**APPENDIX 2A** 

**Burrowing Owl Focused Survey** 

# BURROWING OWL FOCUSED SURVEY REPORT

# MILL CREEK PROMENADE

APN 360-350-006, 360-350-011, & 360-350-017 MENIFEE, CALIFORNIA (Township 6 South, Range 3 West, Section 15)

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Project No: RCA#2016-60

April 2018

# TITLE PAGE

# Date Report Written: April 11, 2018

Date Field Work Completed: February 14<sup>th</sup>, February 21<sup>st</sup>, February 27<sup>th</sup>, and April 6<sup>th</sup> 2018

**Report Title: Burrowing Owl Focused Survey Report** 

Assessor's Parcel Number: APN 360-350-006, 360-350-011, & 360-350-017

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### **EXECUTIVE SUMMARY**

A focused burrowing owl (*Athene cunicularia*) survey was performed on a parcel located in the incorporated City of Menifee, Riverside County, California (Section 15, Township 6 South, Range 3 West, USGS Romoland 7.5' topographic quadrangle, California Quadrangle, 1956) (Appendix A: Figures 1, 2, 3, 4, 5, and 6). The property site has been disturbed by past human activities over the last several decades due to past agricultural activities (hay production), and the site shows signs of recent mowing and plowing. <u>Burrowing owls, which is listed as a California Species of Special Concern, were observed on the property during the field investigations.</u>

It was determined during an initial assessment that the site supports potential habitat for burrowing owls. Therefore, focused surveys were required to be completed prior to the start of any construction activities. Four site visits were completed in February and April 2018 during which transects were walked throughout the site to determine the presence or absence of suitable (i.e., occupiable) burrows and/or burrowing owls. The survey was performed as per the requirements of the California Department of Fish and Wildlife (CDFW) survey protocol (CDFW, 2012).

**Burrowing owls and owl sign were observed during the surveys and suitable burrows were identified.** A total of 2 burrowing owls were identified on the project site. The proposed project for this site would eliminate the existing burrows and the foraging habitat associated with burrowing owls. Therefore, mitigation measures will need to be implemented to minimize and compensate for impacts to species.

The following sections provide a discussion of the survey results which are valid for 30-days as per CDFW requirements. If burrowing owls are observed on the property in the future, the owls should not be removed, harassed, or in any way disturbed regardless of the results of this survey. To do so may constitute a violation of State and City regulations. If owls are encountered during future development activities, all activities should cease and CDFW should be notified.

### 1.0 PROJECT AND PROPERTY DESCRIPTION

The project site is located east of Haun Road, south of Garbani and west of Sherman Road in the City Menifee (Figures 1, 2, & 3). The site is located in Section 15, Township 6 South, Range 3 West on the USGS Romoland 7.5' topographic quadrangle. The approximately 59-acre site is composed of three parcels (APN 360-350-006, 360-350-011, and 360-350-017), and is approximately 0.1-miles east of Interstate 215.

The project site is relatively flat with an elevation of about 1,490 feet (MSL). The project slopes primarily from west to east. The project site is located within an area of the City of Menifee that has been developed or disturbed over the last few decades. Existing single-family dwelling border the site along its western boundary. To the east, the property is bordered by a major roadway. The area to the north consists of a residential community, while to the south a contractor's equipment yard bordered the property. OHV trails and numerous debris piles (i.e., illegal dumping) are located onsite.

The majority of the site supports agricultural land which was used to grow hay. Vegetation observed is somewhat limited and includes brome grasses (*Bromus*, sp.), lamb's quarters (*Chenopodium album*), heliotrope (*Heliotropium* sp.), dove weed (*Eremocarpus setigerus*), and goldfields (*Lastenia California*). An intermittent blueline channel bisects the southern portion of the site and supports a few riparian plant species such as seep willow (*Baccharis emoryi*), red-osier dogwood (*Cornus stolonifera*), cottonwood (*Populus angustifolia*), and arroyo willow (*Salix lasiolepis*). Compendium of all plant species observed during January 15, 2018, are presented in Table 2 (Appendix A).

A total of four (4) focused burrowing owl surveys were performed on February 14<sup>th</sup>, February 21<sup>st</sup>, February 27<sup>th</sup>, and April 6<sup>th</sup> of 2018 during which meandering 30-meter transects were walked throughout the site to determine the presence/absence of burrowing owls, active owl burrows, and/or owl sign (excrement, casting, etc.). Weather conditions during the 2018 surveys consisted of winds ranging from 0 to 5 mph, temperatures in the mid 40's (AM, °F) to mid-60's (AM, °F) with approximately 0-50 percent cloud coverage.

The proposed Mill Creek project is a mixed development which would consist of residential units (attached single-family dwellings), and various commercial/retail businesses and restaurants (Figure 5). Infrastructures would also be a component of the development including streets, sidewalks, alleys, parking, and sewer, and utility lines.

