HABITAT ASSESSMENT
for
BURROWING OWL &
NARROW ENDEMIC PLANT SPECIES

GOLDEN EAGLE MURRIETA APARTMENTS
APN 908-360-015 & 908-360-016

MURRIETA, CALIFORNIA
(USGS Murrieta, CA Quad., Township 7 South, Range 3 West, Section 13)

Owner/Applicant

Golden Eagle Multi-Family Properties, LLC
6201 Oak Canyon Road, Suite 250
Irvine, CA 92618

Prepared by:

RCA Associates, LLC
15555 Main Street, #D4-235
Hesperia, California 92345
Principal Investigator
Randall C. Arnold, Jr.
(760) 956-9212
Report prepared by: Randall Arnold
(760) 956-9212

Project No: RCA#2013-11

March 25, 2013

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EXECUTIVE SUMMARY

The project proponent is proposing to construct a multi-family development on a 7.47-acre parcel located east of the intersection of Clearbrook Drive and Via Princessa in the City of Murrieta, California (Section 13, Township 7 South, Range 3 West). The majority of the site is currently a portion of the SCGA Golf Course (APN 908-360-015). An existing drainage channel is located along the northern portion of the site and the vegetation within this area consists of various grass species typically found on golf courses and as well as numerous trees. A small portion (~0.7 acres; APN 908-360-016) is located directly north of the drainage channel and supports a disturbed grassland community. This area was previously impacted during construction of the single-family development north of the property. Section 4.0 provides a discussion of the vegetation and wildlife occurring in these two areas.

The entire site supports marginal habitat for burrowing owls based on the Phase I survey (habitat assessment) conducted on the site. No owls were observed during the Phase II survey (burrow survey); however, a few occupiable burrows were noted in the 0.7-acre portion north of the drainage channel and some of the rock placed along the edge of the channel may provide suitable areas for burrowing owls. Based on the absence of any owls or owl sign (i.e., whitewash, castings, etc.), no additional surveys are recommended at the present time.

As noted above, the majority of the site (6.77-acres) is currently utilized as part of the SCGA Golf Course and does not support suitable habitat for any of the narrow endemic plant species. The small area north of the drainage channel (0.7-acres) was previously disturbed during construction of the numerous houses to the north and currently supports a disturbed grassland area. Consequently, this area is also not expected to support any sensitive plants. Section 2.0 provides a discussion of the various narrow endemic plant species which have been documented in the region.

Note: If burrowing owls are observed on the site in the future, the owls should not be removed, harassed, or in anyway disturbed regardless of the results of this survey. Disturbing burrowing owls does constitute a violation of State and City regulations. If owls are encountered during future development activities, all activities should cease and California Department of Fish and Game (CDFG) and the City should be notified. In addition, if any populations of any sensitive plant species are observed in the future, CDFG and the City should also be contacted to discuss mitigation measures which may be required.

1.0 PROJECT AND PROPERTY DESCRIPTION

The property consists of two portions which total about 7.47-acres. Approximately 6.77-acres of the site are located directly south of an existing drainage channel and the remainder (0.7-acres) is located north of the channel (Figures 1, 2, 3, and 4). The property is located east of the intersection of Clearbrook Drive and Via Princessa and is bordered on the west by a church and on the south by Murrieta Hot Springs Road. A single-family development is north of the property and the SCGA Golf Course is located to the east.

The site is located in the City of Murrieta (Township 7 South, Range 3 West, Section 13) at an elevation ranging from about 1160 to 1170 feet (MSL). Soils have been significantly disturbed by construction of the golf course in the southern portion and construction of the numerous houses north of the northern portion. However, the soils appear to be primarily sandy loam with some small gravels. No water resources are depicted on the USGS Murrieta Quadrangle; however, a drainage channel is located along the northern edge of the site.

No sensitive wildlife habitats, sensitive wildlife species, or significant wildlife corridors were observed on the property; however, the drainage channel does provide some dense stands of vegetation which may provide some cover for small mammals and birds which may move back and forth along the channel. Weather conditions during the March 12, 2013 survey consisted of winds of 0 to 5 mph, temperatures in the low 50's to low 70's (AM, °F) with about 5 percent cloud coverage. Section 2.0 provides a discussion of burrowing owl populations and narrow endemic plant species known to occur in the region, and 4.0 provides a detailed discussion of the general biological resources.

