

HABITAT ASSESSMENT FOR MOHAVE GROUND SQUIRREL

**LILAC DEVELOPMENT LLC &
WELLSPRING DEVELOPMENT LLC
CONDITIONAL USE PERMIT
APN 3128-481-10 & 11**

SAN BERNARDINO COUNTY, CALIFORNIA
(USGS Adelanto, CA Quad.; Township 5 North, Range 5 West, Section 8)

Owner/Applicant

**Lilac Development LLC &
Wellspring Development LLC
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Prepared by:

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(760) 956-9212**

Project No: RCA#2013-61A

September 6, 2013

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EXECUTIVE SUMMARY

A habitat assessment was conducted for the Mohave ground squirrel on a 17.6-acre parcel located north of Mojave Drive in San Bernardino County (Section 8, Township 5 North, Range 5 West). The site supports a disturbed creosote bush (*Larrea tridentata*) community typical of this portion of the Mojave Desert (Figures 1, 2, and 3). Co-dominants consisted of saltbush (*Atriplex canescens*), cottonthorn (*Tetradymia spinosa*), and ephedra (*Ephedra nevadensis*).

The property is located within the known distribution of the Mohave ground squirrel; and a habitat assessment was previously conducted on April 16, 2010. The habitat assessment was performed by Ryan Young, who holds a Memorandum of Understanding (MOU) from California Department of Fish and Wildlife (CDFW) for the species. The site was re-evaluated on September 6, 2013 and it was determined that the habitat present on the site has not changed since 2010. The site supports suitable habitat for the Mohave ground squirrel based on various criteria outlined in the following sections. However, there is a very low probability that the species occurs on the property based on the very low population levels of Mohave ground squirrels in the area and the absence of any documented populations in adjacent habitats. CDFW should be contacted for concurrence with this conclusion.

1.0 PROJECT AND PROPERTY DESCRIPTION

The property is approximately 17.6-acres in size (gross) and is located in the Adelanto area about 1.25 miles west of Highway 395 along Mojave Drive at the intersection of Lilac Road and Mojave Drive in San Bernardino County (T5N, R5W, Section 8) (Figures 1, 2, 3, and 4). The property consists of relatively flat terrain with no prominent ridges or hills with an elevation of approximately 3,050 to 3,060 feet, MSL. The soils consisted primarily of sandy-loam. A drainage easement bisects the site in a north-south direction and a very deep drainage channel is located in the central portion of the site and bisects the site in a north-south direction. The drainage channel is not depicted as a blue line stream channel on the Adelanto, CA USGS quadrangle (Figure 2). Temperatures during the September 6, 2013 surveys were in the low 50's (°F) (AM) to low 60's (°F) (PM) with winds of 0 to 5 mph. Cloud cover was estimated at 0 to 5 percent. No rare or sensitive wildlife habitats were observed, and no distinct wildlife corridors bisect the property.

The project proponent is proposing to construct a retail/commercial development consisting of several buildings and parking lots. Figure 1 depicts the various retail and office buildings that would be built on the site following approval of the application. The legal description is provided below.

THE SOUTHWEST ¼ OF THE SOUTHEAST ¼ OF THE SOUTHEAST ¼ AND THE SOUTHEAST ¼ OF THE SOUTHWEST ¼ OF THE SOUTHEAST ¼ OF SECTION 8, TOWNSHIP 5 NORTH, RANGE 5 WEST, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA.

