

Appendix B.2



**SUN LAKES BOULEVARD REALIGNMENT PROJECT
LOS ANGELES POCKET MOUSE FOCUSED SURVEY**



City of Banning and Unincorporated Riverside County, California

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TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	PROJECT BACKGROUND/SITE DESCRIPTION.....	1
3.0	BACKGROUND ON THE LOS ANGELES POCKET MOUSE	1
4.0	METHODOLOGY.....	2
5.0	RESULTS	3
6.0	REFERENCES	5

TABLES

TABLE 1. SURVEY DATA	12
TABLE 2. SURVEY RESULTS.....	12

LIST OF APPENDICES

Appendix A	Figures
Appendix B	Site Photographs

1.0 INTRODUCTION

At the request of the Albert A. Webb and Associates (Webb), WSP USA Inc. (WSP) conducted a focused survey for the Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) on the Sun Lakes Boulevard Realignment Project site (project). The project is in the city of Banning, Riverside County, California (Figure 1) and includes the extension of Sun Lakes Boulevard eastward from its current termination point at Highland Home Road to the anticipated connection at West Lincoln Street.

Portions of the project site lie within the Western Riverside County Multiple-Species Habitat Conservation Area (MSHCP) survey area for the Los Angeles pocket mouse and potential habitat for the species is present.

2.0 PROJECT BACKGROUND/SITE DESCRIPTION

The project is generally located south of Interstate 10, west of Sunset Avenue and east of Highland Home Road between the terminus of Sun Lakes Boulevard on the west and the terminus of paved Westward Avenue on the east. It can be found in Section 7 of Township 3 South, Range 1 East of the *Beaumont*, California, United States Geological Survey (1978) 7.5-minute topographic quadrangle map (Figure 2). The elevation of the project site ranges from approximately 2,400 to 2,500 feet above sea level. The geographic coordinates near the middle of the site are 33.5512.85° North latitude and -116.5516.29° West longitude. Vegetation communities on site consist primarily of grassland and scrubs.

The proposed project is a transportation project including construction of a new section of Sun Lakes Boulevard from Highland Home Road to Sunset Avenue (Figure 3) and intersection improvements within the City of Banning's existing road right-of-way (ROW). This report has been updated due to a change in the outline of the proposed impacts and to update all related figures. The project is approximately 5,400 linear feet (1.02 mile) and 110-feet wide, encompassing approximately 19.4 acres of direct footprint and another 9.1 acres of temporary construction disturbance area. Project staging and stockpiling will occur within the City's ROW. Currently, Westward Avenue is a straight east-west unpaved dirt road between Highland Home Road and Sunset Avenue. The project crosses over three creeks, from west to east: Highland Wash, Smith Creek, and Pershing Creek. The project will include the construction of three sets of culverts to cross said creeks.

3.0 BACKGROUND ON THE LOS ANGELES POCKET MOUSE

The Los Angeles pocket mouse is a small rodent of the inland valleys and foothills of southern California, one of eight subspecies of the widespread little pocket mouse (*P. longimembris*) and is not well-studied. It is nocturnal, spending daylight hours in underground burrows or under surface debris and is essentially undetectable except by trapping surveys. It is one of few rodents to enter torpor during winter, a dormant state in which the metabolism is greatly lowered in order to cope with cold and the resulting lack of food.

The Los Angeles pocket mouse is associated with annual grassland, coastal sage scrub, desert scrub, and alluvial sage scrub at lower elevations and usually in sandy soils, but there is much left to learn of its specific habitat requirements. Small mammal biologists in western Riverside County have often found the highest concentrations of this subspecies along or near prominent drainages. Its historic range extended as far west as Burbank and San Fernando in Los Angeles County. Urbanization and agriculture have eliminated much of its historic habitat (Williams 1986), resulting in a current estimated range bordered on the west by Rancho Cucamonga in San Bernardino County, on the east by the San Geronio Pass in Riverside County, and extending south to the vicinity of Aguaanga and Oak Grove in San Diego County (Patten et al. 1998).