## 2.0 LITERATURE AND RECORD REVIEW - BURROWING OWL

As part of the environmental process, California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) data sources were reviewed prior to initiation of field surveys to determine if burrowing owls have been documented on the site or in the area surrounding the property. Based on the literature review and evaluation of the CNDDB database for the area, it was determined that the property is located within the general distribution of the burrowing owl. In addition, forty-six (46) documented occurrences of burrowing owls have been identified in the surrounding area according to CNDDB (2018). However, owls have not been previously identified on the site (CNDDB, 2018).

The burrowing owl is a year-long resident of open, dry grassland and desert habitats. The species was formerly common throughout central and southern California; however, the species has seen a significant reduction over the last few decades due to development activities; farming activities, predation by dogs and cats, and habitat destruction (Zeiner 1990). Conversions of grassland and desert habitats to agricultural fields and residential developments have contributed to the greatest amount of habitat destruction in recent decades. The reduction in population levels was noted as early as the 1940s. Burrowing owls primarily prey upon insects; although, small mammals, lizards, birds, and carrion make up a portion of the owl's diet (Zeiner 1990). Burrowing owls typically utilize abandoned California ground squirrel burrows for roosting and nesting.

# 3.0 METHODOLOGY

The California Burrowing Owl Consortium's *Burrowing Owl Survey Protocol and Mitigation Guidelines* (CBOC 1993) recommend a four-step approach to surveying for this species. An initial assessment of the site by biologists from RCA Associates, Inc. (Blake Curran and Parker Smith) determined that suitable owl habitat was present on the property. Because the assessment indicated that the site does contain suitable burrowing owl habitat, the remaining three phases of the survey were performed. Burrowing owls are typically found in a wide variety of habitats including disturbed grasslands, agricultural areas, and developed areas. Therefore, focused surveys were performed on February 14<sup>th</sup>, February 21<sup>st</sup>, February 27<sup>th</sup>, and April 6<sup>th</sup> of 2018 to determine if any owls, owl sign, or suitable burrows are currently present on the site.

As required by survey protocol, 30-meter, parallel belt transects were walked in a north-south direction until the site had been checked for owls and/or owl sign (burrows, tracks, scats, etc.). The survey protocol also requires that zone of influence (ZOI) surveys be conducted in the surrounding area out to a distance of 500-feet. All transects were walked at a pace that allowed careful observations along the transect routes and in the immediate vicinity. Field notes were recorded regarding native plant assemblages, wildlife sign, and human effects in order to determine the presence or absence of suitable owl habitat. Each survey was performed from about 0700 to 1000 hours.

Focused surveys combined with the identification of the habitat on the site and in the surrounding area will provide data on the potential presence or absence of burrowing owls. Temperatures during the surveys were in the mid 40's (AM, °F) to mid-60's (AM, °F) with approximately 0-50 percent cloud coverage and winds ranging from 0 to 5 mph. No precipitation was recorded during the surveys.

# Limitations:

The results of this report do not constitute authorization for the "take" (impact) of burrowing owls or any other listed or sensitive wildlife species. The authorization to impact the burrowing owl can only be granted by CDFW.

# 4.0 GENERAL BIOLOGICAL SURVEY RESULTS

Field investigations were conducted on February 14<sup>th</sup>, February 21<sup>st</sup>, February 27<sup>th</sup>, and April 6<sup>th</sup> of 2018. The project sites consist of two different plant communities, labeled by the MSHCP database (2012). The majority of the site supports agricultural land which was used to grow hay. Vegetation observed is somewhat limited and includes brome grasses (*Bromus*, sp.), lamb's quarters (*Chenopodium album*), heliotrope (*Heliotropium* sp.), dove weed (*Eremocarpus setigerus*), and goldfields (*Lastenia California*). An intermittent blueline channel bisects the southern portion of the site and supports a few riparian plant species such as seep willow (*Baccharis emoryi*), red-osier dogwood (*Cornus stolonifera*), cottonwood (*Populus angustifolia*), and arroyo willow (*Salix lasiolepis*). Compendium of all plant species observed during January 15, 2018, are presented in Table 2 (Appendix A).

A few common bird species were observed within the project area during the survey with American crow (*Corvus brachyrhynchos*), common raven (Corvus corax), western meadowlark (*Sturnella neglecta*), Anna's hummingbird (*Calypte anna*), western kingbird (*Tyrannus verticalis*), and American kestrel (*Falco sparverius*). All bird species observed are included in the faunal compendium in Table 2.

None of the riparian/riverine species listed in Section 6.1.2 of the MSHCP were found within the project site nor are any of the species expected to inhabit the site given the lack of abundance of any suitable habitat.

