



An Employee-Owned Company

December 16, 2020

Ms. Norma Villicaña
City of El Centro
Community Development Department
1275 Main Street
El Centro, CA 92243

Reference: 2020 Western Burrowing Owl Focused Survey for Monte Vista Regional Soccer and Wellness Park Project (RECON Number 9781)

Dear Ms. Villicaña:

This letter summarizes the results of the 2020 non-breeding season surveys for the western burrowing owl (*Athene cunicularia hypugaea*) conducted within the Monte Vista Regional Soccer and Wellness Park Project (project). The project is located within the community of El Centro, in Imperial County. Figure 1 places the project in a regional context. The project is located within Township 16 South, Range 14 East and 14 West on the U.S. Geological Survey (USGS) El Centro 7.5-minute quadrangles (USGS 1976 and 1979; Figure 2) and is located southwest of the intersection of West McCabe Road and Sperber Road (Figure 3). As shown on the aerial photograph taken in 2020, the project is bounded by development to the east and by agricultural farmland to the north, south, and west (see Figure 3). Based on the habitat assessment, the survey area encompassed 182 acres and included the following assessor's parcel numbers: 054-510-001, 054-510-008, 054-380-010, 054-510-005, 054-380-024, 054-510-002, 052-390-006, 052-390-007, 052-390-016, 054-510-010, 054-510-011, 052-380-006, 054-130-082.

RECON Environmental, Inc. (RECON) biologists conducted non-breeding season surveys in accordance with the guidelines developed by the California Department of Fish and Wildlife (CDFW; 2012; hereafter referred to as survey guidelines). The survey was conducted to determine the presence or absence of the species within the project area and a 500-foot buffer. A discussion of western burrowing owl biology, survey methods, and results is provided below.

Western Burrowing Owl

The western burrowing owl is a CDFW species of special concern. This species is primarily restricted to the western United States and Mexico. Habitat for the western burrowing owl includes dry, open, short-grass areas with level to gentle topography and well-drained soils (CDFW 2012). These areas are also often associated with burrowing mammals (Haug et al. 1993). Western burrowing owls are known to use multiple burrows, called "satellite" burrows, in addition to their nesting burrows. These non-nesting burrows are used to seek protection from predators and for roosting during the non-breeding season (CDFW 2012).

The western burrowing owl is diurnal and typically perches during daylight at the entrance to its burrow or on adjacent structures, such as low posts. Nesting occurs from March through August. Western burrowing owls form a pair bond for more than one year and exhibit high site fidelity, reusing the same burrow year after year (Haug et al. 1993). The female remains inside the burrow during most of the egg laying and incubation period and is fed by the male throughout brooding. Western burrowing owls are opportunistic feeders, consuming a diet that includes arthropods, small mammals, and birds, and occasionally amphibians and reptiles (Haug et al. 1993).

Urbanization has greatly reduced the amount of suitable habitat for this species. Other contributions to the decline of this species include the poisoning of fossorial mammals, road and ditch maintenance, and collisions with automobiles (CDFW 2012).

Survey Methods

RECON biologist Alex Fromer conducted a western burrowing owl habitat assessment on September 24, 2020, to evaluate habitat suitability within the project area. In addition, RECON reviewed historical biological data including the California Natural Diversity Database and United States Fish and Wildlife Service (USFWS) All Species Occurrence Database (USFWS 2020). Vegetation community and land cover classifications follow the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986).

Non-breeding season surveys were performed within suitable habitat identified during the habitat assessment by RECON biologists Alex Fromer, JR Sundberg, Kevin Israel, and Taylor Chase in accordance with the survey guidelines (CDFW 2012). For purposes of this report, the survey area includes all suitable burrowing owl habitat within approximately 500 feet of the project footprint (Figure 4).

All accessible areas of suitable habitat were surveyed on foot, by conducting meandering transects. All avian species observed during the surveys were noted and suitable burrows were recorded using a handheld global positioning system (GPS) device, with notation made on presence or absence of burrowing owl sign (e.g., pellets, whitewash, prey remains, feathers, or decoration). Areas where direct access was not permitted were surveyed using binoculars from adjacent accessible viewpoints. Survey dates, personnel, times, and weather conditions are provided in Table 1. Avian species observed with nomenclature from Chesser et al. 2019 are included in Attachment 1. Photographs showing habitat conditions during the survey are included in Attachment 2; copies of field notes are included as Attachment 3.