This subspecies is not federally, or state listed as threatened or endangered. It is, however, designated a species of special concern by the California Department of Fish and Wildlife (CDFW) (2020) and has been assigned a state rank of S1S2 meaning that the subspecies is considered to be between “critically imperiled” and “imperiled” and “at very high risk of extinction due to extreme rarity” (between 5 or fewer and < than 20 populations), subject to “very steep” to “steep declines, or other factors.”

Portions of the project site lie within the Western Riverside County Multiple-Species Habitat Conservation Area (MSHCP) survey area for the Los Angeles pocket mouse (Figure 3) and potential habitat for the species is present. Under the MSHCP, surveys for the Los Angeles pocket mouse are required in appropriate habitat within the designated survey areas in order to achieve coverage for the species.

4.0 METHODOLOGY

A total of six grids of 25 traps each were placed (Grids A through F) See Figure 3 and photos below. One grid was placed in each drainage and the remaining three grids were placed in upland habitats.

All grids were within the MSHCP-designated survey area for the Los Angeles pocket mouse.

Trapping operations were conducted by WSP biologist John F. Green under the authority of CDFW Scientific Collecting Permit (SCP) #SC-190360007. Because the federally listed as endangered, state listed as threatened Stephens' kangaroo rat (*Dipodomys stephensi*) is known to have occurred onsite, Stephens' kangaroo rat permit holder Phil Brylski was also present for all trapping. Brylski worked under authority of federal permit TE14855-2, a CDFW MOU, and authorizations attached to CDFW SCP 314.

To ensure that weather conditions were suitable to conduct the survey with minimal stress to captured animals, National Weather Service forecasts were monitored for the weather stations nearest the trapping areas. Trapping is not conducted unless five consecutive nights with temperatures above 50 degrees Fahrenheit are forecasted. At this time of year, no temperatures approached that threshold. Traps were set on consecutive nights from September 13-18, 2020.

All traps were 12" long folding Sherman® live traps, modified by the manufacturer for the prevention of tail lacerations when trapping long-tailed animals (such as kangaroo rats). Traps were placed approximately ten meters apart and baited with white proso millet. Traps were opened at dusk daily, checked for captures at dawn, and closed for the day following each dawn check. To comply with Stephens' kangaroo rat trapping guidelines traps were also checked each night. Trapping at each grid was conducted for five consecutive nights. Captured animals were identified and released at the point of capture. Capture data and weather variables were recorded on standardized data forms. The Collector app on an iPhone 8 was used to place and record grids and points for special-status species. Weather variables were recorded with a handheld Kestrel anemometer. Table 1 summarizes the number of traps, weather variables, and moon phases during the survey.

Table 1. Survey Data. Total trap-nights = 750 (150 traps for five nights)

Date (2020)	Night °F	Night Sky	Dawn °F	Dawn Sky	Moon Phase
13-14 September	67.4	Partly cloudy	58.7	100% cover	Waning Crescent
14-15 September	70.3	Partly cloudy	63.3	Partly cloudy	Waning Crescent
15-16 September	69.5	Partly cloudy	63.1	Partly cloudy	Waning Crescent
16-17 September	73.8	Partly cloudy	68.0	Partly cloudy	Waning Crescent
17-18 September	68.1	Partly cloudy	65.5	Partly cloudy	New

°F = degrees Fahrenheit

5.0 RESULTS

Overall, 583 mammal captures were made of seven species for a trapping success rate of 77.7%. Although known to occur in the area, no Los Angeles pocket mice were captured. Two other special-status species was captured: the northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) and the Bryant's Woodrat (*Neotoma bryanti intermedia*) which was formerly known as San Diego desert woodrat. Both are CDFW species of special concern, and both are covered under the MSHCP.

