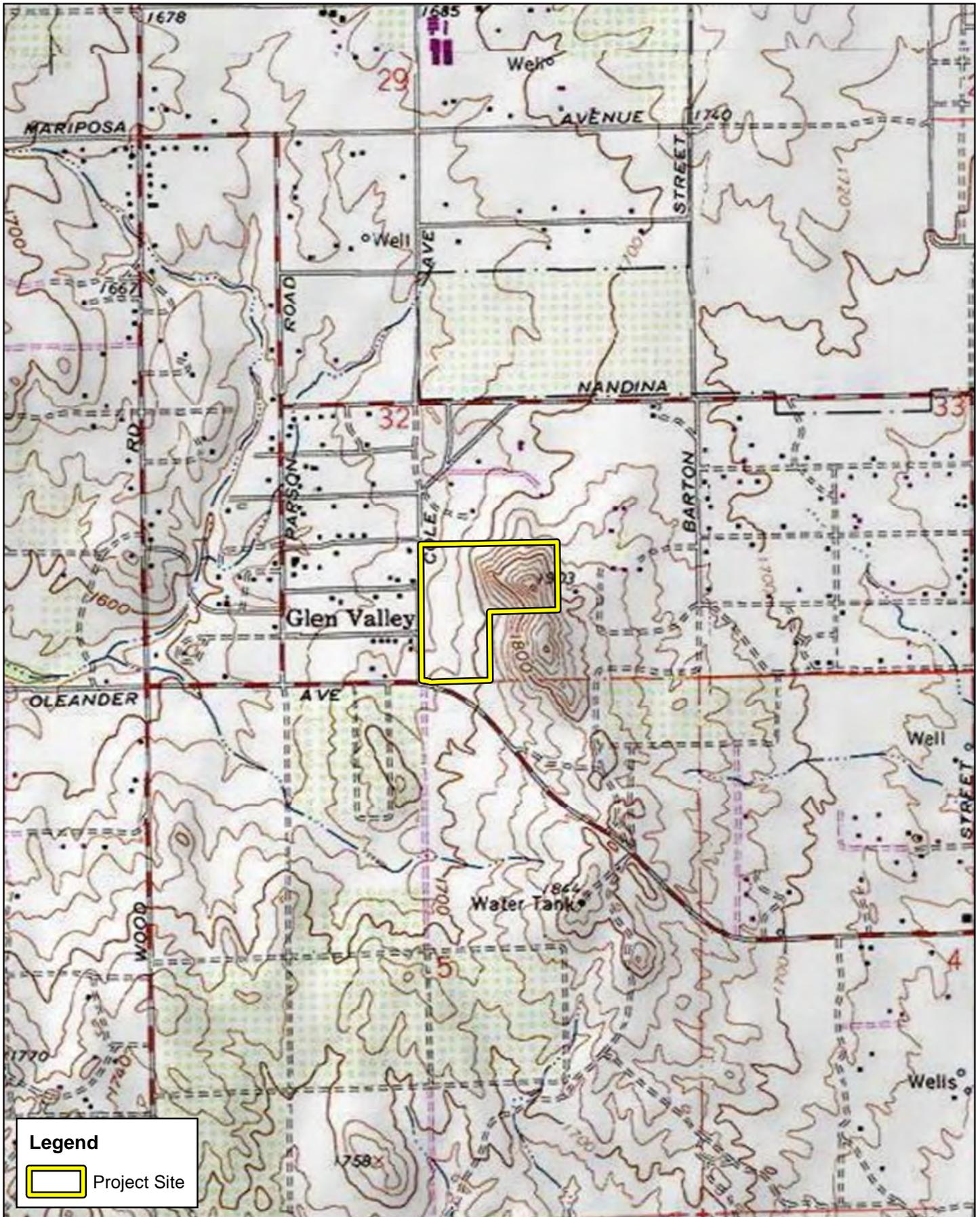
1.2 PROJECT DESCRIPTION

The proposed project consists of the grading for, and construction of, a campus facility on the western portion of the property. Included in the campus facility are worship, meeting, classroom, dormitory, and administrative spaces.



