

GENERAL BIOLOGICAL RESOURCES ASSESSMENT

VICTORVILLE, CALIFORNIA

Prepared for:

ACTK Capital Partners, LLC

Prepared by:

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Prepared for: ACTK Capital Partners, LLC

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1.0 INTRODUCTION AND SUMMARY

Biological surveys were conducted on July 19, 2017 on a 69.5-acre parcel (approximate) between Monte Vista Rd. (West) and Verbena Rd. (East) approximately 0.25 miles north of Bear Valley Rd. in the city of Victorville, California (Township 5 North, Range 5 West, Section 32, USGS Baldy Mesa, California Quadrangle 1996) (Appendix A: Figures 1, 2, 3 & 4). 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. Following the data review, surveys were performed on the site during which the biological resources on the property and in the surrounding areas were documented by biologists from RCA Associates Inc. (Randy Arnold and Parker Smith). As part of the surveys, the property site and the adjoining lands were evaluated for the presence of native habitats which could potentially support populations of sensitive wildlife species. A focused survey was also conducted for the desert tortoise and burrowing owl, and a habitat assessment was performed for the Mohave ground squirrel. The property was also evaluated for the presence of sensitive habitats including wetlands, vernal pools, riparian habitats, and jurisdictional areas.

Based on data from USFWS, CDFW, and a search of the California Natural Diversity Database (CNDDDB, 2017), there are four sensitive wildlife species that have been documented in the region within approximately five miles of the project site. These sensitive species include desert tortoise (*Gopherus agassizii*), burrowing owl (*Athene cunicularia*), Mohave ground squirrel (*Spermophilus mohavensis*), and loggerhead shrike (*Lanius ludovicianus*). Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2000) and Whitaker (1980).

2.0 EXISTING CONDITIONS

The property is approximately 69.5-acres in size and is located between Monte Vista Rd. (West) and Verbena Rd. (East) in the City of Victorville, California (T5N, R5W, Section 32, USGS Baldy Mesa, California Quadrangle) (Appendix A: Figures 1 and 2). The site supports a relatively undisturbed creosote bush (*Larrea tridentata*) community with few signs of past human disturbance (e.g., grading, ground clearing, trash piles, etc.) (Figure 3).

The dominant perennial on the site is creosote bush (*Larrea tridentata*) with white bur-sage (*Ambrosia dumosa*), and ephedra (*Ephedra nevadensis*), as the co-dominant. Annuals included brome grass (*Bromus sp.*), and schismus (*Schismus sp.*). A residential development borders the site directly to the south with vacant land bordering the site to the north, east, and west. No sensitive habitats (e.g., wetlands, critical habitats for sensitive species, etc.) have been documented in the area (CNDDDB, 2017) and no sensitive habitats were observed during the field investigations conducted on July 19, 2017.

3.0 METHODOLOGIES

Biological surveys were conducted on July 19, 2017 during which biologists from RCA Associates, Inc. initially walked meandering transects throughout the site to collect data on the plant and animal communities. Following completion of the initial reconnaissance survey, focused surveys were conducted for the burrowing owl and desert tortoise, and a habitat assessment was also performed for the Mohave ground squirrel. The applicable methodologies are summarized below. Surveys were performed on the site and in the surrounding area from about 0900 to about 1330 hours. Weather conditions during the July 19, 2017 survey consisted of winds 10 to 15 mph, temperatures in the mid-80's (AM) to mid-90's (PM) (°F) with clear skies. All plants and animals detected during the field investigations were recorded and are provided in Tables 1 & 2 along with other species that have been documented in the area (Appendix A).

Desert Tortoise: The site was surveyed for desert tortoises by Randall Arnold and Parker Smith, and as required by the CDFW and USFWS survey protocol, 10 meter, parallel belt transects were walked in an east-west direction until the entire property had been checked for tortoises and/or tortoise sign (burrows, tracks, scats, etc.). Surveys in the zone of influence (ZOI) were also conducted in the areas north, east, south, and west of the site. 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 affects in order to determine the presence or absence of suitable tortoise foraging habitat.