Table 2 presents the complete results of the trapping survey.

Two other special-status species were also incidentally detected during the trapping effort: loggerhead shrike (*Lanius ludovicianus*) and California horned lark (*Eremophila alpestris actia*). The status of these animals will be discussed in other supporting project documents.

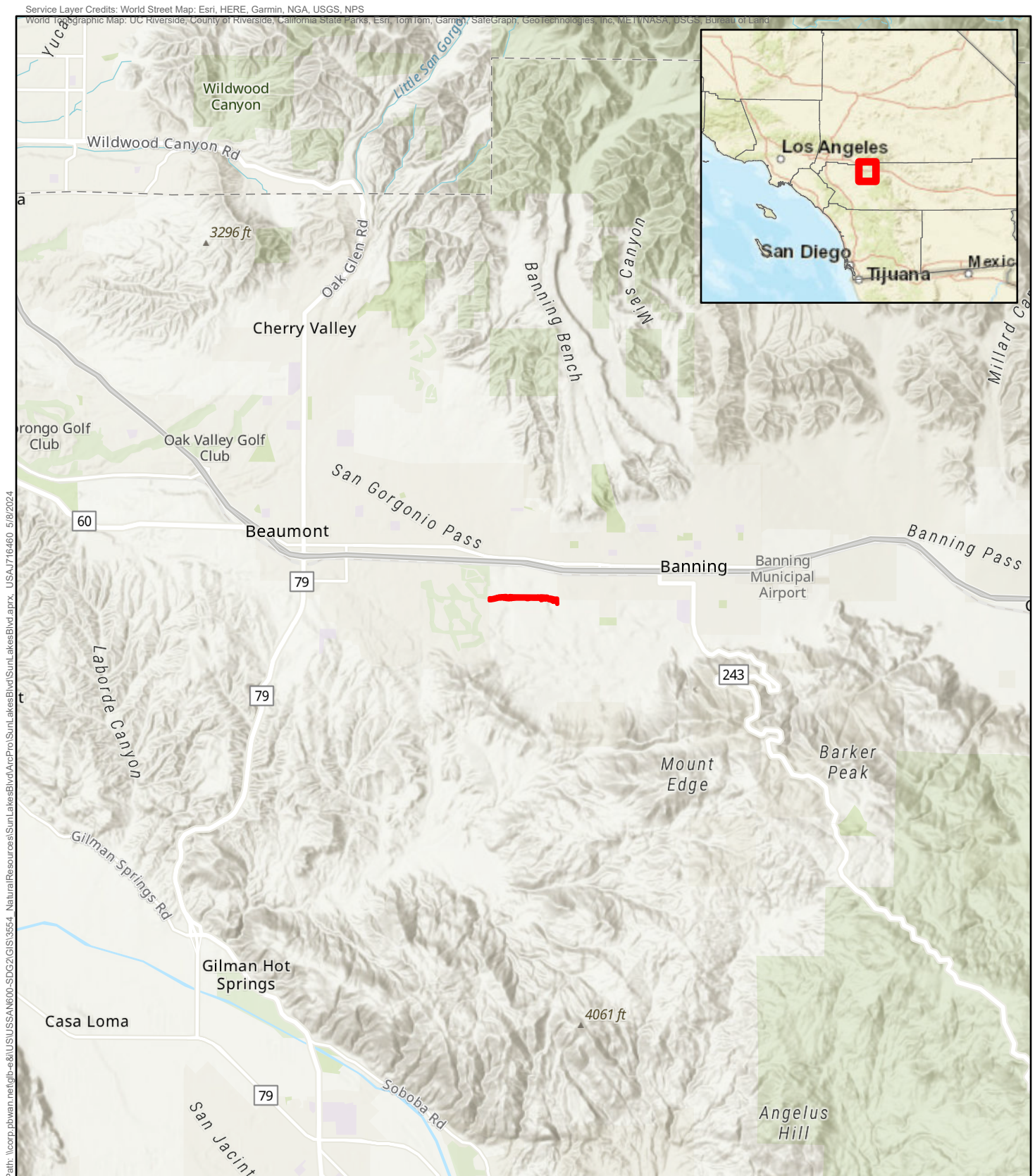
Table 2. Survey Results

Species	13-14 September	14-15 September	15-16 September	16-17 September	17-18 September	TOTALS
Northwestern San Diego Pocket Mouse <i>Chaetodipus fallax fallax</i>	13	30	38	38	40	159
Dulzura Kangaroo Rat <i>Dipodomys simulans</i>	4	9	8	4	10	35