STEEN
ARCHITECTURE • DESIGN • PLANNING
17777 HESPERIA ROAD, SUITE 200, HESPERIA, CA 92345
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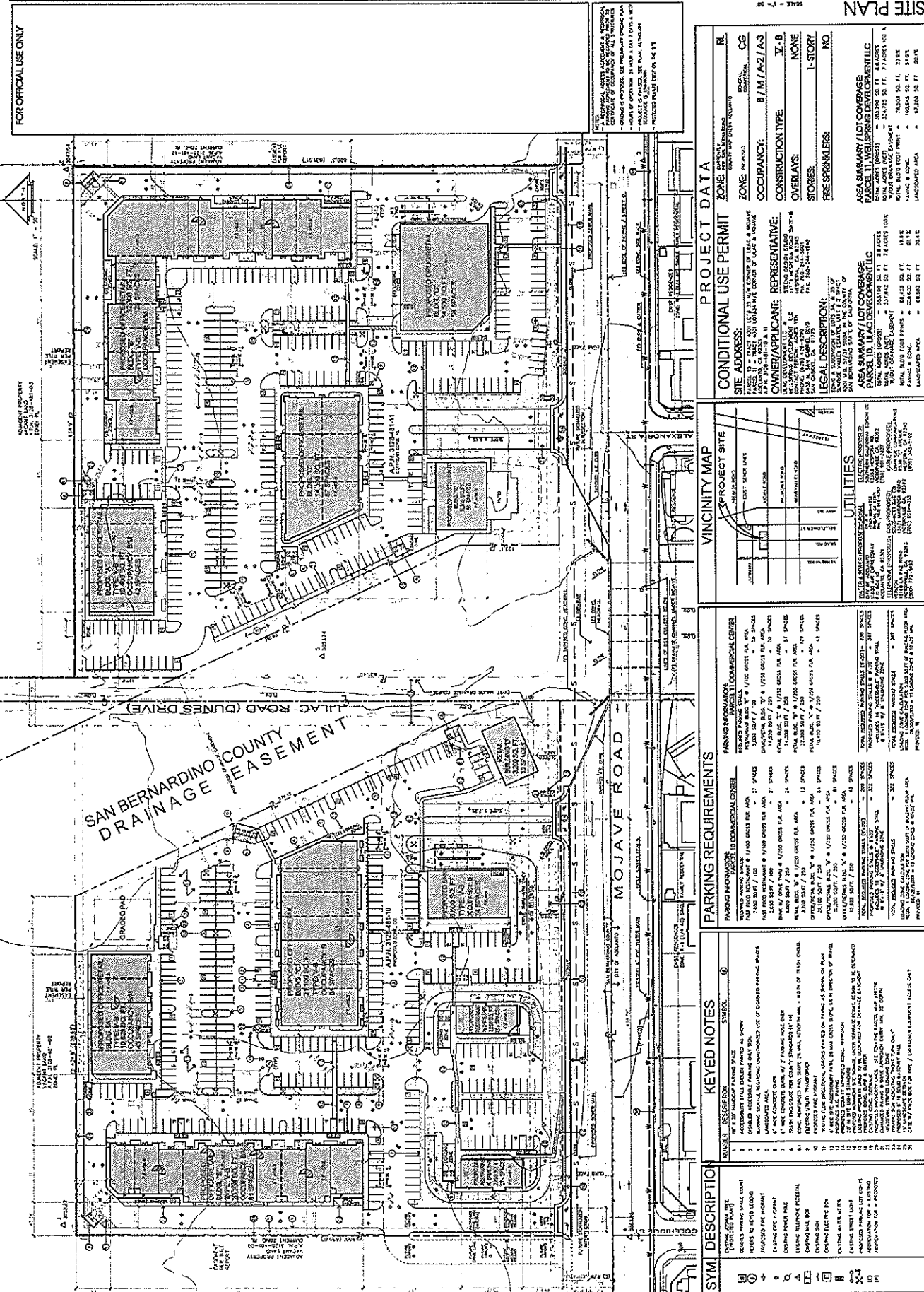
PROJECT: COMMERCIAL DEVELOPMENT
WELLSPRING DEVELOPMENT LLC AND
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17777 HESPERIA ROAD, SUITE 200, HESPERIA, CA 92345
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DATE: MARCH 2020
REVISION:
NO. 1
DATE: 03/11/20
BY: JST
CHECKED: JST

COM-0905
PROJECT NO.

1-1
SHEET NO.