Table 1 Survey Information				
Date	Survey	Surveyors	Survey Time and Conditions	
			Start	End
9/24/2020	Habitat Assessment	A. Fromer	9:00 a.m.; 87°F; 0-1 mph; <5% cc	12:30 a.m.; 99°F; 1-3 mph; <5% cc
9/28/2020	Survey 1	A. Fromer, K. Israel	8:00 a.m.; 76°F; 0-2 mph; 0% cc	10:00 a.m.; 90°F; 2-4 mph; 0% cc
10/19/2020	Survey 2	A. Fromer, JR Sundberg	8:00 a.m.; 74°F; 0-1 mph; <5% cc	10:00 a.m.; 83°F; 0-1 mph; <5% cc
11/10/2020	Survey 3	A. Fromer, T. Chase	8:00 a.m.; 53°F; 1-3 mph; 0% cc	10:00 a.m.; 60°F; 0-2mph; 0% cc
11/30/2020	Survey 4	A. Fromer, T. Chase	8:05 a.m.; 53°F; 0-1 mph; 20% cc	10:00 a.m.; 64°F; 1-2 mph; 20% cc
°F = degrees Fahrenheit; mph = miles per hour; % = percent; cc = cloud cover.				

Habitat Assessment Results

The project area lies within the community of El Centro in Imperial County. It is characterized by a pair of active agricultural fields with active development in the northeastern portion of the project area (see Figure 4).

Based on the habitat assessment, there are two land cover types within the project area and surrounding 150-meter buffer: agriculture and developed land (see Figure 4).

Agriculture is the dominant land cover type within the survey area. This community covers the vast majority of the project area and survey area. The project area is bounded by large areas of active agriculture

to the north, south, and west. Plant species within the project area are sparse and are generally located along the access roads, berms, and canals that surround the agricultural fields.

Developed land occurs in the northeastern corner of the project area and adjacent to the east of the project area. Developed areas include roadways, buildings, and ornamental landscaping, and non-native plant species including Bermuda grass (*Cynodon dactylon*), Mexican fan palm (*Washingtonia robusta*), and Chilean mesquite (*Prosopis chilensis*).

Based on the habitat assessment, the active agricultural fields were surveyed using binoculars, with the survey effort focused on the unvegetated berms, irrigation channels, and small areas of open ground within and adjacent to the project area. In addition, review of historical records showed several database records for western burrowing owl within the vicinity of the survey area in similar agricultural fields (USFWS 2020).

Focused Western Burrowing Owl Surveys Results

One burrowing owl was detected during the habitat assessment and again during the third and fourth focused surveys (see Figure 4). These observations were made in a small area of open ground within active agricultural fields in the northwestern portion of the survey area. During the first observation, the owl was flushed from a small berm and flew across the open ground to a nearby stack of hay bales. The owl then flew east across the agricultural fields and was lost from sight. On subsequent observations, an owl was observed standing within a gap in the hay bales which appeared to be its primary burrow as well as standing underneath tree cover adjacent to the hay bales (see Figure 4 and Attachment 2, Photograph 8).

A total of three additional burrows of the appropriate size and shape for burrowing owl use were found during the habitat assessment and focused surveys (see Figure 4). These potential burrows were 6- to 12-inch concrete irrigation culverts on unvegetated berms between agricultural fields within the center of the survey area. No whitewash, feathers, pellets, or bones were observed within or adjacent to these potential burrows.

In addition to the three potentially suitable burrows mapped during the habitat assessment and focused surveys, a few small mammal burrows and several additional concrete culverts were also observed. The smaller burrows were generally less than three inches in diameter and likely belonged to small fossorial rodents. The additional culverts were either not deep enough to support burrowing owl or open at both ends over a short distance. No burrowing owl sign (e.g., cast pellets, prey remains, molted feathers, excrement, etc.) was observed at these burrows.

Conclusion and Mitigation Requirements

One adult western burrowing owl and one active burrow were detected during the 2020 non-breeding season surveys.

As required per the CDFW protocol guidelines, at a minimum, pre-construction take-avoidance surveys would be required prior to any project-related ground disturbance. One survey shall be conducted no less than 14 days before the start of ground disturbing activities, and a second survey shall be conducted within 24 hours of the start of ground disturbing activities. These surveys will include all areas where suitable habitat is present within the survey area (CDFW 2012) with special focus on the area where the western burrowing owl was observed during focused surveys. Should burrowing owl be determined to still be occupying the survey area, mitigation measures, such as avoidance, minimization measures, translocation, artificial burrow construction, burrow exclusion and closure, and/or habitat-based mitigation or preservation, would be required. Additionally, formal consultation with CDFW in coordination with the City of El Centro would be required to develop an appropriate mitigation plan for the project.