Source: World Transportation, World Shaded Relief, Riverside County

NEW TEMPLE PROJECT
 BURROWING OWL FOCUSED SURVEY REPORT
Regional Vicinity



Legend

Project Site



Source: ESRI World Topo Basemap, Riverside County

NEW TEMPLE PROJECT
BURROWING OWL FOCUSED SURVEY REPORT

Site Vicinity



Legend

 Project Site



0 125 250 500 Feet

Source: ESRI Aerial Imagery, World Transportation, Riverside County

Section 2 Species Background

2.1 SPECIES BACKGROUND

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 well-drained, level to gently-sloping areas characterized by sparse vegetation and bare ground (Haug and Didiuk 1993; Dechant et al. 1999). Burrowing owls are dependent upon the presence of fossorial mammals, such as ground squirrels (*Otospermophilus beecheyi*), whose burrows are used for roosting and nesting (Haug and Didiuk 1993). 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. Burrowing mammals may burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. Large, hard objects at burrow entrances stabilize the entrance from collapse and may inhibit excavation by predators.

Burrowing owls have crepuscular (dawn and dusk) hunting habits but are often observed perched in or near the burrow entrance during the day. They prey upon invertebrates and small vertebrates (Thomsen 1971) through low vegetation which allows for foraging visibility. The nesting season occurs between February 1 and August 31. Burrowing owl in California may migrate southerly, but often remain in the breeding area during the non-breeding period.

The burrowing owl was once abundant and widely distributed within coastal southern California, but it has declined precipitously in counties such as Los Angeles, Orange, San Diego, Riverside, and San Bernardino. A petition was filed to list the California population of the western burrowing owl as an Endangered or Threatened species (Center for Biological Diversity 2003); however, the California Department of Fish and Wildlife (CDFW) declined to list the burrowing owl as either endangered or threatened. The CDFW currently lists the burrowing owl as a California Species of Special Concern.

2.2 REGULATORY FRAMEWORK

The burrowing owl is a resident and migratory bird species protected by international treaty under the Migratory Bird Treaty Act (MBTA) of 1918. The MBTA reflects agreements made between the U.S., England, Mexico, the former Soviet Union, and Japan to protect all of North America's migratory bird populations. The MBTA protects migratory bird nests from possession, sale, purchase, barter, transport, import and export, and collection. The other prohibitions of the MBTA - capture, pursue, hunt, and kill - are inapplicable to nests. The regulatory definition of take, as defined in Title 50 C.F.R. part 10.12, means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to hunt, shoot, wound, kill, trap, capture, or collect. Only the verb "collect" applies to nests. It is illegal to collect, possess, and by any means transfer possession of any migratory bird nest. The MBTA prohibits the destruction of a

nest when it contains birds or eggs, and no possession shall occur during the destruction (United States Fish and Wildlife Service, Migratory Bird Permit Memorandum, April 15, 2003). Certain exceptions to this prohibition are included in 50 C.F.R. section 21. Pursuant to CDFW Code section 3513, the Department enforces the MBTA consistent with rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act.

Additionally, burrowing owl is protected under Sections 3503, 3503.3, 3511, and 3513 of the CDFW Code which prohibit the take, possession, or destruction of birds, their nests or eggs. Implementation of the take provisions requires that project-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (March 1 - August 15, annually). CDFW Code Section 3503.5 protects birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks and owls, including burrowing owls) which makes it unlawful to take, possess, or destroy their nest or eggs.

CDFW's 2012 Staff Report on Burrowing Owl Mitigation offers long-term assurances for conservation of this species in exchange for biologically appropriate levels of incidental take and/or habitat loss as defined in the approved plan. California's NCCP Act (FGC §2800 et seq.) governs such plans at the state level, and was designed to conserve species, natural communities, ecosystems, and ecological processes across a jurisdiction or a collection of jurisdictions. Complementary federal HCPs are governed by the Endangered Species Act (7 U.S.C. § 136, 16 U.S.C. § 1531 et seq.) (ESA). Regional conservation plans (and certain other landscape-level conservation and management plans), may provide conservation for unlisted as well as listed species. Because the geographic scope of NCCPs and HCPs may span many hundreds of thousands of acres, these planning tools have the potential to play a significant role in conservation of burrowing owls, and grasslands and other habitats.

Guidelines for the Implementation of the California Environmental Quality Act (CEQA) provide that a species be considered as endangered or "rare" regardless of appearance on a formal list for the purposes of the CEQA (Guidelines, Section 15380, subsections b and d). CEQA requires a mandatory finding of significance if impacts to threatened or endangered species are likely to occur (Sections 21001(c), 21083. Guidelines 15380, 15064, 15065). Avoidance or mitigation must be presented to reduce impacts to less than significant levels.