The proponent is proposing to construct a multi-family development including streets, parking lots, sidewalks, and open space on 6.77-acres. A tennis court and other outdoor facilities will be constructed within the 0.7 acre portion north of the channel (Figure 5).

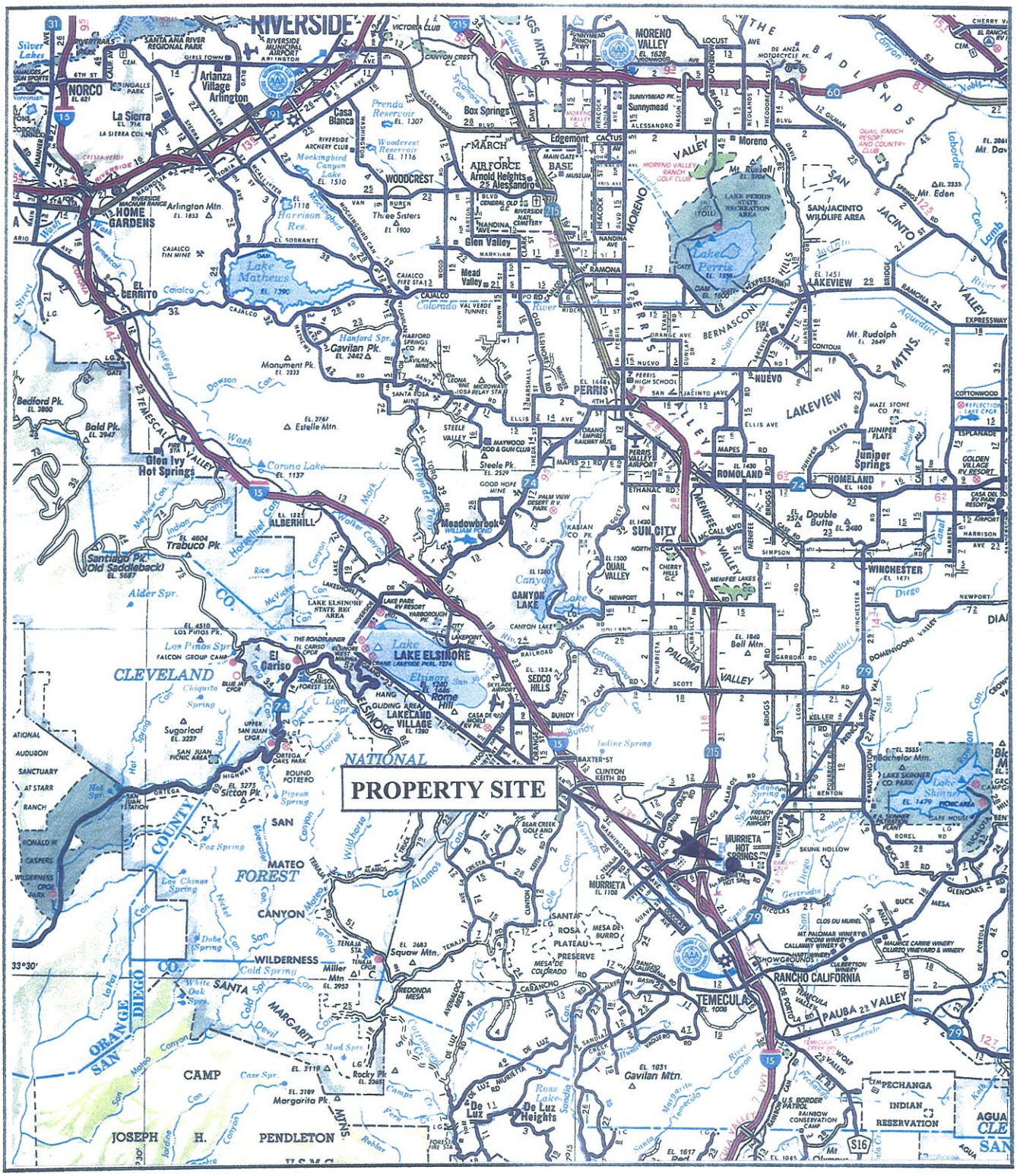


FIGURE 1
VICINITY MAP
(Golden Eagle Murrieta Apartments, Murrieta, CA)
(Source: USGS Murrieta, CA Quad., 1953)