House Mouse <i>Mus musculus</i>	1	2	-	1	2	6
Bryant's (San Diego Desert) Woodrat <i>Neotoma bryanti (lepida) intermedia</i>	1	1	-	1	1	4
Baja Mouse <i>Peromyscus fraterculus</i>	1	-	-	-	-	1
Deer Mouse <i>Peromyscus maniculatus</i>	59	68	83	86	69	365
Western Harvest Mouse <i>Reithrodontomys megalotis</i>	2	3	1	4	3	13
TOTALS	81	113	130	134	125	583
Total trapping success = 77.7% (583 captures in 750 trap-nights).						

6.0 REFERENCES

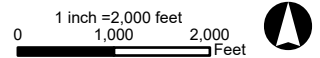
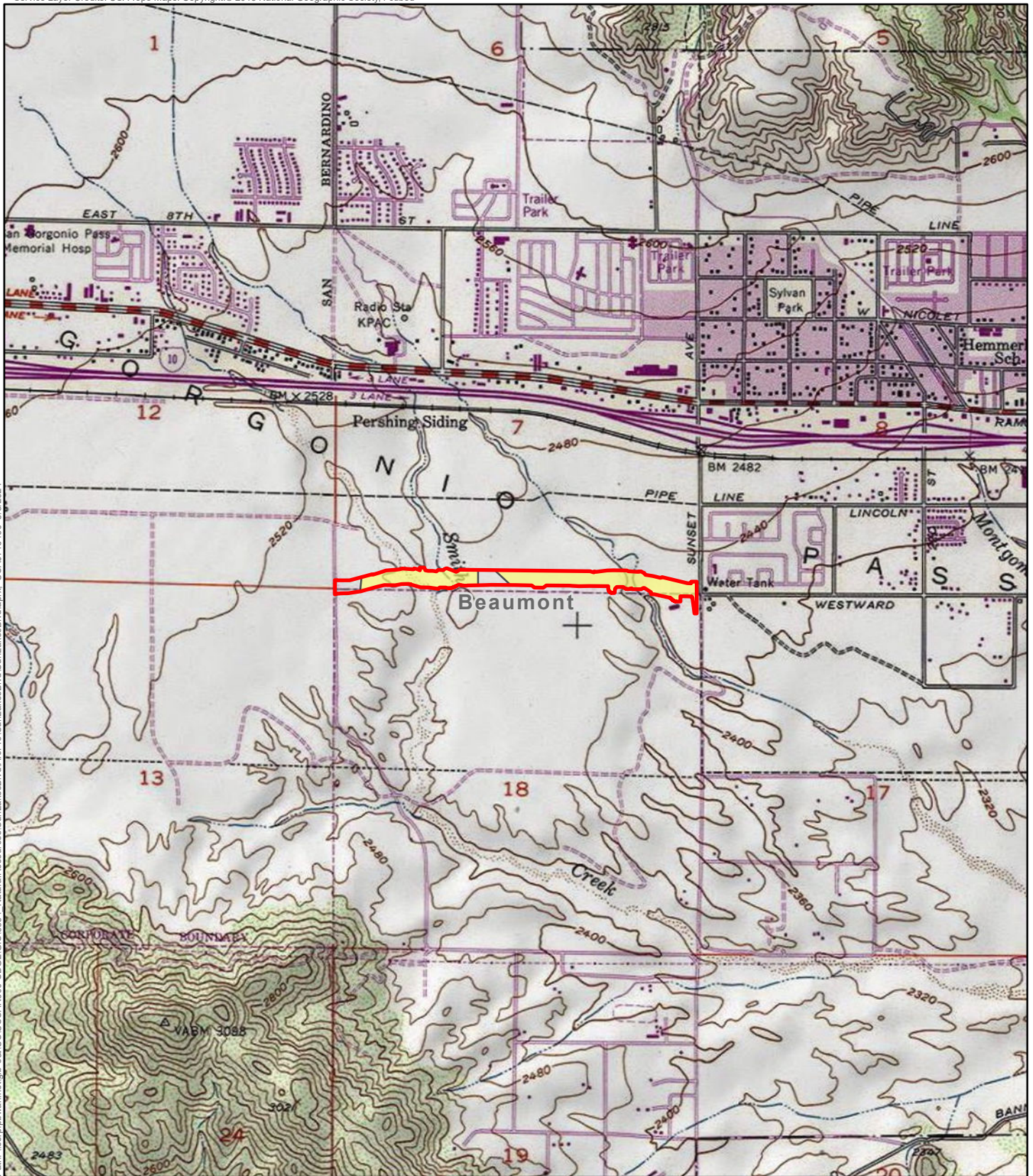
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Appendix A – Figures