SITE PLAN



PROJECT DATA

CONDITIONAL USE PERMIT ZONE: COMMERCIAL

SITE ADDRESS: 17777 HESPERIA ROAD, SUITE 200, HESPERIA, CA 92345

OCCUPANCY: B/M/A2/A3

CONSTRUCTION TYPE: I-B

OVERLAYS: NONE

STORIES: 1-STORY

FIRE SPRINKLERS: NO

AREA SUMMARY / LOT COVERAGE

AREA SUMMARY: 17777 HESPERIA ROAD, SUITE 200, HESPERIA, CA 92345

LOT COVERAGE: 17777 HESPERIA ROAD, SUITE 200, HESPERIA, CA 92345

AREA SUMMARY: 17777 HESPERIA ROAD, SUITE 200, HESPERIA, CA 92345

LOT COVERAGE: 17777 HESPERIA ROAD, SUITE 200, HESPERIA, CA 92345

VICINITY MAP

PROJECT SITE

17777 HESPERIA ROAD, SUITE 200, HESPERIA, CA 92345

UTILITIES

17777 HESPERIA ROAD, SUITE 200, HESPERIA, CA 92345

PARKING REQUIREMENTS

17777 HESPERIA ROAD, SUITE 200, HESPERIA, CA 92345

KEYED NOTES

17777 HESPERIA ROAD, SUITE 200, HESPERIA, CA 92345

FIGURE 1

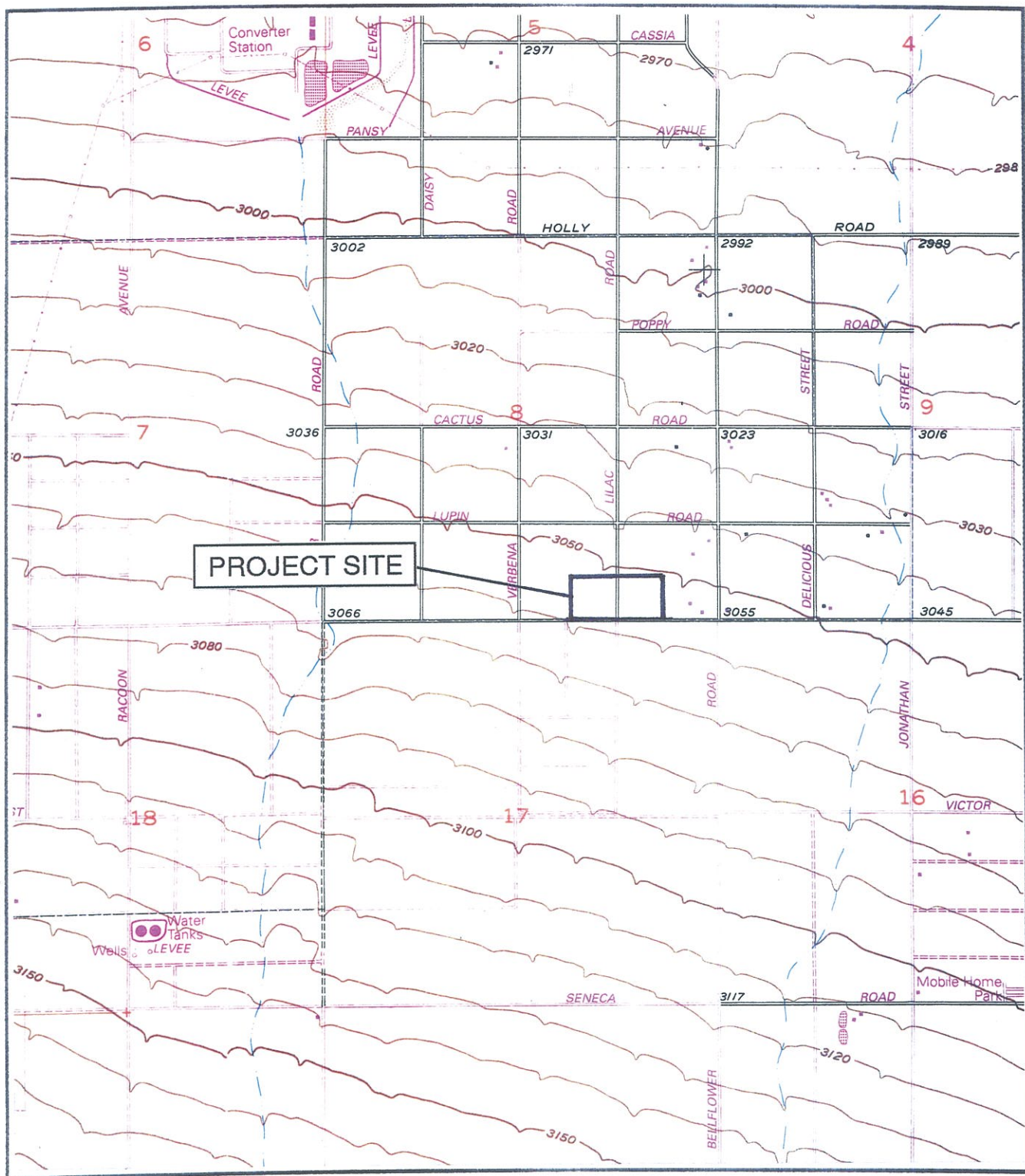
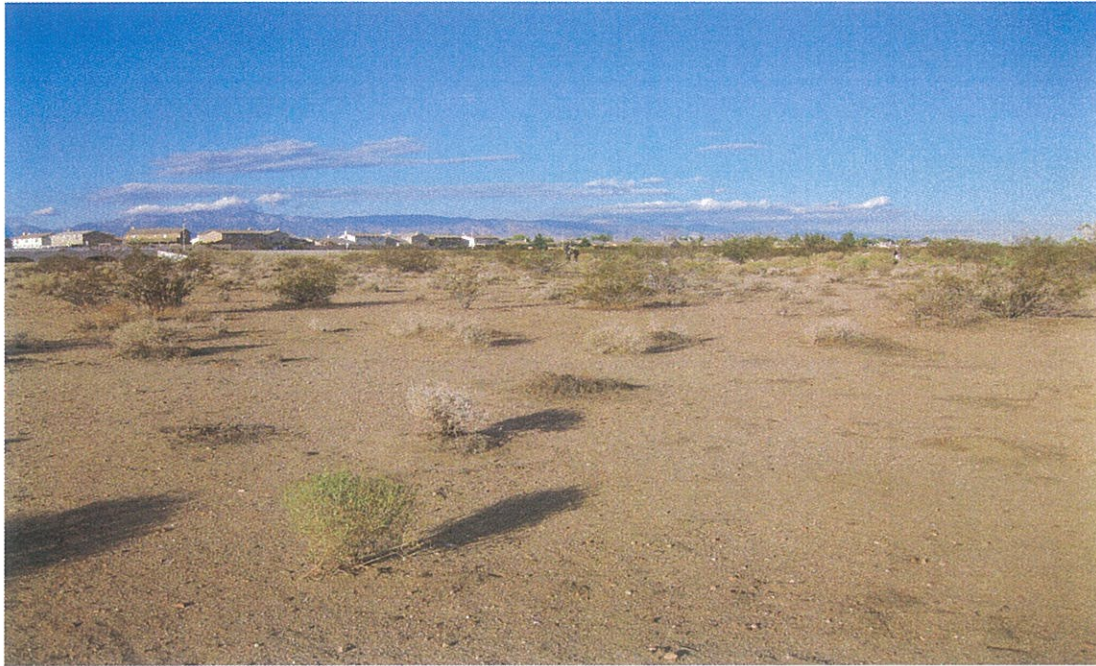