Burrowing Owl: A habitat assessment was conducted for the burrowing owl in conjunction with the general biological surveys to determine if the site supports suitable habitat for the species. Following completion of the habitat assessment, it was determined that the site does support suitable habitat for the burrowing owl; therefore, a focused survey was conducted for burrowing owls and for occupiable (i.e., suitable) burrows which could potentially be utilized by owls. As part of the burrow survey, transects were walked throughout the site during which any suitable burrows were evaluated for owls and owl sign. Burrowing owls typically utilize burrows which have been excavated by other animals (squirrels, coyotes, foxes, dogs, etc.) since owls cannot dig their own burrows. CDFW protocol also requires surveys be conducted in the surrounding area out to a distance of about 500 feet; therefore, surveys were performed in the vacant areas adjacent to the site.

Mohave Ground Squirrel: A habitat assessment was performed for the Mohave ground squirrel as per CDFW protocol including an analysis of the on-site habitat, evaluation of local populations, and assessment of connectivity with habitats in the surrounding area which might support populations of the Mohave ground squirrel.

4.0 LITERATURE SEARCH

As part of the environmental process, a search of the California Natural Diversity Database (CNDDDB, 2017) was performed. Based on this review, it was determined that several sensitive wildlife species have been documented within approximately 5-miles of the property. The following table provides data on each species.

Table 4-1: Federal and State Listed Species and State Species of Special Concern.

T = Threatened; E = Endangered; SSC = Species of special concern; CNDDDB = California Natural Diversity Data Base

Name	Listing Status	Habitat Requirements	Presence/Absence	Comments
burrowing owl (<i>Athene cunicularia</i>)	Fed: None State: None CDFW: SC	Open, dry annual or perennial grasslands, deserts & scrublands	Species not present on the site. Site does not support suitable habitat for the species.	Species is documented in the general region CNDDDB (2017)
desert tortoise (<i>Gopherus agassizii</i>)	Fed: T State: T	Joshua tree woodland Mojavean desert scrub Sonoran desert scrub	Species not present on the site. Site does not support suitable habitat for the species.	Species is documented in the general region CNDDDB (2017)
loggerhead shrike (<i>Lanius ludovicianus</i>)	Fed: None State: None CDFW: SC	Desert wash Joshua tree woodland Mojavean desert scrub Pinon & juniper woodlands	Species not present on the site. Site does not support suitable habitat for the species.	Species is documented in the general region CNDDDB (2017)
sagebrush loeflingia (<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>)	Fed: None State: None CNPS: 2B.2	Desert dunes Great Basin scrub Sonoran desert scrub	Species not present on the site. Site does not support suitable habitat for the species.	Species is documented in the general region CNDDDB (2017)
short-joint beavertail (<i>Opuntia basilaris</i> var. <i>brachyclada</i>)	Fed: None State: None CNPS: 1B.1	Chaparral Joshua tree woodland Mojavean desert scrub Pinon & juniper woodlands	Species not present on the site. Site does not support suitable habitat for the species.	Species is documented in the general region CNDDDB (2017)
Mohave ground squirrel (<i>Xerospermophilus mohavensis</i>)	Fed: None State: T	Chenopod scrub Joshua tree woodland Mojavean desert scrub	Species not present on the site. Site does not support suitable habitat for the species.	Species is documented in the general region CNDDDB (2017)

5.0 RESULT

5.1 General Biological Resources

A relatively undisturbed creosote bush (*Larrea tridentata*) community covers most of the property. Most of the creosote bushes were from 2 to 4 feet in height and the property shows numerous signs of human disturbance including trash piles and signs of ground clearing/grading. Other perennials scattered throughout the property included ephedra (*Ephedra nevadensis*), and white bur-sage (*Ambrosia dumosa*). Annuals observed included brome grass (*Bromus sp.*), and schismus (*Schismus sp.*). Birds identified during the surveys included ravens (*Corvus corax*), mourning dove (*Zenaida macroura*), and sage sparrows (*Artemisiospiza nevadensis*).