There are no features on the site that meet the MSHCP definition of vernal pools. In order to be considered a vernal pool under the MSHCP, a feature must be a wetland (based on the presence of hydrophytic vegetation, hydric soil, and wetland hydrology). The feature must also have a natural origin. Although there are several depressions on the site that pond water; none meets wetland criteria and all are artificial in nature. In addition, no vernal pools were observed during the field investigations on the project site; consequently, the site does not support suitable habitat for fairy shrimp. The lack of suitable habitat for fairy shrimp is due to the soil that is made up of sandy loam soil which cannot hold water long enough. Thus, the site is also unable to support any sensitive vegetable that is associated with wetland features. The topography of the site is such so

that water is unable to pool. Other non-vernal pool features such as depressions, drainages, and road ruts were examined for suitable fairy shrimp habitat; it is RCA Associates opinion that they lack the suitable habitat required for fairy shrimp

# 5.0 **RESULTS – BURROWING OWL**

### PHASE I HABITAT ASSESSMENT RESULTS

During the Phase I habitat assessment, physical and biological characteristics of the project site were compared to burrowing owl habitat requirements in an effort to determine whether the site is suitable for this species. The project site is within the geographic range of the burrowing owl, as depicted on current range maps, and on-site elevations are within the range occupied by the species (Haug et al. 1993). Vegetation on-site is composed disturbed agricultural land, a community that is well represented throughout the Riverside County and that is known to be capable of supporting burrowing owls. Based on this information, the project site contains suitable habitat for the burrowing owl.

# PHASE II TRANSECT SURVEY RESULTS

During Phase II transect surveys, the overall density of animal burrows within the project site was observed to be high. Occasional small mammal burrows, likely those of kangaroo rats (*Dipodomys spp.*), pocket mouse (*Perognathus spp.*), and/or woodrat (*Neotoma spp.*) were observed but were not of sufficient size to accommodate a burrowing owl. There is an abundance of suitable burrows onsite due to the presence of California ground squirrel activity. From the results of the transect survey, it was determined the project site contains suitable burrowing for the burrowing owls. A full nesting season survey was to be performed for this particular project for burrowing owls have been observed on the property.

# PHASE III OWL CENSUS AND OBSERVATION RESULTS

Phase III of the burrowing owl survey protocol was performed for the project site to monitor for any observations of owl sightings or activity. Two (2) burrowing owls were identified on the site.

The focused surveys for the burrowing owl conducted on February 14<sup>th</sup>, February 21<sup>st</sup>, February 27<sup>th</sup>, and April 6<sup>th</sup> of 2018 identified owls and owl sign (i.e., whitewash, castings, etc.). In addition, occupiable burrows were observed on the site increasing the likelihood the species will inhabit the site in the future given the fact burrowing owls rely upon abandoned burrows which have been excavated by other animals (i.e., coyotes, foxes, ground squirrels, etc.).

# **Burrow #1**

• Burrowing owl pair was observed outside the entrance of the burrow. The owl would move in and out of the burrow. Staying close to the burrow entrance. The owls were observed perching to the north.

# Burrow #2

- No owl was observed at this burrow. There were signs of usage by burrowing owls at the burrow entrance castings, whitewashing, and feather were observed.
- The close vicinity of this burrow to burrow occupied by owls means that this burrow could be used by those owls while out foraging or protection.

# **Burrows #3 - 11**

These burrows have the potential to provide suitable habitat for burrowing owl. These burrows show no signs of burrowing owl presence but are of suitable size.

# PHASE IV SURVEY REPORT

Phase IV of the burrowing owl survey protocol involves preparing a survey report that presents the results of the protocol surveys. This Focused Burrowing Owl Survey Report constitutes the Phase IV report for the project site.

#### 6.0 IMPACTS AND RECOMMENDATIONS

Future development of the site is expected to have direct or indirect impacts on burrowing owls or occupied owl habitat based on the results of the focused surveys conducted on February 14<sup>th</sup>, February 21<sup>st</sup>, February 27<sup>th</sup>, and April 6<sup>th</sup> of 2018. Mitigation measures will need to be taken in order to offset potentially significant impacts on the burrowing owl. The following recommendations are based on the Burrowing Owl Consortium guidelines.