2.2.1 MSHCP Section 6.3.2 Additional Survey Needs and Procedures – Burrowing Owl

Under Section 6.3.2 the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) the 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 purpose of Section 6.3.2 of the MSHCP is to provide coverage under the MSHCP for those species for which existing available information was not sufficient, and therefore, survey requirements are incorporated in the MSHCP to provide the level of information necessary for these species to receive coverage (Dudek & Associates, Inc., 2003).

Section 3 Methodology

General weather conditions during each of the surveys were suitable for detections of burrowing owls. The weather during the surveys consisted of cloudy to clear skies with minimal wind, and temperatures ranging from 60-73 degrees Fahrenheit (°F). Surveys are not accepted if they are conducted during rain, high winds (> 20 mph), dense fog, or temperatures over 90°F. The protocol survey for burrowing owl requires a systematic survey of all areas that provide suitable habitat plus a 150-meter (approximately 500 feet) zone of influence (survey area) on all sides of suitable habitat, where applicable (Exhibit 4, *Survey Area and Suitable Habitat*).

Due to surrounding development, a zone of influence was not able to be surveyed by foot to the east, north, west, or southwest of the project site. Residential developments occur to the north and west of the site and do not provide suitable habitat for burrowing owls; therefore, these areas were not surveyed for burrowing owls. The area east and southeast support is partially undeveloped residential parcels, water storage tanks, and other fenced-off private property and was scanned with binoculars for burrowing owls from the boundary of the project site. The area further south and to the southwest was accessible and was surveyed on foot. Refer to Exhibit 4, *Survey Areas and Suitable Habitat*.

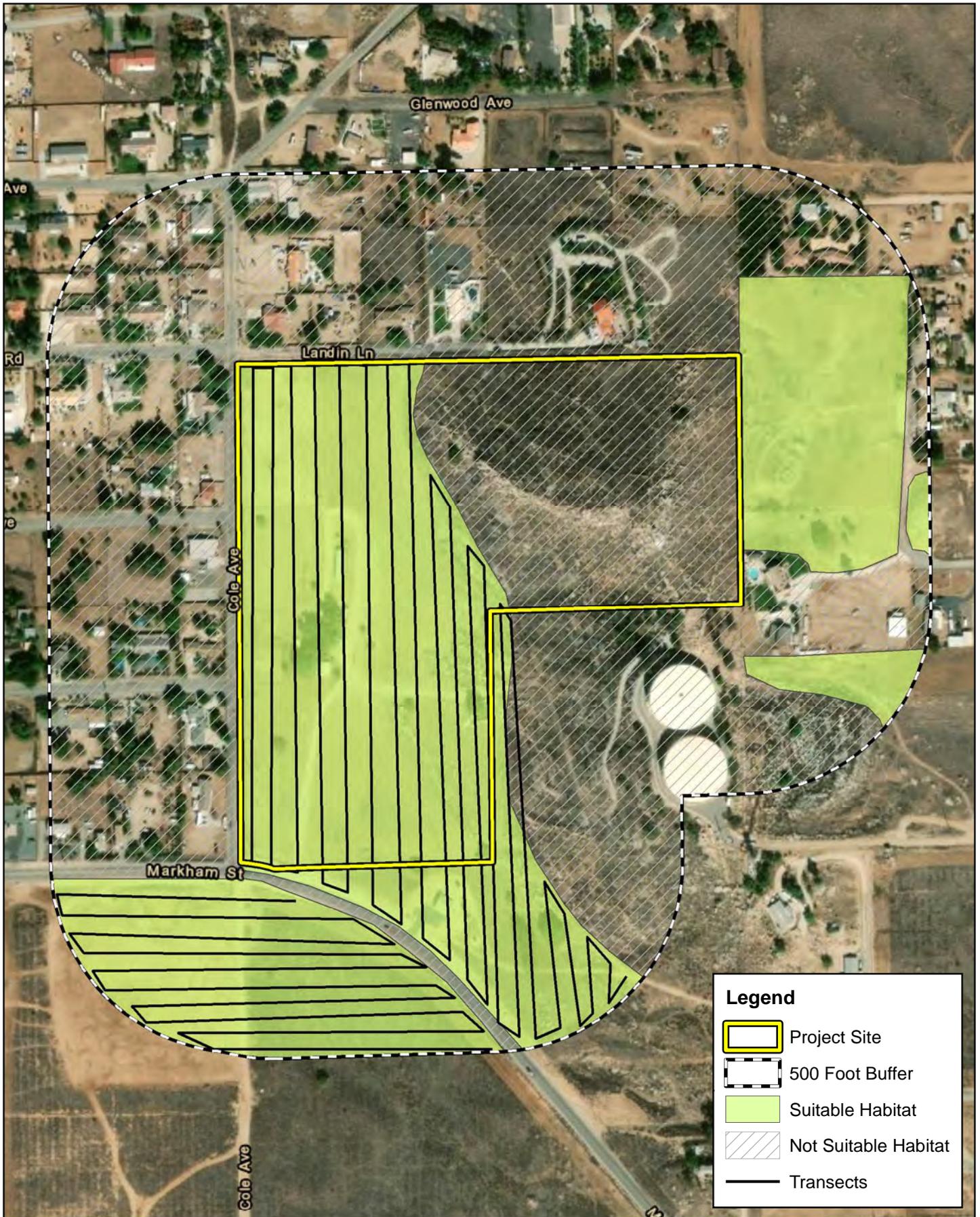
Survey transects on the project site were oriented north to south and were conducted at a maximum of 30-meter (approximately 100 feet) intervals to ensure 100% visual coverage of all areas in suitable habitat on the project site and within the survey area. The focused burrowing owl surveys were conducted during the recognized timeframe (the breeding season is typically March through August) in the morning one hour before sunrise to two hours after sunrise.