The only mammals observed were black-tailed jackrabbits (*Lepus californicus*), and California ground squirrels (*Spermophilus californicus*); however, numerous small mammal burrows were also noted and some of these may be utilized by Merriam's kangaroo rats (*Dipodomys merriami*) which are common in the area. Reptiles observed were limited to side-blotched lizards (*Uta stansburiana*). Coyotes (*Canis latrans*) also traverse the site during hunting activities as indicated by the numerous scats observed. No distinct wildlife corridors were identified on the site or in adjacent areas.

5.2 Federal and State Listed Species

Mohave Ground Squirrel: Mohave ground squirrel populations have been documented in the area with the nearest observation about 5 miles south of the property (Occurrence #318, Baldy Mesa, California Quad), and this observation was recorded in 2005 (CNDDDB, 2017). There are no recent observations of the species in the immediate area surrounding the site (CNDDDB, 2017) and the species is not expected to occur on the site based on the following criteria:

1. Limited number of recent documented observations in the general region;
2. Limited connectivity with other vacant habitats in the region.

Desert Tortoise: Desert tortoises have been documented in the area; however, there are no recent observations of this species in the immediate vicinity of the site, and no tortoises or tortoise sign (i.e., burrows, scats, tracks, etc.) were observed on the site during the protocol surveys conducted on July 19, 2017.

Loggerhead shrike: The loggerhead shrike has been documented in the region; however, there are no recent observations of this species in the immediate area (CNDDDB, 2017) and suitable habitat (i.e., riparian) is absent from the site or the zone of influence.

5.3 Wildlife Species of Special Concern

Burrowing Owl: There are numerous owl colonies that have been observed in the general region (CNDDDB, 2017). In addition, there are numerous other documented owl colonies within about five miles of the site (CNDDDB, 2017). No suitable (i.e., “occupiable”) burrows or burrowing owl sign (whitewash, castings, etc.) were observed on the site. Based on the results of the field investigations and the absence of owl sign, the species is not expected to currently inhabit the property. However, a pre-construction survey will be required by CDFW immediately prior to the start of any future site clearing activities to determine if the species has moved onto the site since completion of the July 2017 surveys.

6.0 Impacts and Mitigation Measures

6.1 General Biological Resources

Future development of the site will impact the general biological resources present on the site, and most of the vegetation will likely be removed during future development activities. However, wildlife on the site is somewhat limited and future activities will generate minimal impacts on wildlife species known to occur in the area. Species with limited mobility (i.e., small mammals and reptiles) will experience some increases in mortality during the construction phase; although, more mobile species (i.e., birds, large mammals) will be displaced into adjacent areas and will likely experience negligible impacts. Loss of about 69.5-acres of desert vegetation is not expected to have a significant cumulative impact on the overall biological resources in the region given the presence of similar habitat throughout the surrounding region.

6.2 Federal and State Listed and Species of Special Concern

Development of the property is not expected to impact any special status animal species that have been documented in the area (CNDDDB, 2017). As noted in Section 5.3, no desert tortoises or tortoise sign were observed on the site or zone of influence, nor were any burrowing owls observed on the property during the protocol surveys. Suitable owl burrows and burrowing owl sign (whitewash, castings, etc.) were not observed on the site or in the zone of influence (ZOI). As per CDFW protocol, the survey results are valid for only 30 days; therefore, CDFW will require a 30-day pre-construction survey be performed prior to the start of any future clearing/grading activities to determine if owls have moved on to the site since completion of the July 2017 surveys. The site supports adequate habitat for the Mohave ground squirrel; however, based on the limited number of documented observations for the region, current habitat conditions, and low population levels, the probability of the species inhabiting the site is very low.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Future on-site activities may result in the removal of about 69.5-acres of desert scrub vegetation; however, any future activities are not expected to have a significant cumulative impact on the general biological resources in the surrounding region. In addition, development of the site is not expected to have an impact on any State or Federal listed wildlife species, and no other special status animal species (i.e., State “species of special concern”) are expected to be impacted. However, if any special status species are observed on the property during future development activities, 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.