- 1. Occupied burrows should not be disturbed during the nesting season, from February 1 through August 31, unless the Department of Fish and Game verifies that the birds have not begun egg-laying and incubation or that the juveniles from those burrows are foraging independently and capable of independent survival at an earlier date.
- 2. When destruction of occupied burrows is unavoidable, burrows should be enhanced (enlarged or cleared of debris) or created (by installing artificial burrows) in a ratio of 1:1 in adjacent suitable habitat that is contiguous with the foraging habitat of the affected owls.
- If owls must be moved away from the disturbance area, passive relocation (see below) is preferable to trapping. A period of at least one week is recommended to allow the owls to move and acclimate to alternate burrows.
- 4. A minimum of 6.5 acres of foraging habitat, calculated on a 100-m (approx. 300 ft.) foraging radius around the natal burrow, should be maintained per pair (or unpaired resident single bird) contiguous with burrows occupied within the last three years (Rich 1984, Feeney 1992). Ideally, foraging habitat should be retained in a long-term conservation easement.
- 5. The mitigation committee recommends monitoring the success of mitigation programs as required in Assembly Bill 3180. A monitoring plan should include mitigation success criteria and an annual report should be submitted to the California Department of Fish and Game.

### 6.2 Avoidance of Occupied Burrows

No disturbance should occur within 50 m (approx. 160 ft.) of occupied burrows during the nonbreeding season of September 1 through January 31 or within 75 m (approx. 250 ft.) during

the breeding season of February 1 through August 31. Avoidance also requires that a minimum of 6.5 acres of foraging habitat be preserved contiguous with occupied burrow sites for each pair of breeding burrowing owls (with or without dependent young) or single unpaired resident bird.

#### 6.3 Mitigation for Unavoidable Impacts

#### 6.3.1 On-site Mitigation

On-site passive relocation should be implemented if the above avoidance requirements cannot be met. Passive relocation is defined as encouraging owls to move from occupied burrows to alternate natural or artificial burrows that are beyond 50 m from the impact zone and that are within or contiguous to a minimum of 6.5 acres of foraging habitat for each pair of relocated owls. Relocation of owls should only be implemented during the non-breeding season. On-site habitat should be preserved in a conservation easement and managed to promote burrowing owl use of the site.

Owls should be excluded from burrows in the immediate impact zone and within a 50 m (approx. 160 ft.) buffer zone by installing one-way doors in burrow entrances. One-way doors should be left in place 48 hours to ensure owls have left the burrow before excavation. One alternate natural or artificial burrow should be provided for each burrow that will be excavated in the project impact zone. The project area should be monitored daily for one week to confirm owl use of alternate burrows before excavating burrows in the immediate impact zone. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe or burlap bags should be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.

#### 6.3.2 Off-Site Mitigation

If the project will reduce suitable habitat on-site below the threshold level of 6.5 acres per relocated pair or single bird, the habitat should be replaced off-site. Off-site habitat must be suitable burrowing owl habitat, as defined in the Burrowing Owl Survey Protocol, and the site approved by CDFG. Land should be purchased and/or placed in a conservation easement in perpetuity and managed to maintain suitable habitat. Off-site mitigation should use one of the following ratios:

- 1. Replacement of occupied habitat with occupied habitat: 1.5 times 6.5 (9.75) acres per pair or a single bird.
- 2. Replacement of occupied habitat with habitat contiguous to currently occupied habitat: 2 times 6.5 (13.0) acres per pair or a single bird.
- 3. Replacement of occupied habitat with suitable unoccupied habitat: 3 times 6.5 (19.5) acres per pair or a single bird.

# **On-Site Biological Monitoring**

A biological monitor shall be present during all ground disturbing construction activities to ensure that burrowing owls are not impacted by the project and to administer passive relocation of owls, if required. If burrowing owls are observed, the biological monitor shall have the authority to halt construction activities to avoid damaging sensitive resources or violating applicable laws.

CDFW will require a 30-day pre-construction survey be performed immediately prior (i.e., 30days or less) to the start of any future construction activities to determine if any owls have moved onto the site since the April 2018 surveys.

CDFW and USFWS (as applicable) should be contacted to discuss specific mitigation measures which may be required for the individual species. CDFW and USFWS are the only agencies which can grant authorization for the "take" of any sensitive species.

This Focused Burrowing Owl Survey Report and mitigation measures recommended herein do not constitute authorization for incidental take of migratory birds.

# 7.0 **REFERENCES**

- American Ornithologists' Union. 1989. Thirty-Seventh Supplement to the American Ornithologists' Union Checklist of North American Birds. Auk, 106:532-538.
- Baldwin, Bruce G, et. al.

2002. The Jepson Desert Manual. Vascular Plants of Southeastern California. University of California Press, Berkeley, CA.

California Department of Fish and Game

1990. California Wildlife: Volume 1 (Amphibians and Reptiles), Volume II (Birds), and Volume III (Mammals).

- California Department of Fish and Game 1990 California's Wildlife, Volumes 1, 2, and 3. Sacramento.
- California Department of Fish and Game 1995. Staff Report on Burrowing Owl Mitigation.
- California Department of Fish and Game March 7, 2012 (a). Staff Report on Burrowing Owl Mitigation. 34 pp.
- California Department of Fish and Game 2015 Natural Diversity Data Base (b). Sacramento
- Ehrlich, P., Dobkin., Wheye, D.