Suitable burrows/sites, including rock piles and non-natural substrates, were thoroughly examined for signs of presence. All burrows encountered were examined for shape, scat, pellets, white-wash, feathers, tracks, and prey remains. The location of all suitable burrowing owl habitat, potential owl burrows, burrowing owl sign, and any owls observed were recorded and mapped, with a hand-held GPS unit, if observed. Methods to detect presence of burrowing owls included direct observation, aural detection, and signs of presence. Binoculars were used to observe distant birds and their activity around potential nesting habitat. During the focused surveys, the survey area was assessed on foot by qualified biologist Jacob H. Lloyd Davies who is knowledgeable in the habitats and behavior of burrowing owls.

Four focused burrowing owl surveys were conducted on July 24, July 30, August 5, and August 10, 2020. All surveys were completed between 0600 to 1000 hours. The surveys were conducted to document the presence/absence of burrowing owl on the project site.

Table 1: Survey Data

Survey No.	Survey Date	Surveyor	Time	Temperature (°F)	Cloud Cover	Wind Speed (mph)	Burrowing Owl Detected
1	7/24/20	Jacob Lloyd Davies	0600-0900	60-62	100%	1-3	No
2	7/30/20	Jacob Lloyd Davies	0630-0930	65-70	10%	1-5	No
3	8/5/20	Jacob Lloyd Davies	0700-1000	68-73	0%	1-5	No
4	8/10/20	Jacob Lloyd Davies	0630-0930	62-70	0%	1-5	No