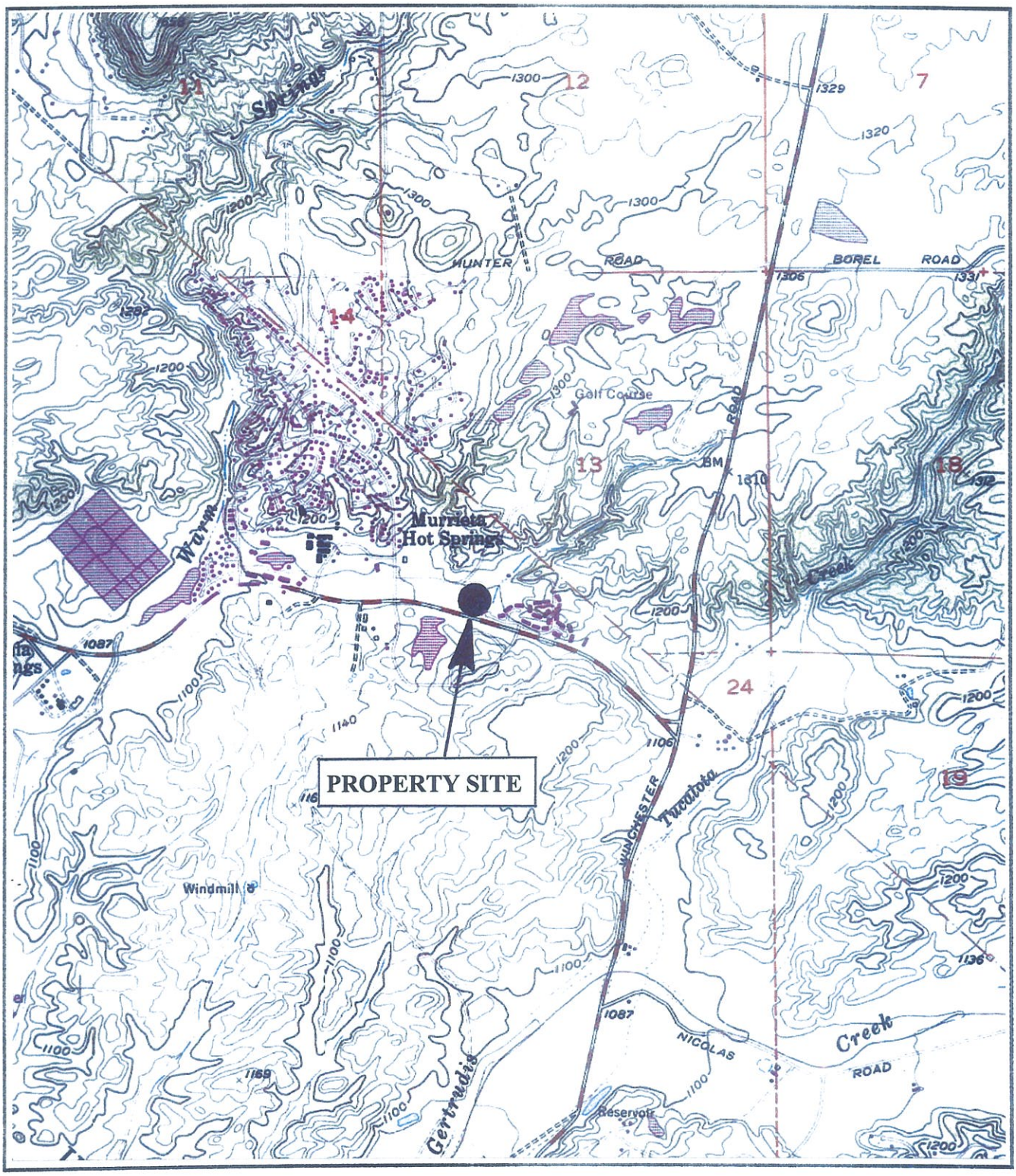


FIGURE 2
PROPERTY LOCATION
(Golden Eagle Murrieta Apartments, Murrieta, CA)
(Source: USGS Murrieta, CA Quad., 1953)