Ms. Norma Villicaña
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If you have any questions concerning the contents of this letter, please contact me at
afromer@reconenvironmental.com or (619) 308-9333 extension 193.

Sincerely,



Alexander Fromer
Biologist

APF:sh

Attachments

References Cited

- California Department of Fish and Wildlife (CDFW)
2012 Staff Report on Burrowing Owl Mitigation. March.
- Chesser, R. T., K. J. Burns, C. Cicero, J. L. Dunn, A. W. Kratter, I. J. Lovette, P. C. Rasmussen,
J. V. Remsen, Jr., D. F. Stotz, and K. Winker
2019 Check-list of North American Birds (online). American Ornithological Society through the 61st
Supplement. <http://checklist.americanornithology.org/taxa> June 30.
- Haug, E.A., B.A. Millsap, and M.S. Martell
1993 Burrowing Owl (*Speotyto cunicularia*). In *The Birds of North America*, no. 61, edited by A. Poole
and F. Gill. The Birds of North America, Inc., Philadelphia.
- Holland, Robert F.
1986 Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame
Heritage Program, California Department of Fish and Game. October.
- U.S. Fish and Wildlife Service (USFWS)
2020 All Species Occurrences GIS Database. Carlsbad Fish and Wildlife Office. Accessed January.
- U.S. Geological Survey (USGS)
1976 7.5-Minute Topographic Map, Heber Quadrangle.

1979 7.5-Minute Topographic Map. El Centro Quadrangle.