Section 4 Results

4.1 EXISTING CONDITIONS

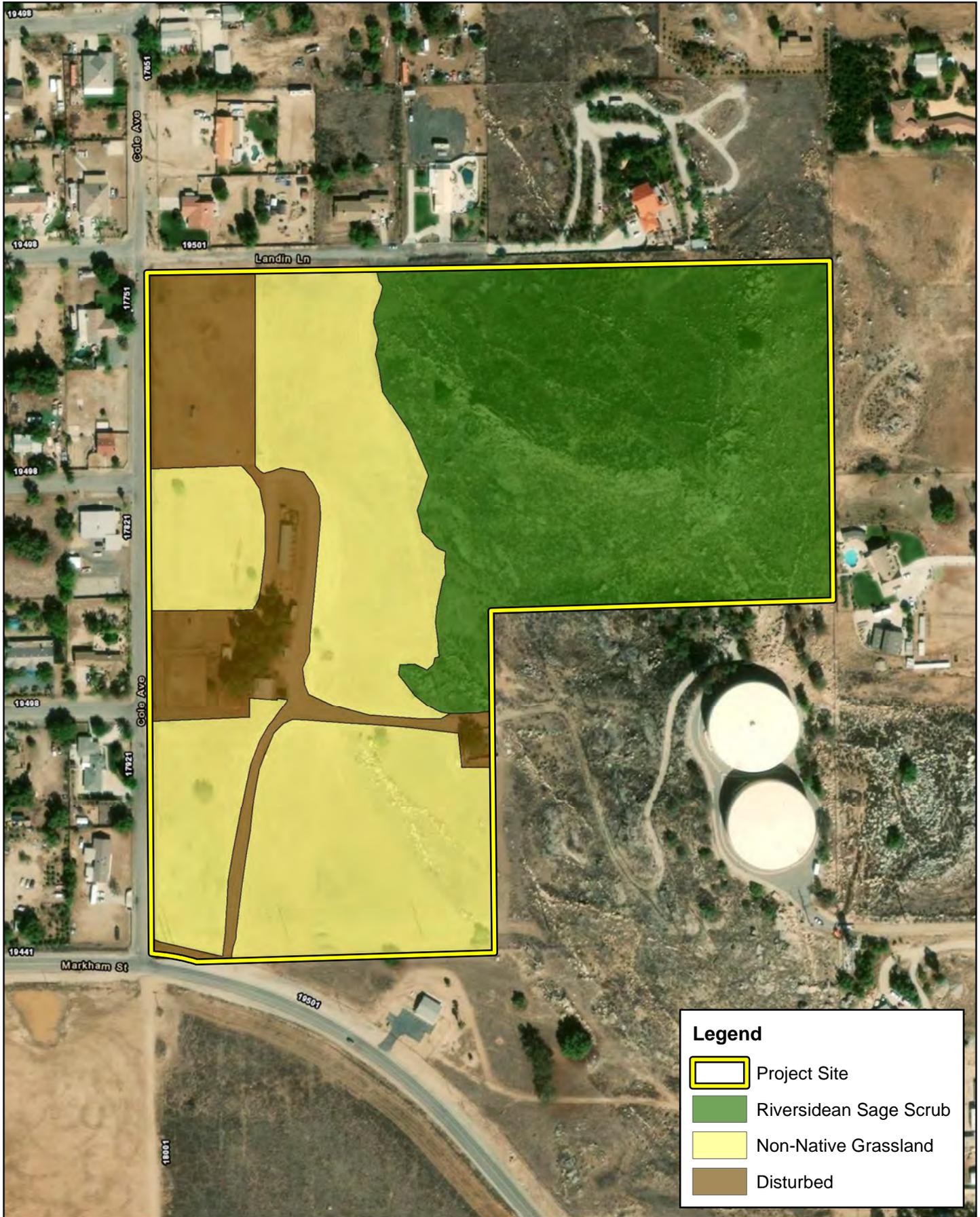
The project site consists of a hill on its eastern half, and a flat, heavily disturbed area on the western half of the project site. Elevation on the project site ranges from approximately 1,660 to 1,913 feet above mean sea level, with steep topography on its eastern half. The highest elevation occurs in the middle of the northeast portion of the site and slopes sharply to the east, north, and south, and gently to the west. The western portion of the site is relatively flat and slopes gently from west to east.

Based on the NRCS USDA Web Soil Survey, the project site is underlain by the following soil units: Cieneba sandy loam (5 to 8 percent slopes); Cieneba rocky sandy loam, eroded (8 to 15 percent slopes); Cieneba rocky sandy loam, eroded (15 to 50 percent slopes); and Vista coarse sandy loam, eroded (8 to 15 percent slopes). Soils in the eastern portion of the site have been mechanically disturbed and heavily compacted from historic land uses (i.e., ranching activities, grading activities, weed abatement activities, and staging activities for surrounding development). Historic aerials show these activities have been ongoing since at least 1978. The site also supports existing structures related to historical ranching activities and temporary structures that were erected by transient persons, which included multiple temporary dwellings and a poultry farm and resulted in abandoned vehicles and illegal dumping.

The site is bordered by residential development to the west and north, residential development and undeveloped, vacant land to the east, water storage tanks and commercial development to the southeast, and undeveloped, vacant land to the south and southwest.

The project site supports two (2) plant communities: non-native grassland (NNG) and Riversidean Sage Scrub (RSS). Refer to Exhibit 5, *Vegetation*. In addition, the site also supports one (1) land type that would be classified as disturbed. Refer to Appendix B, *Site Photographs*, for representative site photographs. The development planned for the project is limited to the flat area on the western half of the project site, which supports exclusively non-native grassland and disturbed areas. Therefore, no native plant communities are expected to be impacted from implementation of the proposed project.