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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. Field work conducted for this assessment was performed by me or other biologists 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: 07/20/2017 Signed: *Randy Arnold*
Report Author

Field Work Performed By: Randall Arnold
Senior Biologist

Field Work Performed By: Parker Smith
Biological Field Technician

Appendix A
Tables and Figures

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

Common Name	Scientific Name	Location
Sage	<i>Salvia</i> sp.	On-site & in surrounding area.
Schismus	<i>Schismus barbatus</i>	“
Brome grass	<i>Bromus ps.</i>	“
Paperbag plant	<i>Salazaria Mexicana</i>	“
Ephedra	<i>Ephedra nevadensis</i>	“
Buckwheat	<i>Eriogonum</i> sp.	“
Anderson’s thornbush	<i>Lycium andersonii</i>	“
Joshua tree	<i>Yucca brevifolia</i>	“
Creosote bush	<i>Larrea tridentate</i>	“
Cholla	<i>Opuntis acanthocarpa</i>	“

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

Common Name	Scientific Name	Location
Common raven	<i>Corvus corax</i>	On-site and in the surrounding area.
Sage sparrow	<i>Amphispiza belli</i>	“
Side-blotched lizard	<i>Uta stansburiana</i>	“
Mourning dove	<i>Zenaida macroura</i>	“
California ground squirrel	<i>Spermophilus beecheyi</i>	“
Brewer’s blackbird	<i>Euphagus cyanocephalus</i>	“
Jackrabbit	<i>Lepus Californicus</i>	“
Desert cottontail	<i>Sylvilagus auduboni</i>	Known to occur in area.
Coyotes	<i>Canis latrans</i>	“
Merriam’s kangaroo rat	<i>Dipodomys merriami</i>	“
Song sparrow	<i>Melospiza melodia</i>	“
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	“
Western whiptail lizard	<i>Cnemidophorus tigris</i>	“
Desert spiny lizard	<i>Sceloporus magister</i>	“
Cactus wren	<i>Campylorhynchus brunneicapillus</i>	“
Gambel’s quail	<i>Callipepla gambelii</i>	“
Antelope ground squirrel	<i>Ammospermophilus leucurus</i>	“

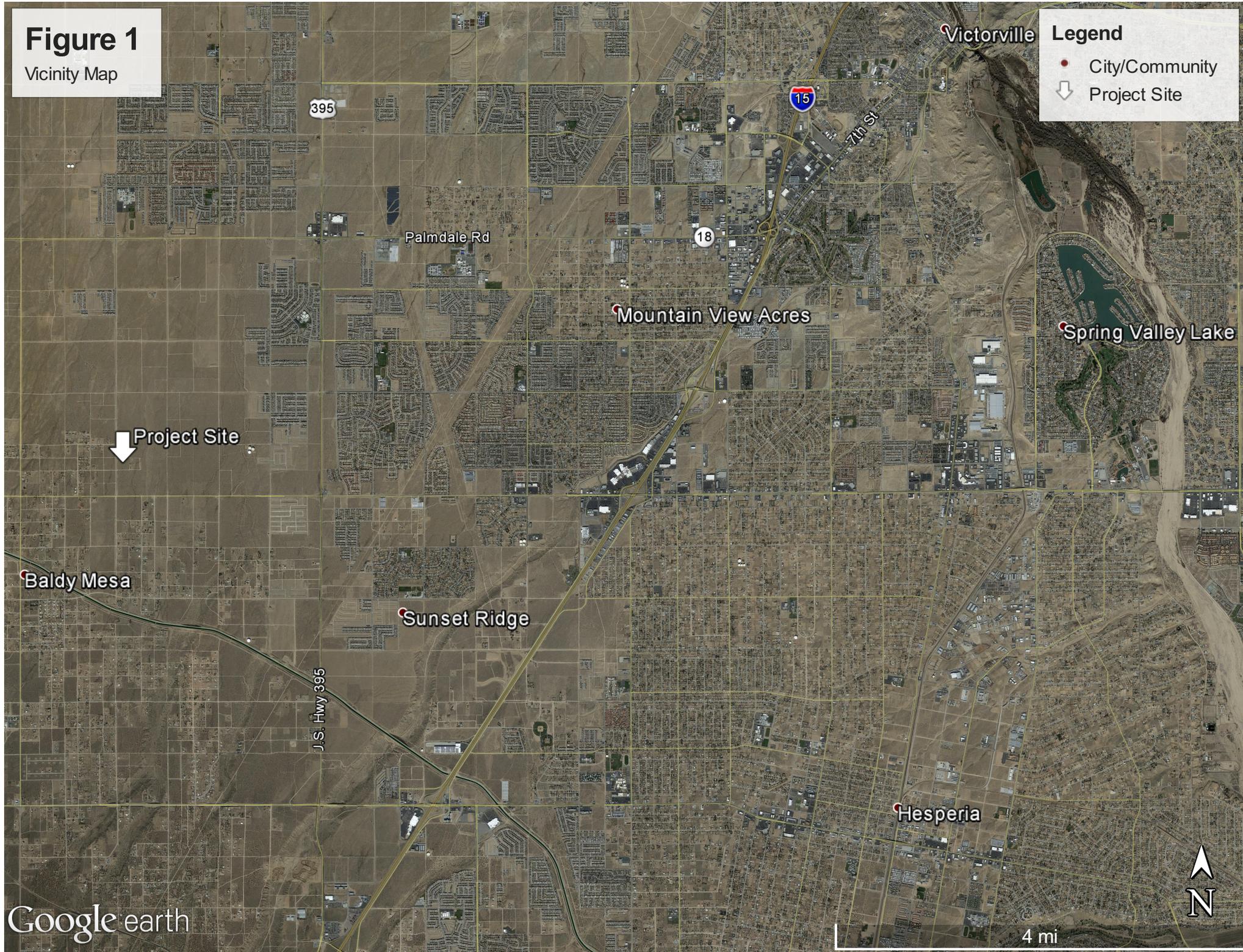
Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which have been identified on the site or in the region by biologists from RCA Associates, INC.