EASTERN BOUNDARY OF 6.77 ACRE PORTION (APN 908-360-015) LOOKING WEST

WESTERN BOUNDARY OF 6.77 ACRE PORTION (APN 908-360-015) LOOKING EAST

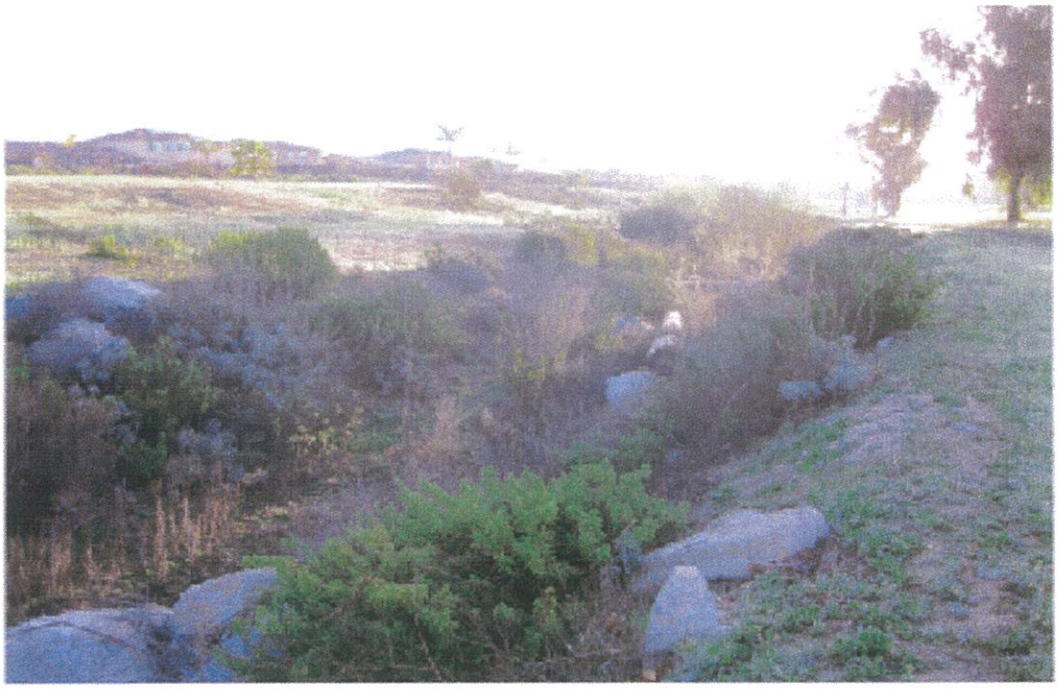
FIGURE 3
Photographs of Site
(Golden Eagle Murrieta Apartments, Murrieta, CA)

WESTERN BOUNDARY OF 0.7 ACRE PORTION (APN 908-360-016) LOOKING EAST

EASTERN BOUNDARY OF 0.7 ACRE PORTION (APN 908-360-016) LOOKING WEST

FIGURE 3, cont.
Photographs of Site
(Golden Eagle Murrieta Apartments, Murrieta, CA)

EASTERN BOUNDARY OF DRAINAGE CHANNEL LOOKING WEST



WESTERN BOUNDARY OF DRAINAGE CHANNEL LOOKING EAST

FIGURE 3, cont.
Photographs of Site
(Golden Eagle Murrieta Apartments, Murrieta, CA)

2.0 LITERATURE AND RECORD REVIEW - BURROWING OWL AND NARROW ENDEMIC PLANT SPECIES

As part of the environmental process, California Department of Fish and Game (CDFG) and U.S. Fish and Wildlife Service (USFWS) data sources were reviewed prior to initiation of field surveys to determine if burrowing owls (*Athene cunicularia*) 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 site is located within the general distribution of the burrowing owl. In addition, populations of owls have been identified in the immediate surrounding area according to CNDDB (2013). The nearest documented owl populations are about 1.5 miles southeast and northeast of the site (Occurrences #460 & #684) according to CNDDB (2013). Numerous other owl colonies have also been documented in the surrounding region between five and ten miles of the property (CNDDB, 2013)

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 rodent burrows for roosting and nesting.