Birder's Handbook. A Field Guide to the Natural History of North American Birds. Simon & Schuster Building Rockefeller Center 1230 Avenue of the Americas. New York, New York 10020.

Feeney, L. 1992. Site fidelity in burrowing owls. Unpublished paper presented to Raptor Research Annual Meeting, November 1992. Seattle, Washington.

Grenfell, W.E. Jr., and W.F. Laudenslayer, Jr. editors. 1983. Distribution of California Birds. California Wildlife/Habitat Relationship Program. Publication No. 4 California Department of Fish and Game, Sacramento, and USDA Forest Service.

Haug, E. A. and L. W. Oliphant. 1990. Movements, activity patterns, and habitat use of burrowing owls in Saskatchewan. J. Wildlife Management 54:27-35.

Henny, C. J. and L. J. Blus. 1981. Artificial burrows provide new insight into burrowing owl nesting biology. Raptor Research 15:82-85.

Hickman, James C.

The Jepson Manual Higher Plants of California. University of California Press. Berkeley, CA. 3<sup>rd</sup> Edition. 1996.

Holland, R.

1986. A Description of the Terrestrial Natural Communities of California. California Department of Fish and Game, October.

Jaeger, Edmund C.

1969. Desert Wild Flowers. Stanford University Press, Stanford, California. 321 pp. Kays, R. W. & Wildson, D. E.

Mammals of North America. Princeton University Press, Princeton, New Jersey. 2002.

Martin, D. J. 1973. Selected aspects of burrowing owl ecology and behavior. Condor 75:446-456.

# Munz, Philip A.

1974. A Flora of Southern California. University of California Press, Berkeley, California. 1086 pp.

Rich, T. 1984. Monitoring burrowing owl populations: Implications of burrow re-use. Wildlife Society Bulletin 12: 178- 180.

# Sibley, David Allen.

National Audubon Society. The Sibley guide to Birds. Alfred A Knopf, Inc. 2000.

# Stebbins, Robert C.

A Field Guide to Western Reptiles and Amphibians. Houghton Mifflin Company. 2003.

Thomsen, L. 1971. Behavior and ecology of burrowing owls on the Oakland Municipal Airport. Condor 73: 177-192.

URS Corporation (URS). 2012. General Biological Resources Assessment Report for the Marathon Solar Project. Prepared for the County of San Bernardino

# Whitaker, John O.

The Audubon Society Field Guide to North American Mammals. Alfred A Knopf, Inc. 1980.

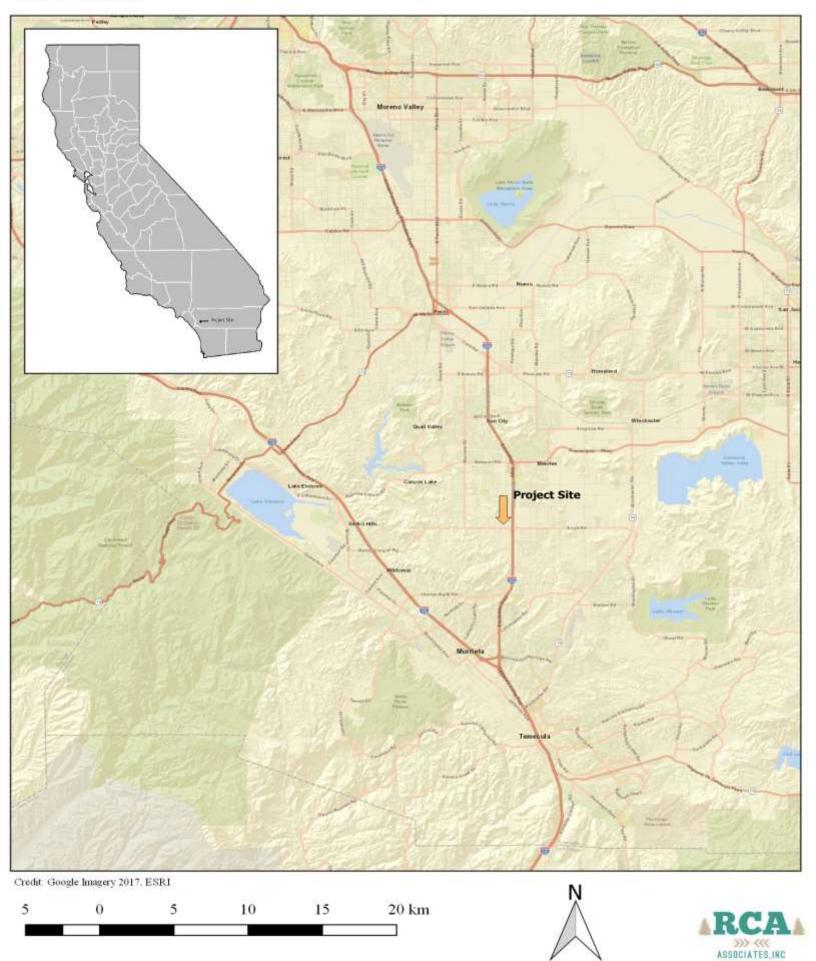
# Williams, D. F.