FIGURE 2
PROPERTY LOCATION
 (Lilac Deve. LLC & Wellspring Deve. LLC)
 (Source: USGS Adelanto, CA Quad., 1956)



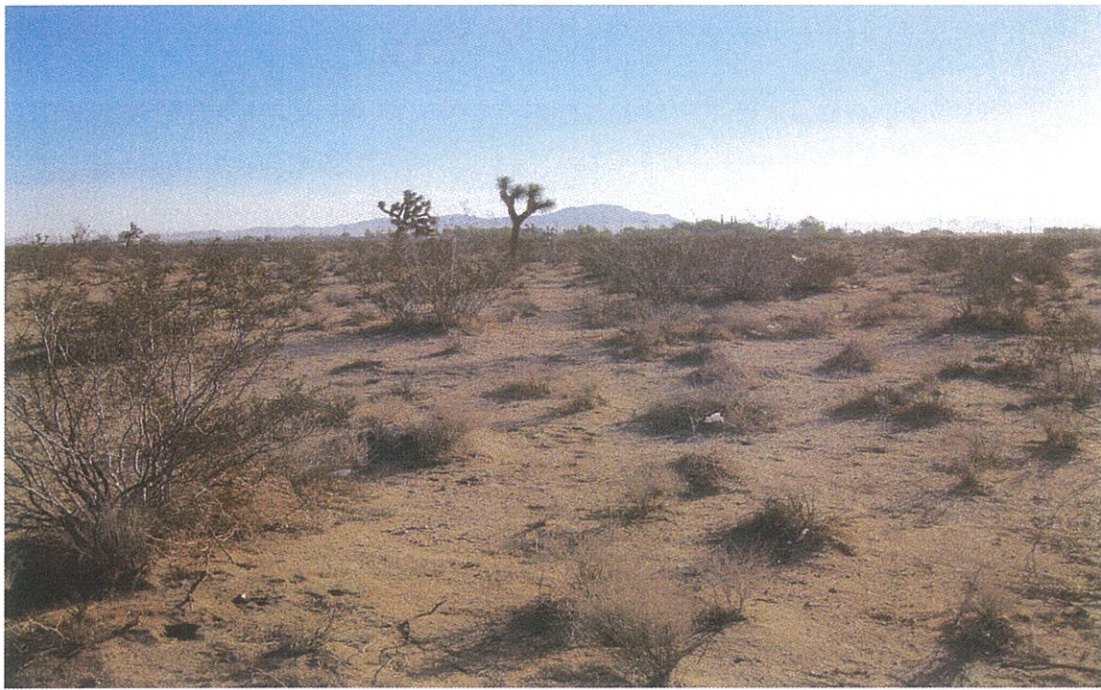


NORTHEAST CORNER LOOKING SOUTHWEST



SOUTHEAST CORNER LOOKING NORTHWEST

FIGURE 3
PHOTOGRAPHS OF SITE
(LILAC DEVELOPMENT & WELLSRING DEVELOPMENT)



SOUTHWEST CORNER LOOKING NORTHEAST



NORTHWEST CORNER LOOKING SOUTHEAST

FIGURE 3, cont.
PHOTOGRAPHS OF SITE
(LILAC DEVELOPMENT & WELLSRING DEVELOPMENT)

2.0 LITERATURE/RECORDS REVIEW FOR MOHAVE GROUND SQUIRREL

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 populations of the Mohave ground squirrel have been documented on the site or in the area surrounding the property. Based on the literature review and evaluation of the CNDDDB database for the Adelanto quadrangle, it was determined that the site is located within the general distribution of the Mohave ground squirrel.

The CNDDDB records (2013) indicate the closest known Mohave ground squirrel (MGS) occurrence is about 3.5 miles northwest of the property (Figure 6) (CNDDDB, 2013). This specimen was observed in 1954 (Occurrence #301) and is currently stored at the Kansas University Museum (CNDDDB, 2007). The second closest occurrence is about one mile to the northeast and was observed in 2005 (Occurrence #318). This juvenile Mohave ground squirrel was trapped and released during a protocol trapping survey performed for another project. The third closest record (#11) from 1977 is two miles to the northeast. This specimen was trapped and is currently stored at the LA County Museum.

The vegetation community present on the site is a disturbed creosote bush (*Larrea tridentata*) community, which is associated with the species (See Section I - 4.0 for a detailed description of the vegetation community.). The Mohave ground squirrel has been listed by CDFW as a threatened species, thereby giving it protection under the California Endangered Species Act. The species is known to occur in the western Mojave Desert in portions of four counties including Inyo, Kern, San Bernardino, and Los Angeles (Clark, D 1991). The distribution of the Mohave ground squirrel is quite limited as compared to the distribution of other ground squirrel species (Hall, R. 1981 in Clark, D 1991). The Mohave ground squirrel is found in several habitat types throughout the Mojave Desert including creosote bush scrub, saltbush scrub, and Joshua tree woodland communities. Degradation and destruction of the species' habitat and isolation of individual populations appear to be the primary factors in the species' decline (Clark, D. 1991).

3.0 METHODOLOGY

A habitat assessment was initially performed on April 16, 2010 by Ryan Young with an additional assessment conducted on September 6, 2013. As per CDFW requirements, the vegetation on the site, as well as in the surrounding area, was evaluated to determine if the dominant plant community in the area was representative of those associated with the Mohave ground squirrel. In addition to the field investigations, a background database search was performed using the CNDDDB Rarefind 3 along with supplemental references for the species, including the CDFG Mohave ground squirrel survey Guidelines. Field investigations included walking meandering transects throughout the site during which a vegetation list was compiled, and the site evaluated for the presence of plants that are frequently utilized by the squirrel for food. All transects were walked at a pace that allowed careful observations along the transect routes for the presence of any small mammal burrows. Additional field notes were recorded regarding native plant assemblages, wildlife sign, and human affects in order to determine the presence or absence of suitable Mohave ground squirrel habitat.