There are five narrow endemic sensitive plants which have been documented in the region including many-stemmed dudleya (*Dudleya multicaulis*), San Miquel savory (*Satureja chandleri*), Hammitt's clay-cress (*Sibaropsis hammittii*), California orcutt grass (*Orcuttia californica*), and spreading navarretia (*Navarretia fossalis*). Of these five species, only the California orcutt grass (Occurrence #16) and spreading navarretia (Occurrences # 44 & 62) have been documented within about five miles west of the property (CNDDB, 2013).

Many-stemmed dudleya, San Miquel savory, and Hammitt's clay-cress are typically found in chaparral, coastal sage scrub, and native grasslands; whereas, California orcutt grass occurs in mud-flats and valley grassland communities. Spreading navarretia occurs in freshwater marshes and vernal pools.

3.0 METHODOLOGY

Burrowing Owls: A Phase I survey was conducted for burrowing owls by Randall Arnold on March 12, 2013 to determine if suitable habitat was present on the site. Burrowing owls are typically found in a wide variety of habitats including disturbed grassland and agricultural areas; therefore, a Phase II survey was also conducted to determine if any owls or occupiable burrows were present on the site. As required by survey protocol, 30 meter, parallel belt transects were walked in a north-south direction until the property 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; however, ZOI surveys were limited to the area directly west and northeast of the site. No additional ZOI surveys were conducted due to the presence of existing developments.

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 owl habitat. Surveys were performed on the site from about 0630 to about 0930 hours. Phase I and Phase II surveys combined with 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 March survey were in the low 50's to low 70's (°F), wind speeds of about 0 to 5 mph, and cloud coverage of about 5 percent. No precipitation was recorded during the survey.

Narrow Endemic Plant Species: The small area (0.7-acres) north of the drainage channel where a tennis court and other outdoor facilities will be located was evaluated for the presence of suitable habitat for the five narrow endemic plant species which have been documented in the region. Meandering transects were walked throughout the area during which the habitat was evaluated and the plants observed were recorded. ZOI transects were also conducted in the area immediately east of the site to evaluate the habitat. No focused surveys were conducted for the narrow endemic plants.

Limitations: The results of this report do not constitute authorization for the "take" of burrowing owls or any other listed or sensitive wildlife species. The authorization to impact the burrowing owl can only be granted by CDFG. If owls are observed during future project activities, project activities should cease immediately and CDFG and San Bernardino County should be contacted to discuss mitigation measures which may be required for the species.

4.0 GENERAL BIOLOGICAL SURVEY RESULTS

The portion of the site south of the channel (APN 908-360-015) has been significantly disturbed by the installation of a golf course (SCGA Golf Course) (Figure 4). The 6.77-acre area supports a few grass species (*Poa* sp. & *Bromus* sp.) typically planted on golf courses. About 25 eucalyptus trees (*Eycalyptus globulus*) are also scattered throughout the area along with two pine trees (*Pinus* sp.). A few palm trees (*Washingtonia* sp.) were also noted (Figure 3).

Vegetation within the drainage channel was somewhat more varied and included black sage (*Salvia mellifera*), willow (*Salix* sp.), yerba santa (*Eriodictyon trichocalyx*), sedge (*Carex* sp.), and cattail (*Typha angustifolia*) (Figure 3). Great basin sagebrush (*Artemisia tridentata*), salt cedar (*Tamarix* sp.), tree tobacco (*Nicotiana glauca*), acacia (*Acacia* sp.), and cottonwood (*Populus* sp.).

The 0.7 acre portion north of the channel supports a disturbed grassland area and is dominated by brome grasses (*Bromus* sp.), erodium (*Erodium texanum*), and fiddleneck (*Amsinckia tessellata*) (Figures 3 and 4). A few small palms (*Washingtonia* sp.) were also noted. Table 1 provides a compendium of plants observed on the property (Appendix A).