1986. Mammal Species of Special Concern in California, Timton Kangaroo Rat. California Department of Fish and Game.

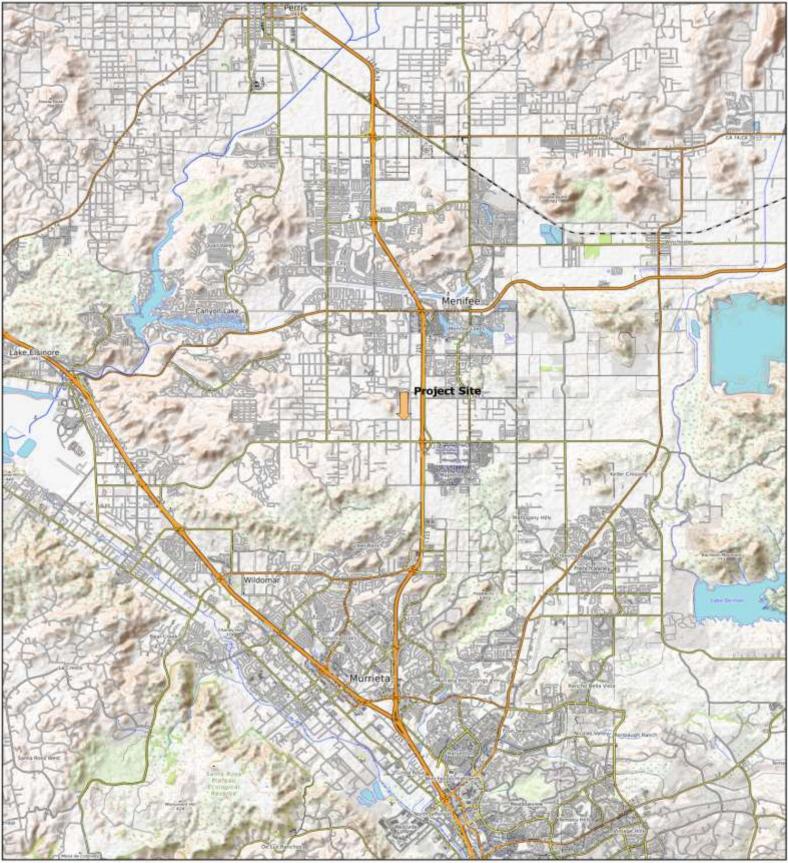
Zam, M. 1974. Burrowing owl. U. S. Department of Interior, Bureau of Land Management. Technical Note T-N 250. Denver, Colorado. 25pp.

Zeiner, D. C., W., F. Laudenslayer, Jr., K. E. Mayer, M. White. Editors. 1990. California's Wildlife. Volume 2. Birds. State of California, Department of Fish and Game. Sacramento, California. 731 pp. FIGURES