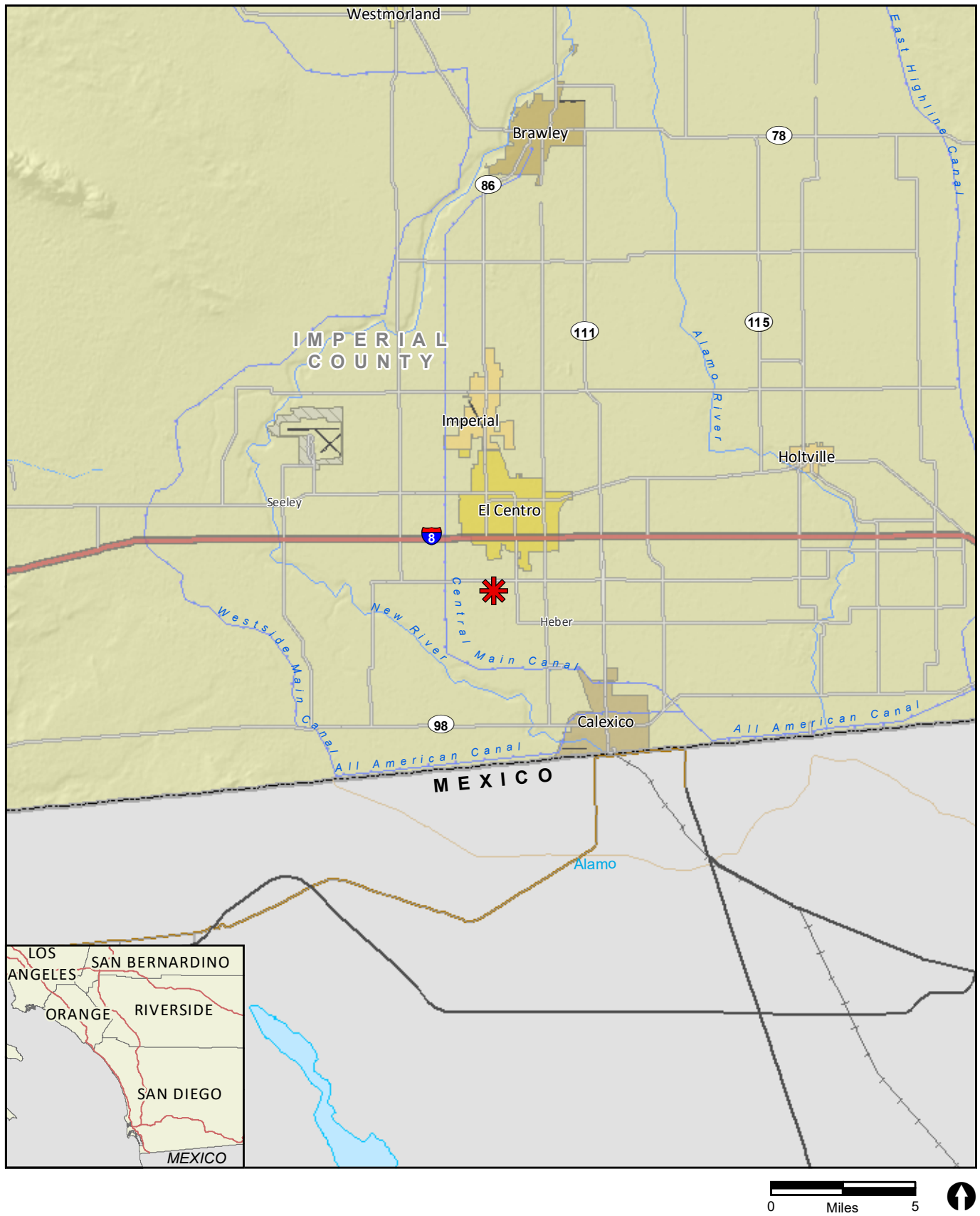
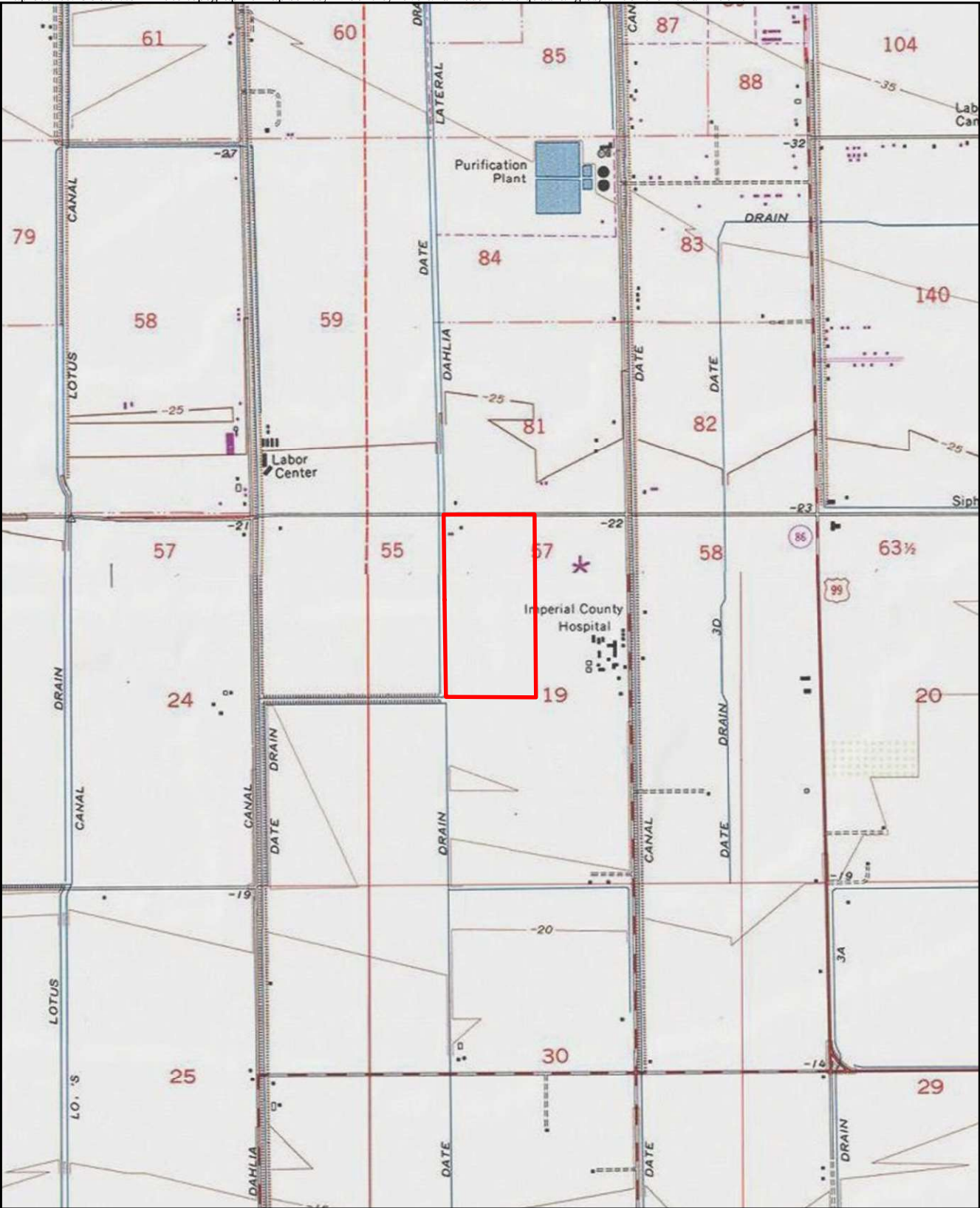