Only a few wildlife species were identified during the field investigations conducted on March 12, 2013 from 0630 to 0930 hours. Some of the birds observed included mourning doves (*Zenaida macroura*), ravens (*Corvus corax*), song sparrows (*Melospiza melodia*), Brewer blackbirds (*Euphagus cyanocephalus*), house finches (*Carpodacus mexicanus*), and western kingbirds (*Sialia Mexicana*). Cottontail rabbits (*Sylvilagus auduboni*) were the only mammals observed although pocket gopher's (*Thomomys bottae*) may inhabit the area and a few coyote scats (*Canis latrans*) were also identified. No reptiles were observed, although, side-blotched lizards (*Uta stansburiana*), western whiptail lizards (*Cnemidophorus tigris*), and fence lizards (*Sceloporus occidentalis*) are relatively common in the area and may occur on the property. No distinct wildlife corridors were identified on the site or in the immediate surrounding area; however, the drainage channel may provide some habitat for movement of wildlife. Table 2 (Appendix A) provides a compendium of wildlife species observed on the site and other species known to occur in the region.

FIGURE 4
Aerial Photograph of Site
(Golden Eagle Murrieta Apartments, Murrieta, CA)
(Not to Scale)

5.0 RESULTS

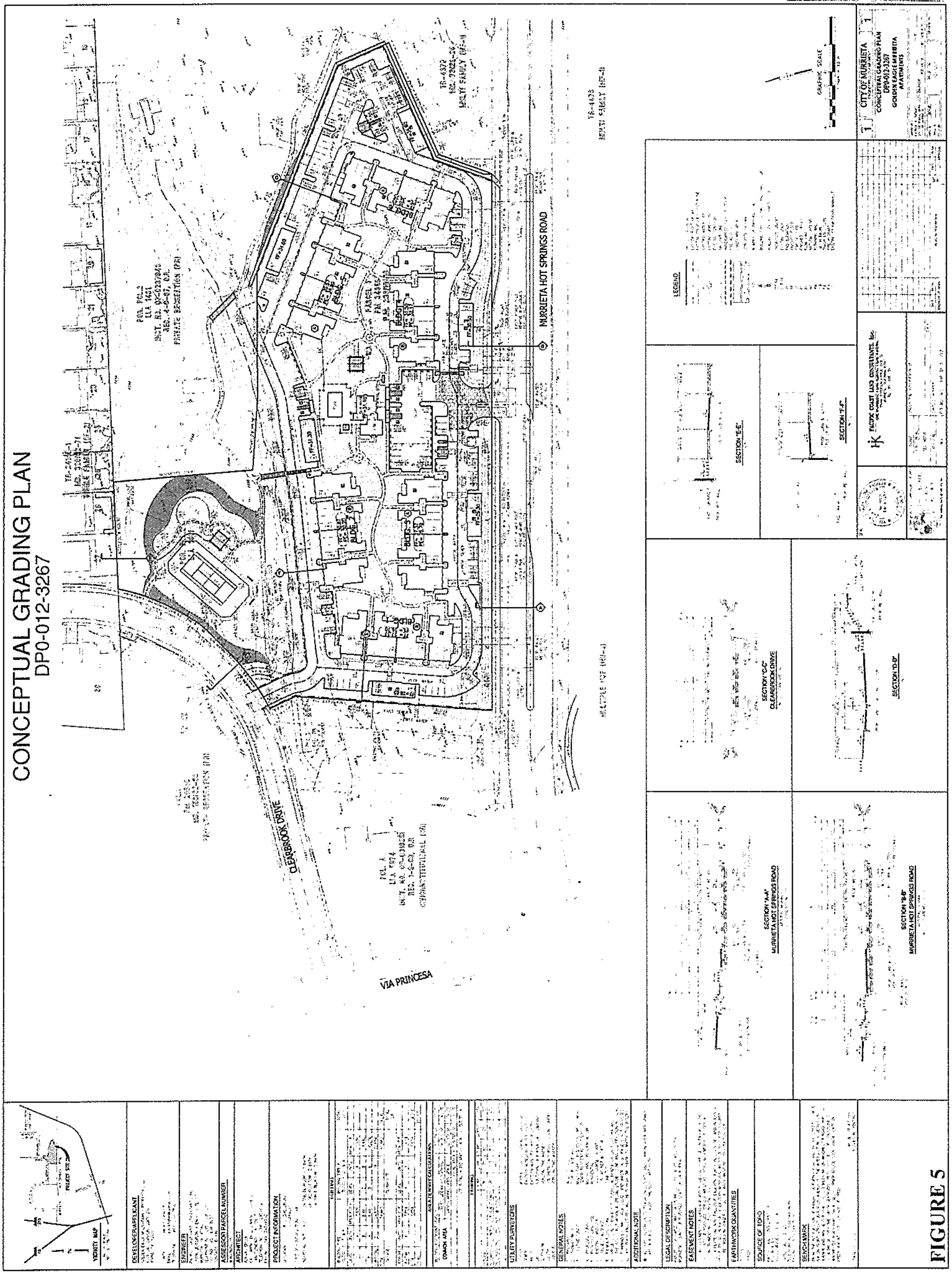
Burrowing Owl: The entire site supports very marginal habitat for burrowing owls based on the results of the surveys, and there are no documented owl colonies within one-mile of the property (Appendix A). No occupiable burrows were identified on the 7.47 acre property or in adjacent areas to the west or northeast. However, some of the large rocks and boulders along the channel may provide some potential cavities for owls; although, no owls or owl sign (whitewash, castings, etc.) were observed anywhere along the channel. Based on the results of the field investigations, no additional surveys (i.e., nesting season survey, etc.) were deemed necessary (The California Burrowing Owl Consortium, April 1993 & Staff Report on Burrowing Owl Mitigation, March 7, 2012).