The NNG community on-site is composed primarily of non-native grasses and weedy/early successional species. Plant species observed in the disturbed NNG plant community include red-stemmed filaree (*Erodium cicutarium*), short-podded mustard (*Hirschfeldia incana*), fiddleneck (*Amsinckia menziesii*), mouse barley (*Hordeum murinum*), London rocket (*Sisymbrium irio*), elderberry (*Sambucus nigra*), coyote melon (*Cucurbita californica*), sunflower (*Helianthus annuum*), telegraph weed (*Heterotheca grandiflora*), doveweed (*Croton setiger*), combseed (*Pectocarya linearis*), Russian thistle (*Salsola tragus*), needle goldfields (*Lasthenia gracilis*), brass button (*Cotula coronopifolia*), ripgut (*Bromus diandrus*), cheeseweed (*Malva parviflora*), paniculate tarplant (*Deinandra paniculata*), Peruvian pepper (*Schinus molle*), Brazilian pepper (*Schinus terebinthifolius*), wild oat (*Avena fatua*), wild rye (*Elymus* sp.), and china berry (*Melia azedarach*).



Legend

-  Project Site
-  Riversidean Sage Scrub
-  Non-Native Grassland
-  Disturbed

The RSS community on the hillside on the northeast portion of the site is dominated by California sagebrush (*Artemisia californica*) and brittlebush (*Encelia farinosa*). Other plant species observed in this plant community include white sage (*Salvia apiana*), Jimsonweed (*Datura wrightii*), California aster (*Corethrogyne filaginifolia*), scarlet larkspur (*Delphinium cardinale*), laurel sumac (*Malosma laurina*), fragrant sumac (*Rhus aromatica*), wild oat, deerweed, doveweed, Mediterranean mustard, California figwort (*Scrophularia californica*), Nuttall's snapdragon (*Antirrhinum nuttallianum*), Peruvian pepper and Brazilian pepper.

The disturbed areas on-site are nearly devoid of vegetation with the exception of ornamental plant species and non-native/invasive species that are adapted to a high degree of disturbance. Plant species observed in the disturbed areas of the site include Peruvian pepper, Brazilian pepper, ripgut, and short-podded mustard.

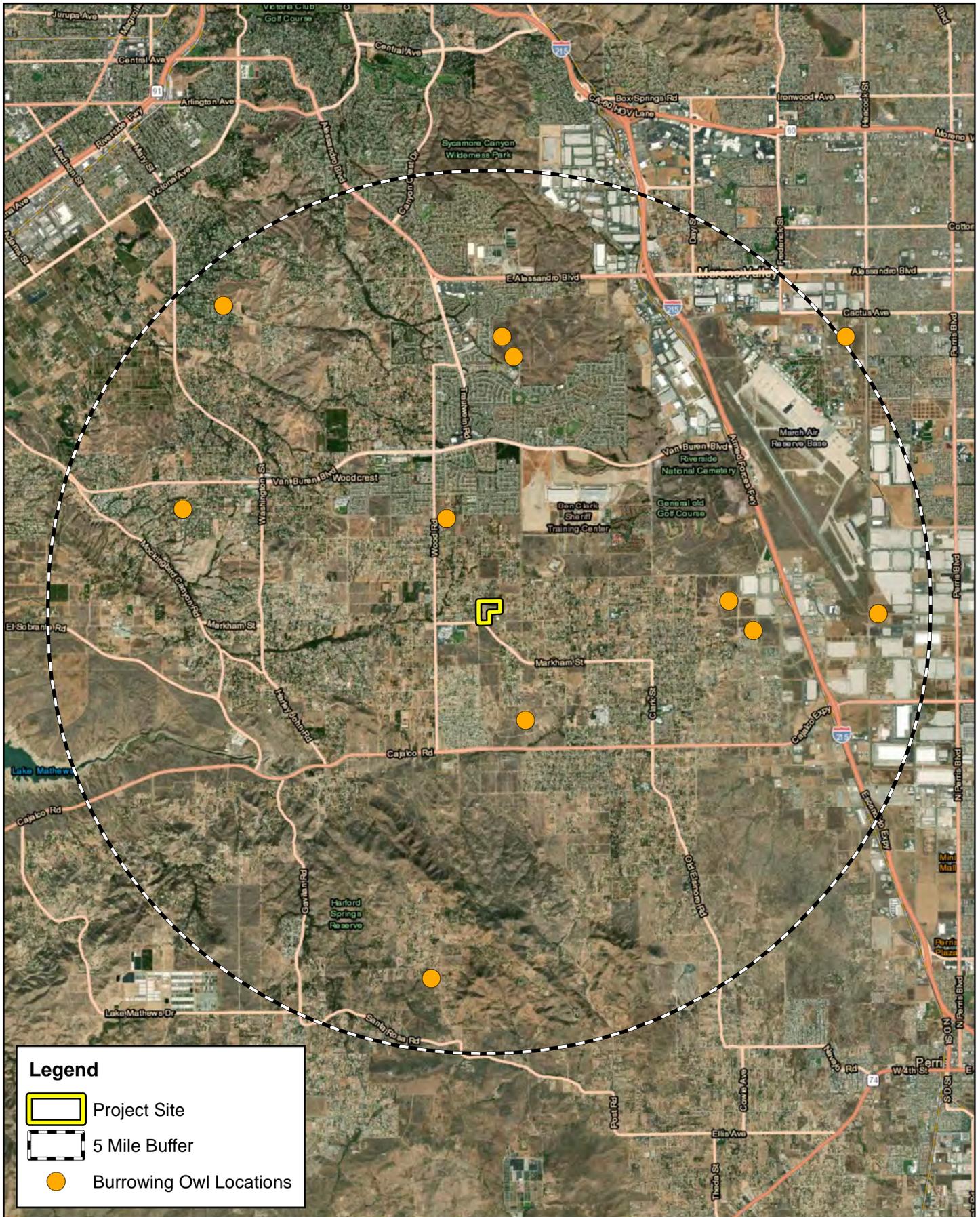
It should be noted that a fire occurred on-site between March and July 2020. Evidence of the fire, including burned trees, burned vehicles, debris, and ash was prevalent throughout the disturbed areas of the site and portions of the non-native grassland within the southern half of the site. Fire damage extended outside of the site to the adjacent hillside to the southeast. Residual fire retardant was observed on the northeast portion of the site.