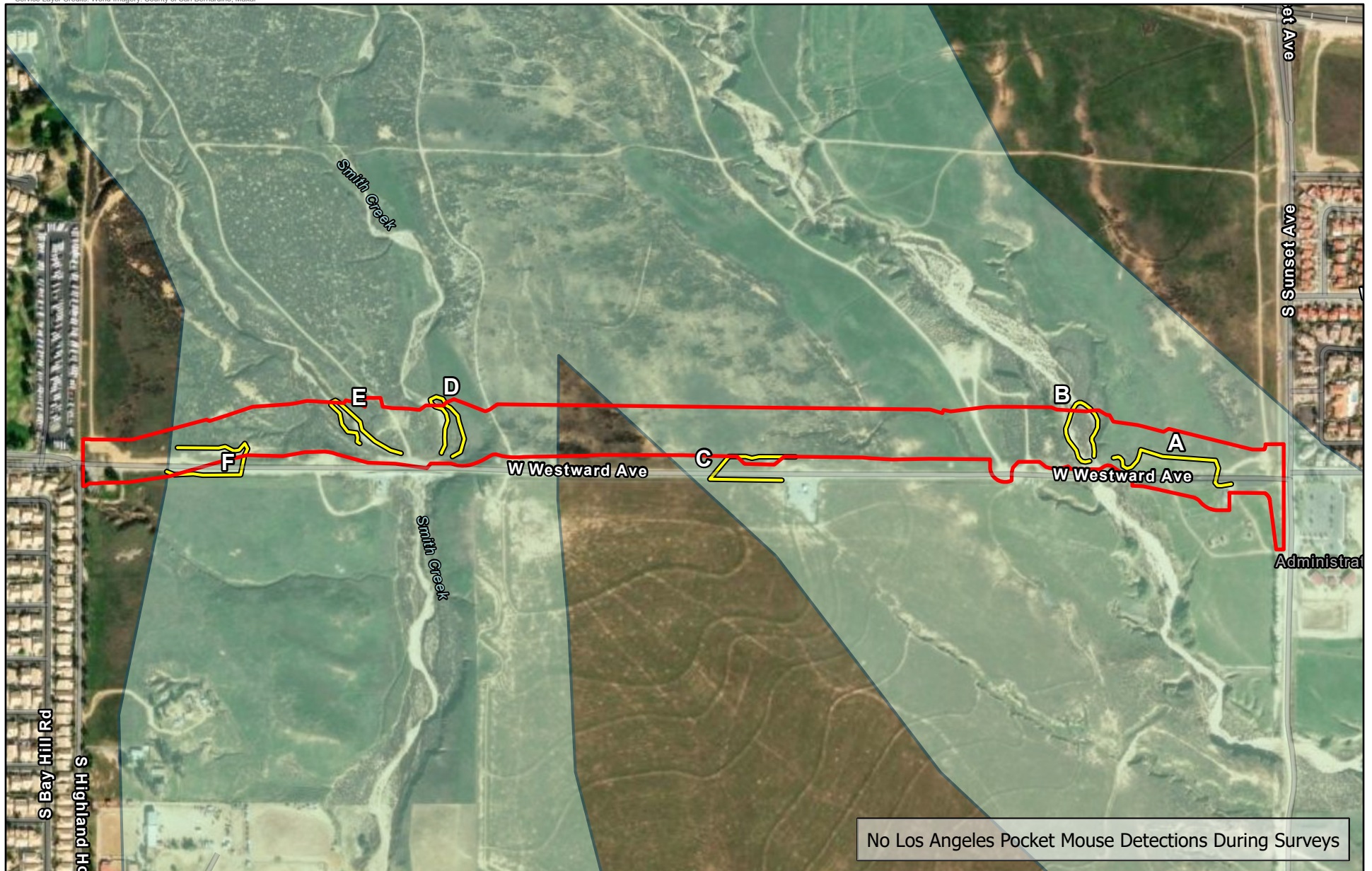
 Project Alignment

FIGURE 1
Project Vicinity and Location
Los Angeles Pocket Mouse Survey Report
Sun Lakes Blvd. Realignment Project
Banning, CA



- MSHCP L.A. Pocket Mouse Survey Area
- Project Alignment

FIGURE 2
USGS 7.5' Topo Quad: Beaumont
Los Angeles Pocket Mouse Survey Report
Sun Lakes Blvd. Realignment Project
Banning, CA



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- Los Angeles Pocket Mouse Trapping Line
- MSHCP Mammal Survey Area
- Project Alignment