Limitations:

The results of the habitat assessment and the results presented in this report do not constitute authorization for the “take” of the Mohave ground squirrel or any other listed or sensitive wildlife species. The authorization to impact the species can only be granted by CDFW. If Mohave ground squirrels are observed during future project activities, the activities should cease immediately and CDFW should be contacted to discuss mitigation measures which may be required for the species.

4.0 GENERAL BIOLOGICAL SURVEY RESULTS

The site supports a disturbed creosote bush (*Larrea tridentata*) community with co-dominants saltbush (*Atriplex canescens*), ephedra (*Ephedra nevadensis*), and cotton-thorn (*Tetradymia spinosa*) also present (Figures 3 and 4). A few other perennials were also observed such as Joshua tree (*Yucca brevifolia*), burrobrush (*Franseria dumosa*), and rabbitbrush (*Chrysothamnus depressus*). A few annuals were also including erodium (*Erodium texanum*), bunchgrass (*Phleum pretense*), schismus (*Schismus barbatus*), and buckwheat (*Eriogonum fasciculatum*). Table 1 provides a compendium of plants observed on the site and in the ZOI (Appendix A).

The only mammals observed included Jackrabbits (*Lepus californicus*) and antelope ground squirrels (*Ammospermophilus leucurus*); although, coyote scats (*Canis latrans*) were also present. Merriam's kangaroo rats (*Dipodomys merriami*) are very common in the region and may also inhabit the site. Reptiles observed included side-blotched lizards (*Uta stansburiana*) and western whiptail lizards (*Cnemidophorus tigris*). Desert spiny lizards (*Sceloporus magister*) are also common in the region and may inhabit the site. Ravens (*Corvus corax*) and sage sparrows (*Amphispiza belli*) were the only birds identified during the September 6 surveys. Table 2 provides a compendium of wildlife species observed on the property (Appendix A).



FIGURE 4
BIOLOGICAL RESOURCES MAP
(LILAC DEVELOPMENT & WELLSPRING DEVELOPMENT)

5.0 RESULTS – MOHAVE GROUND SQUIRREL

The site is a rectangular-shaped polygon approximately 17.6-acres in size located north of Mojave Drive in the Adelanto area of San Bernardino County (Section 8, Township 5 North, Range 5 West) (Figures 1 and 2). The vegetation community consists of a somewhat disturbed creosote bush community and has been previously described in Section 4.0. The topography consists of relatively flat terrain with no prominent topographic features (Figures 2, 3, and 4).

Based on the results of the habitat assessment, as well as the literature review search, it has been determined that the site supports marginal suitable habitat for the Mohave ground squirrel. However, there is a very low probability that the species inhabits the site based on the low population levels in the region, the relatively small size of the site, and the absence of any documented sightings in the immediate area (CNDDDB, 2013). CDFW should be contacted for concurrence with this conclusion. Regardless of the results of the habitat assessment, Mohave ground squirrels cannot be taken under State law. The survey report and any mitigation included do not constitute authorization for incidental take of the species. If the species is observed during future site activities, all on-site activities should cease immediately and CDFW should be contacted.

6.0 IMPACTS AND RECOMMENDATIONS

Construction of the proposed project is not expected to have a direct or indirect impact on the species. The site does support marginal suitable habitat for the species; however, it is very unlikely the species occurs on the site based on the absence of any documented sightings in the immediate area, low population levels in the region, and the small size of the site. CDFW should be contacted for concurrence with this conclusion. If the site is modified by grading or otherwise disturbed prior to project approval which results in the loss of suitable habitat for the species, CDFW and the County Building and Safety Department should be notified. Such action prior to project approval will violate the State endangered species law and may be considered grounds for denial of the project. Mitigation and restoration plans will also be required under such actions.

7.0 PROPOSED MITIGATION MEASURES

Based on the results of the assessment, no mitigation measures are proposed at the present time. However, if the species is observed during future development activities, CDFW should be contacted to discuss mitigation measures which may be required.