Based on a review of CDFW's California Natural Diversity Database (CNDDDB) approximately 10 burrowing owl observations have been recorded within 5 miles of the project site. The nearest occurrence was approximately 1 mile southwest of the project site. Refer to Exhibit 6, *CNDDDB BUOW Observations*.

4.2 BURROWING OWL FOCUSED SURVEY

The western half of the project site is unvegetated and/or vegetated with a variety of low-growing plant species that allow for line-of-sight observation favored by burrowing owls. The project site also supports several suitable burrows (>4 inches in diameter) capable of providing roosting and nesting opportunities. However, the site includes an abundance of tall trees and is bordered to the west by tall electrical poles that provide perching opportunities for large raptors (i.e., red-tailed hawk) that can prey on burrowing owls. Despite a systematic search of the project site, no burrowing owls or sign (pellets, feathers, castings, or whitewash) were observed on or within 500 feet, where accessible, of the project site during the focused surveys.

Bird species detected during the field survey included mourning dove (*Zenaida macroura*), house finch (*Haemorhous mexicanus*), American crow (*Corvus brachyrhynchos*), Eurasian collared dove (*Streptopelia decaocto*), Say's phoebe (*Sayornis saya*), black phoebe (*Sayornis nigricans*), California quail (*Callipepla californica*), greater roadrunner (*Geococcyx californianus*), California towhee (*Melospiza crissalis*), lesser goldfinch (*Spinus psaltria*), Cassin's kingbird (*Tyrannus vociferans*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), northern mockingbird (*Mimus polyglottos*), and rock wren (*Salpinctes obsoletus*).



Legend

- Project Site
- 5 Mile Buffer
- Burrowing Owl Locations



Source: ESRI Aerial Imagery, CDFW CNDDDB, Riverside County

NEW TEMPLE PROJECT
BURROWING OWL FOCUSED SURVEY REPORT

Burrowing Owl CNDDDB Observations

Section 5 Conclusion and Recommendations

Based on the results of the 2020 burrowing owl focused surveys, no burrowing owls or evidence of recent or historic use by burrowing owls were observed on the project site. As a result, burrowing owls are presumed absent from the project site. Out of an abundance of caution, and to ensure burrowing owl remain absent from the project site, it is recommended that a 30-day burrowing owl pre-construction clearance survey be conducted in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* prior to any ground disturbing activities. If burrowing owls and/or birds displaying nesting behaviors are observed within the project site during future construction, further review may be needed to ensure compliance with the MSHCP, MBTA and Fish and Game Code.