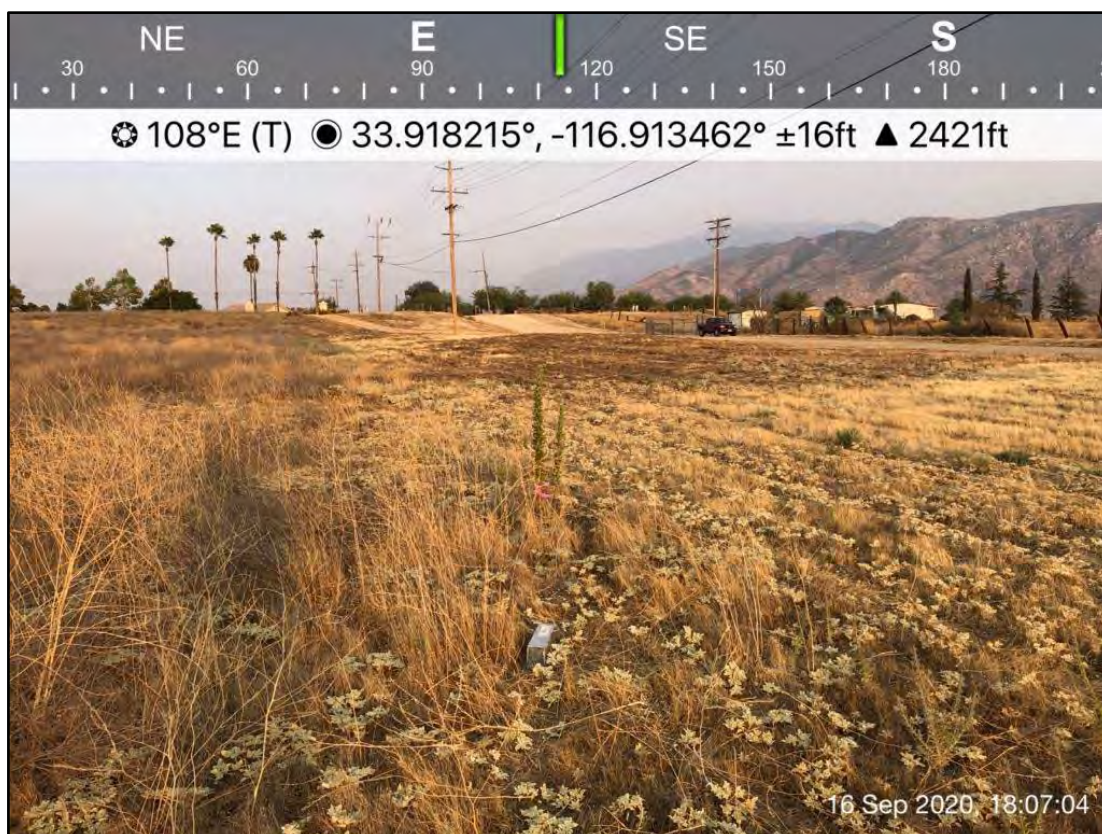
1 inch = 600 feet
0 300 600 Feet



FIGURE 3

Local Vicinity
Los Angeles Pocket Mouse Survey Report
Sun Lakes Blvd. Realignment Project