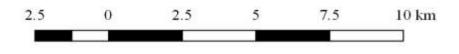
Figure 1 Regional Vicinity Map



# Figure 2 Local Topographic Map



Credit: Google Imagery 2017, ESRI

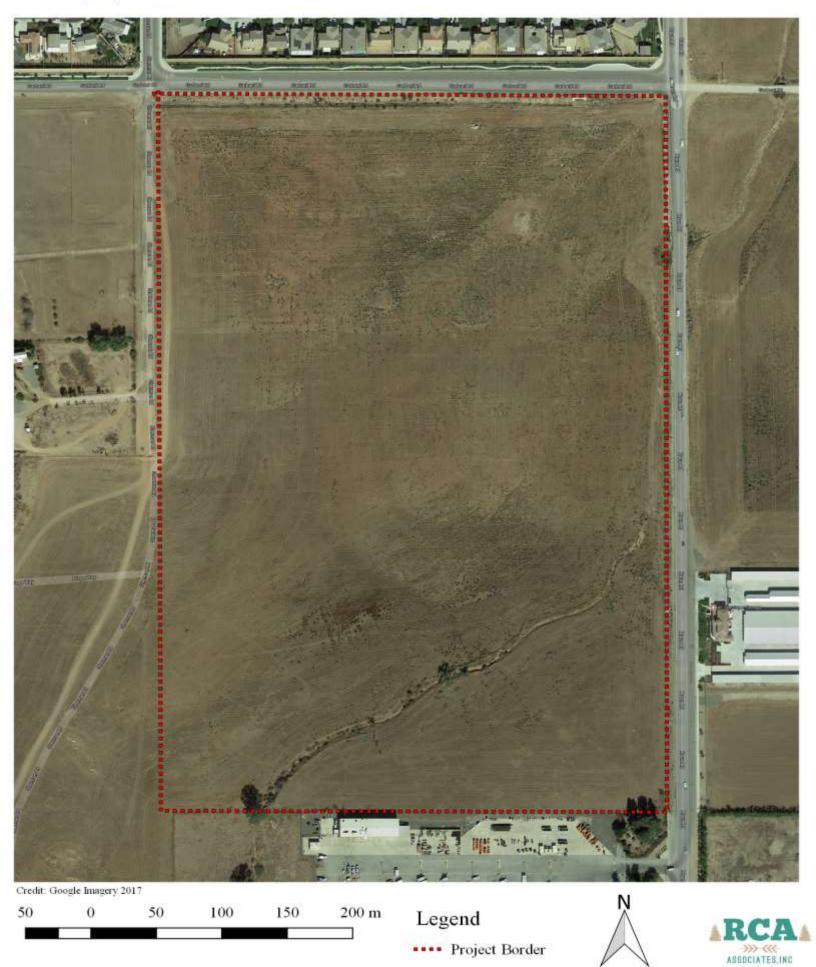


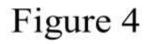




# Figure 3

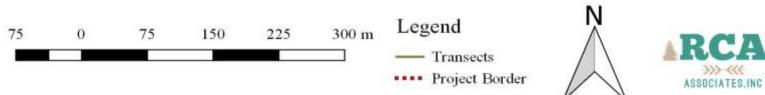
Local Vicinity Map





Transects Walked



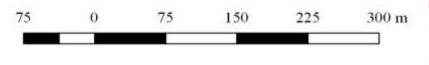


# Figure 5

Burrowing Owl and Burrow Locations



Credit: Google Imagery 2017



- •••• Project Border Burrows
  - Active Burrow
  - Potential Burrow



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Site Photographs



# CENTER OF SITE LOOKING NORTH



CENTER OF SITE LOOKING EAST

# Figure 5 Cont.

Site Photographs



CENTER OF SITE LOOKING SOUTH



CENTER OF SITE LOOKING WEST

# Figure 6

Burrow Photographs



# APPENDIX A

**Burrowing Owl Occurrences** 

Burrowing Owl occurrences within the region based on the California Diversity Data Base (2018). (SC = Species of special concern)

Name	Listing Status	Habitat Requirements	Presence/Absence	Comments (Other owl colonies in the region.)
Burrowing owl (Athene cuniculuria)	CDFW: SC	Various: desert scrub, agricultural lands, disturbed areas	Site does support suitable habitat for the species; however, no burrowing owls or sign observed on site.	Forty-six (46) documented occurrences within approximately 5 miles of the property.

# **APPENDIX B**

Flora and Fauna Compendia

### Table 1 - Plants observed on the site and known to occur in the area.

Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which have been identified on the site or in the region by biologists from RCA Associates, Inc.

Common Name	Scientific Name	Comments
Annuals		
Snakeweed	Gutierrezia sarothrea	Observed off-site
Telegraph weed	Heterotheca gradifolia	۲۵
Bladderpod	Isomeris aroborea	۲۵
Fiddleneck	Amsinckia tessellate	۲۵
Black mustard	Brassica nigra	۲۵
Plantain	Plantago erecta	۲۵
Croton	Croton califonica	۲۵
Coyote melon	Cucurbita foetidissma	۲۵
Pearly everlasting	Gnaphalium californicum	۲۵
Phacelia	Phacelia distans	۲۲
Lambs quarters	Chenopodium califonicum	۲۲
Centaurem	Centaurea squarrosa	۲۵
Brome grass	Bromus sp.	On-site
Dove weed	Eremocarpus setigerus	۲۵
Tobacco	Nicotiana attenuta	66
Lamb's quarters	Chenopodium album	66
Cottonwood	Populus angustifolia	66
Arroyo Willow	(Salix lasiolepis	۲۵
Heliotrope	Heliotropium sp.	۲۵
Erodium	Erodium cicutarium	۲۵
Goldfields	Lasthenia californica	۲۵
Russian thistle	Salsola tragus	۲۵
Stephanomeria	Stephanomeria sp.	۲۵
Seep willow	Baccaharis emoryi	"
Mustard	Brassica tourneforti	66
Red-osier dogwood	Cornus stolonifera	66
Tamarisk	Tamarix ramoissina	66

Source: Munz, P.A. 1974. A Flora of Southern California. University of California Press. Berkeley, California. 1086 pp.

# Table 2 - Wildlife observed on the site and those species expected to the area.

Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which have been identified on the site or in the region by biologists from RCA Associates, Inc.