Section 6 References

- California Burrowing Owl Consortium, 1993. *Burrowing Owl Survey Protocol and Mitigation Guidelines*. Accessed on the internet at:
www.dfg.ca.gov/wildlife/nongame/docs/boconsortium.pdf
- California Department of Fish and Wildlife (CDFW). 2019. RareFind 5, California Natural Diversity Data Base, California. Data Base report on threatened, endangered, rare or otherwise sensitive species and communities for the Stelle Peak and Perris 7.5-minute USGS quadrangles.
- California Department of Fish and Wildlife (CDFW), 2012. *Staff Report on Burrowing Owl Mitigation*.
- Coulombe, H.N. 1971. *Behavior and population ecology of the burrowing owl (Speotyto cunicularia) in the Imperial Valley of California*. Condor 73: 162-176.
- Environmental Programs Department. (2006, March 29). *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area*. <http://www.wrc-rca.org/mshcp-species-survey-protocols/>
- Haug, E.A., B.A. Millsap, and M.S. Martell. 1993. *Burrowing Owl (Speotyto cunicularia)*. In: A. Poole and F. Gill, editors, *Birds of North America*, No. 61. Philadelphia: The Academy of Natural Science; Washington DC: The American Ornithologists' Union.
- Ramsen, Jr., J.V. 1978. *Bird Species of Special Concern in California*. Non-game Wildlife Investigations. Wildlife Management Branch Administrative Report No78-1. Report prepared for California Department of Fish and Game.

Appendix A Site Photographs



Photograph 1: From the northwest corner of the project site looking east along the northern boundary.



Photograph 2: From the northwest corner of the project site looking south along the western boundary.



Photograph 3: From the southwest corner of the project site looking north along the western boundary.



Photograph 4: From the southwest corner of the project site looking east along the southern boundary.



Photograph 5: Looking north from the southern extent of the 500-foot buffer. The landscape and vegetation continue in both directions throughout the southern portion of the buffer.



Photograph 6: Looking east within the inaccessible southeast corner of the 500-foot buffer, southeast of the water tanks.



Photograph 7: From the southern of two southeast corners of the project site looking west along the western portion of the southern boundary.



Photograph 8: From the southern of two southeast corners of the project site looking north along the southern portion of the eastern boundary.



Photograph 9: From within the southeast portion of the 500-foot buffer looking south. The water tanks are located behind the fence on the left; the project site is visible on the far right.



Photograph 10: From within the southeast portion of the 500-foot buffer looking north. The project site is visible in the background slope and in the top-left corner.



Photograph 11: From within the southeast portion of the 500-foot buffer looking southeast. The project site is visible in the top-left corner.



Photograph 12: From the northern of two southeast corners looking west along the eastern portion of the southern boundary.



Photograph 13: From the northern of two southeast corners looking north along the northern portion of the eastern boundary.



Photograph 14: From the eastern portion of the project site looking east towards the eastern portion of the 500-foot buffer.



Photograph 15: From the eastern portion of the project site looking northeast towards the northeastern portion of the 500-foot buffer in the top of the photograph.



Photograph 16: From the northeast corner of the project site looking south along the northern portion of the eastern boundary.



Photograph 17: From the northeast corner of the project site looking west along the northern boundary.



Photograph 18: From the northeast portion of the project site looking north towards the residential development within the 500-foot buffer.

Appendix B Fauna Compendium

Table B-1: Wildlife Species

Scientific Name	Common Name
Aves	Birds
<i>Buteo jamaicensis</i>	red-tailed hawk
<i>Callipepla californica</i>	California quail
<i>Corvus brachyrhynchos</i>	American crow
<i>Falco sparverius</i>	American kestrel
<i>Geococcyx californianus</i>	greater roadrunner
<i>Haemorhouse mexicanus</i>	house finch
<i>Melozone crissalis</i>	California towhee
<i>Mimus polyglottos</i>	northern mockingbird
<i>Salpinctes obsoletus</i>	rock wren
<i>Sayornis nigricans</i>	black phoebe
<i>Sayornis saya</i>	Say's phoebe
<i>Spinus psaltria</i>	lesser goldfinch
<i>Streptopelia decaocto</i>	Eurasian collared dove
<i>Tyrannus vociferans</i>	Cassin's kingbird
<i>Zenaida macroura</i>	mourning dove
Mammalia	Mammals
<i>Canis latrans</i>	coyote
<i>Canis lupus familiaris</i>	domestic dog
<i>Lepus californicus</i>	black-tailed jackrabbit
<i>Felis catus</i>	domestic cat
<i>Otospermophilus beecheyi</i>	California ground squirrel
<i>Sylvilagus audubonii</i>	Audubon's cottontail
Reptilia	Reptiles
<i>Sceloporus orcutti</i>	granite spiny lizard
<i>Uta stansburiana elegans</i>	western side-blotched lizard