Banning, CA

Appendix B – Site Photographs



Trap Grid A in eastern project upland.



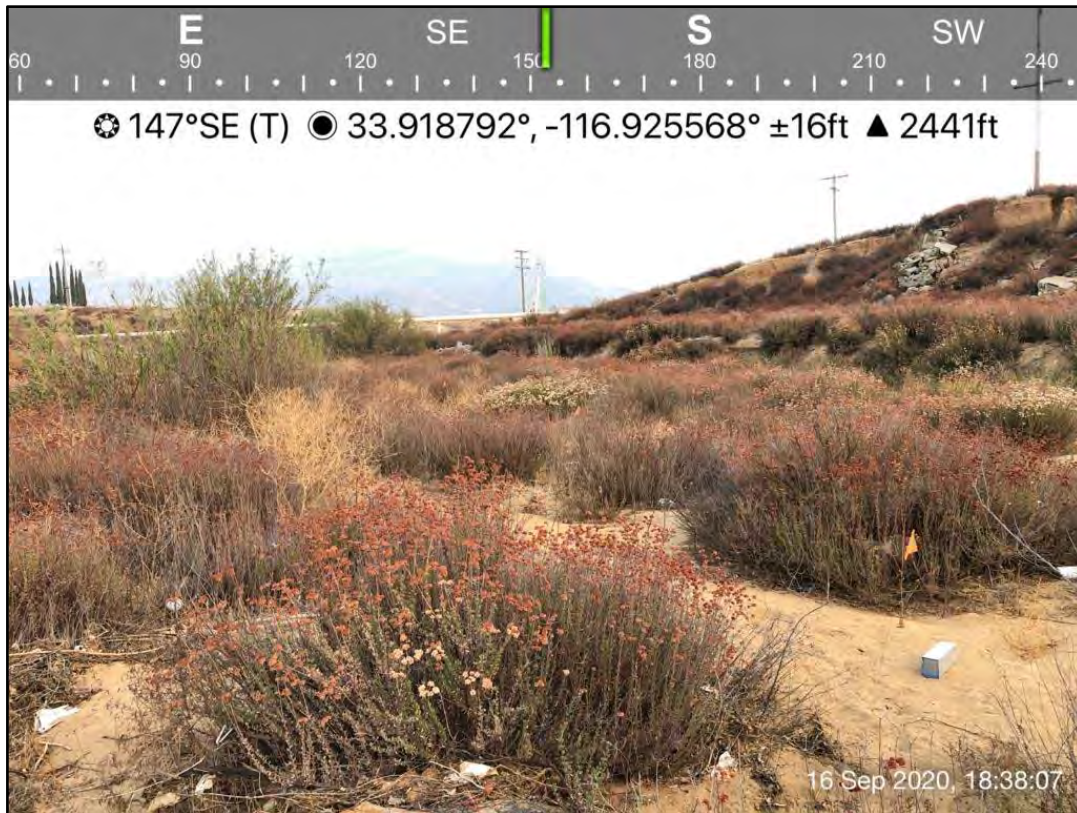
Trap Grid B in easternmost drainage, Pershing Wash.