Narrow Endemic Plant Species: Based on the habitat assessment performed on the 0.7 acre parcel directly north of the channel, it was determined that the area does not support prime habitat for any of the narrow endemic plants. Many-stemmed dudleya, San Miquel savory, and Hammitt's clay-cress typically occur in areas which support chaparral and coastal sage scrub and the absence of these habitats from the site eliminates the possibility of these three species inhabit the site. Furthermore, California orcutt grass is limited to dry mudflats and native grasslands and is not expected to occur on the site. The spreading navarretia is found in freshwater marshes and vernal pools and the absence of the habitats significantly reduces the possibility of the species being found on the site. Although, there is some riparian habitat along the channel, the probability of the species occurring in the drainage channel is very low.

6.0 IMPACTS AND RECOMMENDATIONS

Burrowing owl: Construction of the proposed project is not expected to have any direct or indirect impacts on burrowing owls or occupied habitat based on the results of the field investigations conducted in March 12, 2013. No additional investigations are recommended at this time; however, CDFG and the City may require the proponent to conduct a 30-day pre-construction survey immediately prior to the start of future construction activities. This survey will be required to determine if any owls have moved onto the site since the March 12, 2013 surveys.

Narrow Endemic Plant Species: As noted in Section 5.0, the 0.7-acre portion of the site north of the existing channel was evaluated for the potential presence of any narrow endemic plants, as well as the potential habitat. The site does not support any habitats typically associated with narrow endemic plants. As previously noted, the 0.7-acre area was disturbed during construction activities associated with the existing residential development directly north of the site. Therefore, the proposed multi-family development will not impact any narrow endemic plant species.


CONCEPTUAL GRADING PLAN
DP0-012-3267
MURRIETA HOT SPRINGS ROAD
CLEARBROOK DRIVE
VIA PRINCESA
LEGEND
SECTION "A-A"
MURRIETA HOT SPRINGS ROAD
SECTION "B-B"
MURRIETA HOT SPRINGS ROAD
SECTION "C-C"
CLEARBROOK DRIVE
SECTION "D-D"
SECTION "E-E"
SECTION "F-F"
GRAPHIC SCALE
CITY OF MURRIETA
CONCEPTUAL GRADING PLAN
DP0-012-3267
GOLDEN EAGLE MURRIETA
APARTMENTS
PACIFIC COAST LAND CONSULTANTS, Inc.
VICINITY MAP
PROJECT SITE
DEVELOPER/APPLICANT
ENGINEER
ASSESSOR PARCEL NUMBER
ARCHITECT
PROJECT INFORMATION
UTILITY PURVEYORS
GENERAL NOTES
ADDITIONAL NOTE
LEGAL DESCRIPTION
EASEMENT NOTES
EARTHWORK QUANTITIES
SOURCE OF TOPO
BENCH MARK
FIGURE 5