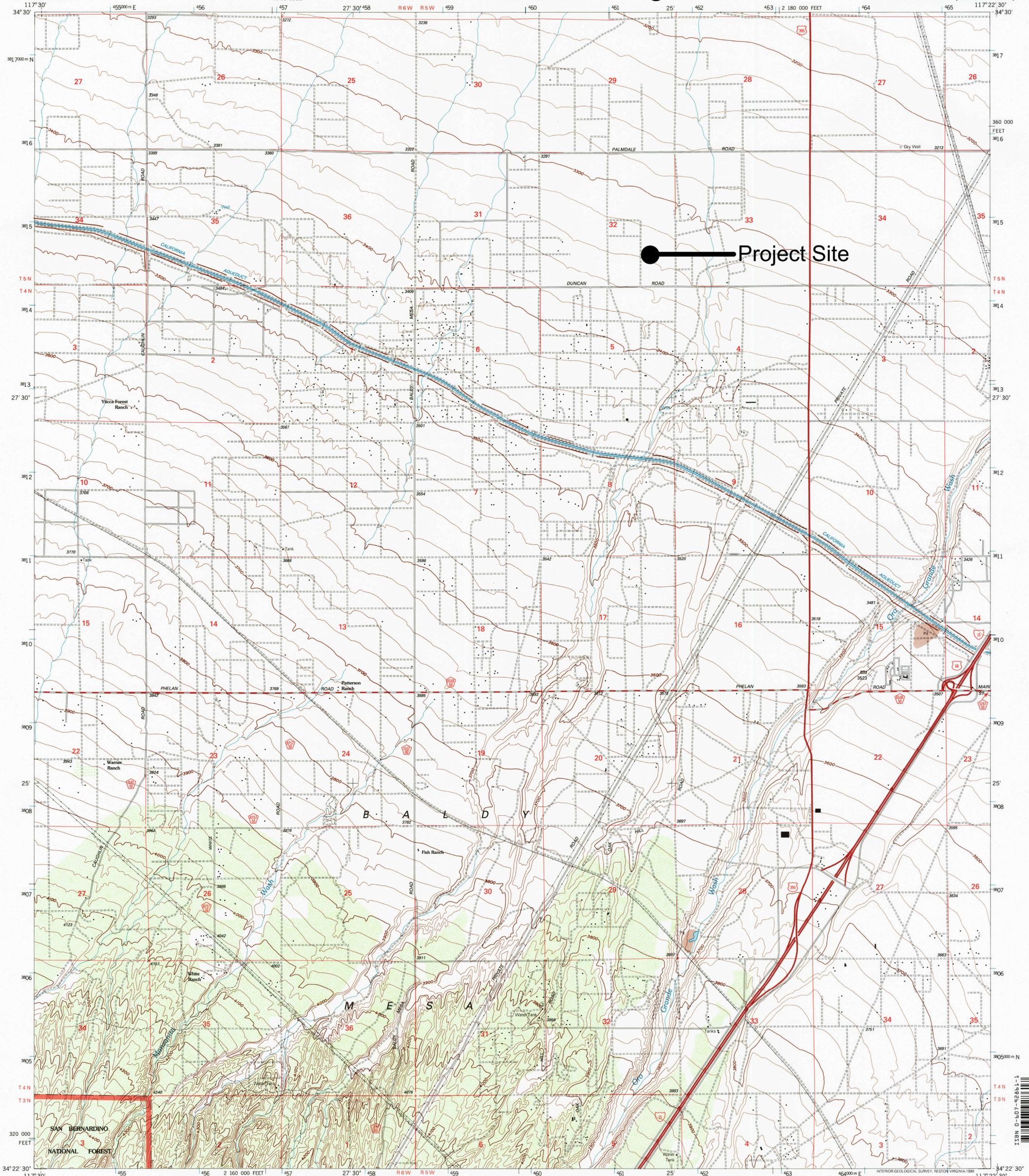
Figure 1

Vicinity Map

Legend

- City/Community
- ↓ Project Site



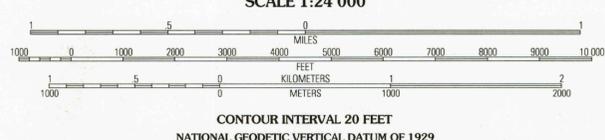
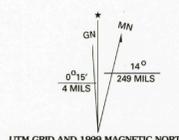


Produced by the United States Geological Survey 1988
Revision within and adjacent to National Forest System lands
by USDA Forest Service 1996

Compiled from aerial photographs taken 1952. Revised from aerial photographs
taken 1994. Contours have not been revised.
North American Datum of 1927 (NAD 27). Projection and 10 000-foot ticks:
California coordinate system, zone 5 (Lambert conformal conic)
Blue 1000-meter Universal Transverse Mercator ticks, zone 10

North American Datum of 1983 (NAD 83) is shown by dashed corner ticks
The values of the shift between NAD 27 and NAD 83 for 7.5-minute
intersections are obtainable from National Geodetic Survey NADCON software

Non-National Forest System lands within the National Forest
Inholdings may exist in other National or State reservations
This map is not a legal land line or ownership document. Public lands are
subject to change and leasing, and may have access restrictions; check
with local offices. Obtain permission before entering private lands



1	2	3	4	5	6	7	8

HIGHWAYS AND ROADS

- Interstate (Shield)
- U.S. (Shield)
- State (Shield)
- County (Shield)
- National Forest, suitable for passenger cars (Shield)
- National Forest, suitable for high clearance vehicles (Shield)
- National Forest Trail (Shield)
- Primary highway (Double line)
- Secondary highway (Single line)
- Light-duty road (Dashed line)
- Paved (Solid line)
- Gravel (Dashed line)
- Dir. (Dashed line)
- Composition unspecified (Dashed line)
- Unimproved; 4 wheel drive (Dashed line)
- Trail (Dashed line)
- Gate; Barrier (Dashed line)

QUADRANGLE LOCATION

BALDY MESA, CA
1996
NIMA 2552 IV NW - SERIES V895

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, P.O. BOX 25286, DENVER, COLORADO 80225
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