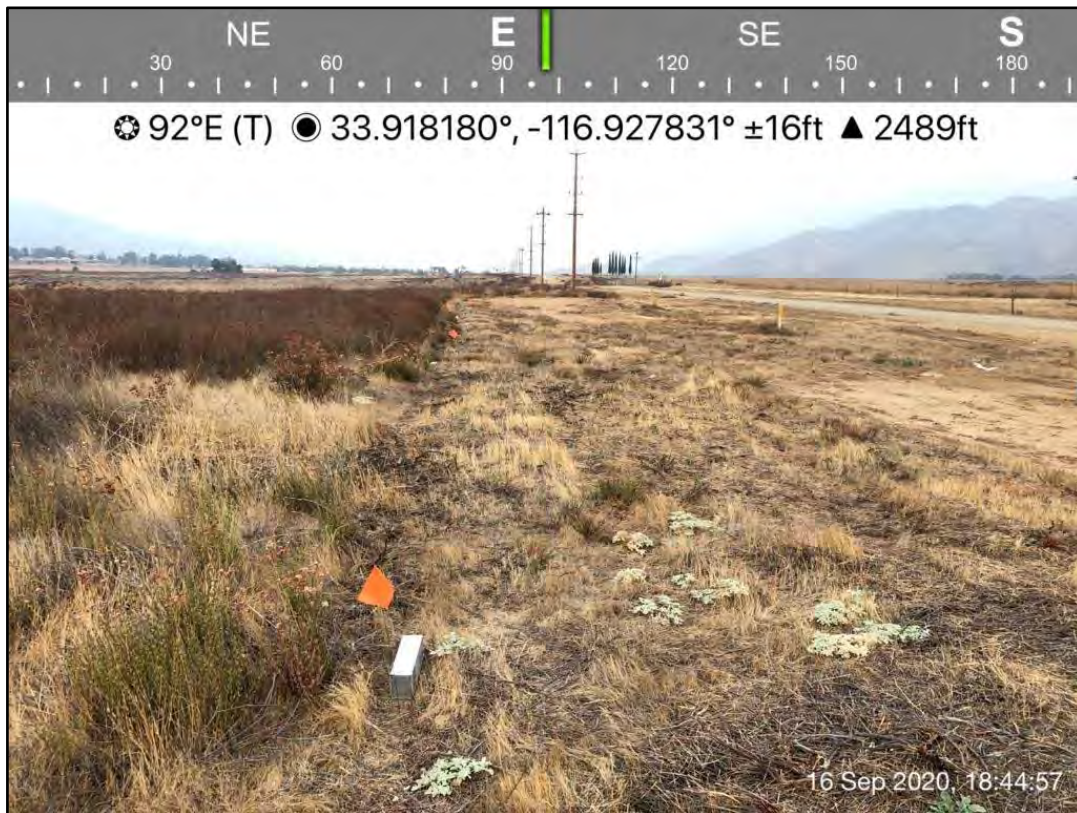
Trap Grid C in central project upland. Horse-grazed land immediately to south.



Trap Grid D in central drainage, Smith Creek.



Trap Grid E in western drainage, Highland Wash. Cover photo is also from this drainage.



Trap Grid F in western project upland.