Common Name	Scientific Name	Comments
Mammals		
Desert cottontail	Sylvilagus auduboni	Observed on-site
California ground squirrel	Spermophilus beecheyi	٠٠
Coyote	Canis latrans	Scats observed on-site.
Deer mouse	Peromyscus maniculatus	May occur on-site.
California mouse	P. californicus	
Botta's pocket gopher	Thomonys bottae	٠٠
Birds		-
Raven	Corvus corax	Observed on-site.
Crow	C. brachyrhynchos	٠٠
American Kestrel	Falco sparverius	٠٠
Burrowing Owl	Athene cunicularia	٠٠
Western meadowlark	Sturnella neglecta	۰۵
Western kingbird	Tyrannus verticalis	٠٠
Say's Phoebe	Sayornis saya	٠٠
Northern mockingbird	Mimus polyglottus	۰۵
Anna's hummingbird	Calypte amna	Observed on site
Mourning dove	Zenaida macroura	٠٠
California quail	Callipepla Californica	Observed in surrounding area
White-crowned sparrow	Zonotrichia leucophrys	۰۰ ۲۰
Red-tail Hawk	Buteo jamaicensis	٠٠
Greater Roadrunner	Geococcyx californianus	٠٠
Rock pigeon	Columba livia	٠٠
Brewer's blackbird	Euphagus cyanocephalus	٠٠
Lark sparrow	Chondestes grammacus	٠٠
House finch	Carpodacus mexicanis	"
Bullock's oriole	Icterus bullockii	٠٠
Sage sparrow	Amphispiza belli	٠٠
Costa hummingbird	Calypte costae	· ·
Ash-throated flycatcher	Myiarchus cinerascens	۲۲
American robin	Turdus migratorius	٠٠
Scrub jay	Aphelocoma coerulescens	۲۵
<b>Reptiles and Amphibians</b>		
Side-blotched lizard	Uta stansburiana	Observed on site.
Western fence lizard	Sceloprus occidentalis	۰۲
Granite spiny lizard	Sceloporus orcuttii	۲۲
Common garter snake	Thamnophis sirtalis	Occurs in area
Gopher snake	Pituphis melanolecus	۲۲
Western toad	Bufo boreas	۲۲
Southwestern toad	Bufo mircroscaphus	"

#### SOURCES:

(1) Blair, W.F. 1968. Vertebrates of the United States. McGraw-Hill, Inc. New York.

616 pp.

(2) Whitaker, J. O. 1980. The Audubon Society Field Guide to North American Mammals. A. A. Knopf, New York. 745 pp.

# CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this biological evaluation and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Fieldwork conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date:04/11/2018	Signed:
Field Work Performed By:	Randall Arnold Senior Biologist
Field Work Performed By:	Parker Smith Biological Technician
Field Work Performed By:	Blake Curran Environmental Biologist

### **REGULATORY CONTEXT**

The burrowing owl is a migratory bird species protected by international treaty under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter, any migratory bird listed in 50 C.F.R.Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R. 21). Sections 3503, 3503.5, and 3800 of the California Department of Fish and Game Code 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). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or the loss of habitat upon which the birds depend is considered "taking" and is potentially punishable by fines and/or imprisonment. Such taking would also violate federal law protecting migratory birds (e.g., MBTA).

The burrowing owl is a Species of Special Concern to California because of declines of suitable habitat and both localized and statewide population declines. 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). The 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.

# **CEQA AND SUBDIVISION MAP ACT**

CEQA Guidelines Section 15065 directs that a mandatory finding of significance is required for projects that have the potential to substantially degrade or reduce the habitat of or restrict the range of a threatened or endangered species. CEQA requires agencies to implement feasible mitigation measures or feasible alternatives identified in EIR's for projects which will otherwise cause significant adverse impacts (Sections 21002, 21081, 21083; Guidelines, sections 15002, subd. (a)(3), 15021, subd. (a)(2), 15091, subd. (a).). To be legally adequate, mitigation measures must be capable of "avoiding the impact altogether by not taking a certain action or parts of an action";

"minimizing impacts by limiting the degree or magnitude of the action and its implementation"; "rectifying the impact by repairing, rehabilitating or restoring the impacted environment"; "or reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action." (Guidelines, Section 15.370). Section 66474 (e) of the Subdivision Map Act states "a legislative body of a city or county shall deny approval of a tentative map or parcel map for which a tentative map was not required, if it makes any of the following findings: (e) that the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish and wildlife or their habitat". In recent court cases, the court upheld that Section 66474(e) provides for environmental impact review separate from and independent of the requirements of CEQA (Topanga Assn. for a Scenic Community v. County of Los Angeles, 263 Cal. Rptr. 214 (1989).).