7.0 PROPOSED MITIGATION MEASURES

The site does not support any burrowing owls at the present time. However, if owls are observed on the site during future construction activities, CDFG and the City should be contacted to discuss mitigations which may be required. CDFG is the only agency which can grant authorization for the "take" of any sensitive species, including the burrowing owl. In addition, no narrow endemic plant species are expected to occur on the site; therefore, no mitigation measures are recommended

8.0 REFERENCES

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APPENDIX A

Burrowing Owl & Narrow Endemic Plant Species Occurrences

Burrowing Owl and Narrow Endemic Plant Species occurrences in surrounding region based on California Diversity Data Base (2013). (SC = Species of special concern)

Name	Listing Status	Habitat Requirements	Presence/Absence	Comments
Burrowing owl (*Athene cuniculuria*)	CDFG: SC	Various: desert scrub, agricultural lands, disturbed areas	Site support very marginal habitat.	A. Occurrence #460; 1.5 miles to SE. B. Occurrence #684; 2-miles to NE. C. Occurrence #963; 5-miles to NW. D. Occurrence #1202; 5-miles to north. E. Occurrence #1513; 5-miles to north. F. Occurrence 1514; 5-miles to north. G. Occurrence #1515; 2-miles to south.
Many-stemmed (*Dudleya multicaulis*)		Chaparral, coastal sage scrub	Not expected to occur onsite due to absence of habitat.	No documented populations within 5-miles of site.
San Miquel savory (*Satureja chandleri*)		"	"	"
Hammit's clay-cress (*Sibaropsis hammittii*)		"	"	"
California Orcutt grass (*Orcuttia californica*)	CNPS: List 1B.1	Mud-flats and Valley grasslands.	"	A. Occurrence #16; 5-miles to west. B. Occurrence #18; 2-miles to south.
Spreading Navarretia (*Navarretia fossalis*)	CNPS: List 1B.1	Freshwater marshes.	"	Occurrence #62; 1.5-miles to south.

APPENDIX B

Flora and Fauna Compendia

Table 1 - Plants observed on the site and/or adjacent areas.

Common Name	Scientific Name	Location
Erodium	*Erodium texanum*	On-site
Buckwheat	*E. fasciculatum*	"
Brome grass	*Bromus sp.*	"
Bluegrass	*Poa* sp.	"
Fiddleneck	*Amsinckia tessellata*	"
Rabbitbrush	*Chrysothamnus depressus*	"
Black sage	*Salvia mellifera*	"
Saltbush	*Atriplex canescens*	"
Great basin sagebrush	*Artemisia tridentata*	"
Eucalyptus	*Eucalytus globulus*	"
Pine	*Pinus* sp.	"
Palm trees	*Washingtonia* sp.	"
Cattail	*Typha angustifolia*	Drainage channel
Willow	*Salix* sp.	"
Salt cedar	*Tamarix* sp.	"
Tree tobacco	*Nicotiana glauca*	"
Cottonwood	*Populus* sp.	"
Acacia	*Acacia* sp.	Adjacent areas

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

Common Name	Scientific Name	Location
Common raven	*Corvus corax*	Observed on-site.
Song sparrow	*Melospiza melodia*	"
Mourning dove	*Zenaida macroura*	"
Western kingbird	*Tyrannus verticalis*	"
Raven	*Corvus corax*	"
Brewer's blackbird	*Euphagus cyancephalus*	"
House finch	*Carpodacus mexicanus*	"
Desert cottontail	*Sylvilagus auduboni*	"
Western fence lizard	*Sceloporus occidentalis*	"
Western whiptail lizard	*Cnemidophorus tigris*	May occur in area.
Side-blotched lizard	*Uta stansburiana*	"
Pocket gopher	*Thomonys bottae*	"
Desert spiny lizard	*Sceloporus magister*	"
California ground squirrel	*Spermophilus beecheyi*	"
Coyote	*Canis latrans*	"
Merriam's kangaroo rat	*Dipodomys mohavensis*	

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 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: 3-25-2013 Signed: _____
Report Author

Field Work Performed By: Randall Arnold
Senior Biologist