9 780607 9286 17

CENTER LOOKING NORTH



CENTER LOOKING EAST



FIGURE 3
SITE PHOTOS

CENTER LOOKING SOUTH



CENTER LOOKING WEST



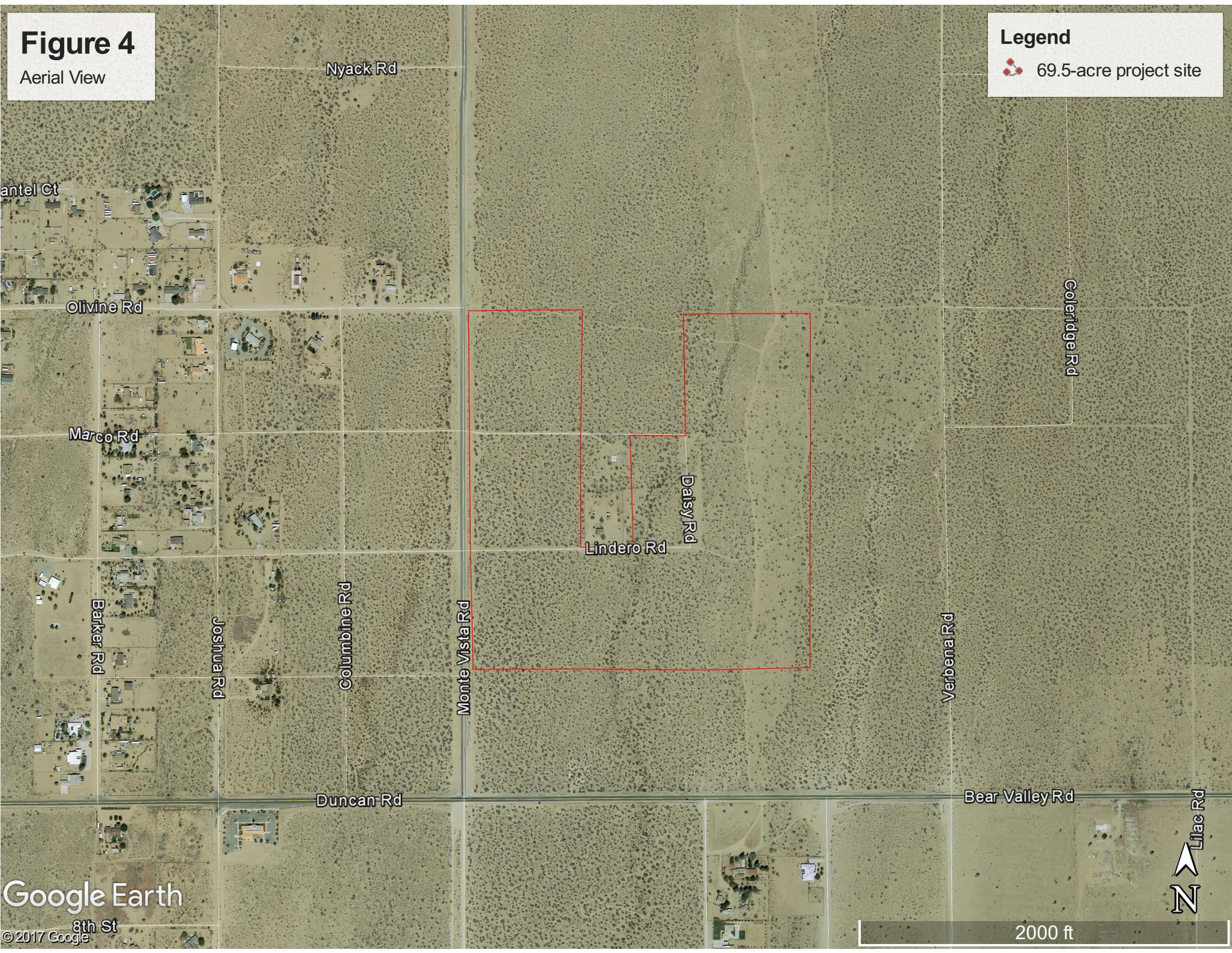
FIGURE 3 Cont.
SITE PHOTOS

Figure 4

Aerial View

Legend

 69.5-acre project site



Google Earth

8th St

© 2017 Google



2000 ft