8.0 REFERENCES

- California Department of Fish and Game
1990 California's Wildlife, Volumes 1, 2, and 3. Sacramento.
- California Department of Fish and Game
2013 Natural Diversity Data Base. Sacramento
- Holing, Dwight
1998 California Wild Lands. Chronical Books. San Francisco, CA. 211 pp.
- Holland, Robert F.
1986 Preliminary Description of the Terrestrial Natural Communities of California. Prepared for the California Natural Diversity Data Base. California Department of Fish and Game. Sacramento, California. 160 pp.
- Johnson, H.
1976 vegetation and Plant Communities of Southern California Deserts- a functional view. In Symposium proceedings: Plant communities of Southern California. June Latting, editor. California Native Plant Society, Spec. No. 2 Berkeley, CA.

TABLES

Mohave Ground Squirrel Occurrence Table

Mohave ground squirrel occurrences within five miles of the site based on California Natural Diversity Data Base (2013).

Name	Listing Status	Habitat Requirements	Presence/Absence	Comments
Mohave ground squirrel (<i>Spermophilus mohavensis</i>)	Fed: None State: T	Desert scrub	Site does supports suitable habitat for the species. Native vegetation evenly distributed throughout the site.	A. Occurrence #301; 3.5 miles northwest of site. B. Occurrence #318; one mile northeast of site. C. Occurrence #11; two miles northeast of site.

LIST OF FIGURES

**Vicinity Map
Mohave Ground Squirrel Distribution Map**

Southern Range of the Mohave Ground Squirrel

Edwards AFB

Rosamond

Barstow

Helendale

Adelanto

Victorville--Hesperia--Apple Valley

Wrightwood

PROJECT SITE

Legend

MGS Range

Crestline

Scale

0 2.5 5 10 Miles

Map Produced by
Phoenix Ecological Consulting
Source: West Mojave Plan

Rosamond

Adelanto

Wrightwood

SOLO

MGS Range

Food Type	Number of people
Vegetables	2.5
Fruits	5
Grains	7.5
Meat	10

Map Produced by
Phoenix Ecological Consulting
Source: West Mojave Plateau

SITE PHOTOGRAPHS



CENTER OF PROPERTY LOOKING WEST



CENTER OF PROPERTY LOOKING EAST

SITE PHOTOGRAPHS
(LILAC DEVELOPMENT & WELLSRING DEVELOPMENT)

APPENDIX A
Flora and Fauna Compendia

Table 1 - Plants observed on the site.

Common Name	Scientific Name	Location
Erodium	<i>Erodium texanum</i>	On-site and off-site
Schismus	<i>Schismus barbatus</i>	“
Buckwheat	<i>E. fasciculatum</i>	“
Brome grass	<i>Bromus sp.</i>	“
Fiddleneck	<i>Amsinckia tessellata</i>	“
Rabbitbrush	<i>Chruysothanus depressus</i>	“
Saltbush	<i>Atriplex canescen</i>	“
Creosote bush	<i>Larrea tridentata</i>	“
Yellow-green matchweed	<i>Gutierrezia sarothrae</i>	“
Joshua tree	<i>Yucca brevifolia</i>	“
Bunchgrass	<i>Phleum sp.</i>	“
Burrobush	<i>Franseria dumosa</i>	“

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

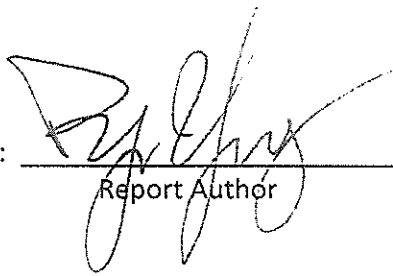
Common Name	Scientific Name	Location
Common raven	<i>Corvus corax</i>	Observed on-site.
Sage sparrow	<i>Amphispiza belli</i>	“
Mourning dove	<i>Zenaida macroura</i>	“
Horned lark	<i>Eremophila alpestris</i>	“
Western whiptail lizard	<i>Cnemidophorus tigris</i>	May occur on site.
Side-blotched lizard	<i>Uta stansburiana</i>	Observed on-site.
Antelope ground squirrel	<i>Ammospermophilus leucurus</i>	May occur on-site.
Desert spiny lizard	<i>Sceloporus magister</i>	“
California ground squirrel	<i>Spermophilus beecheyi</i>	Occurs in area
Coyote	<i>Canis latrans</i>	Scats observed
Merriam's kangaroo rat	<i>Dipodomys mohavensis</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, LLC, or which are common species in the region.

Certification:

I hereby certify that the statements furnished above and in the attached exhibits present the data and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this report 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: September 6, 2013

Signed: 
Report Author