FIGURE 1
Regional Location




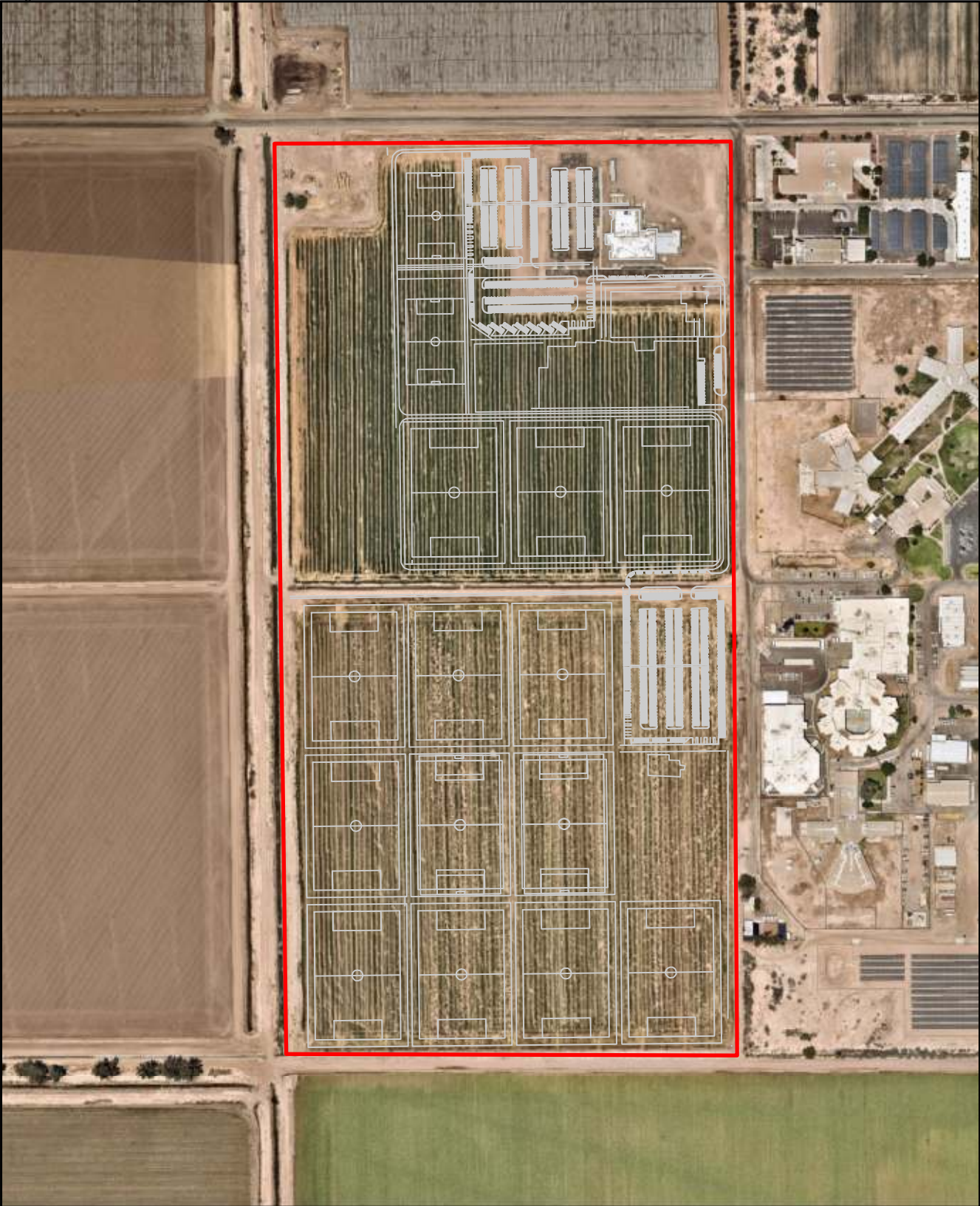
 Project Boundary

FIGURE 2
Project Location on USGS Map



 Project Boundary
 Site Plan

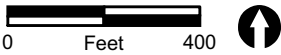
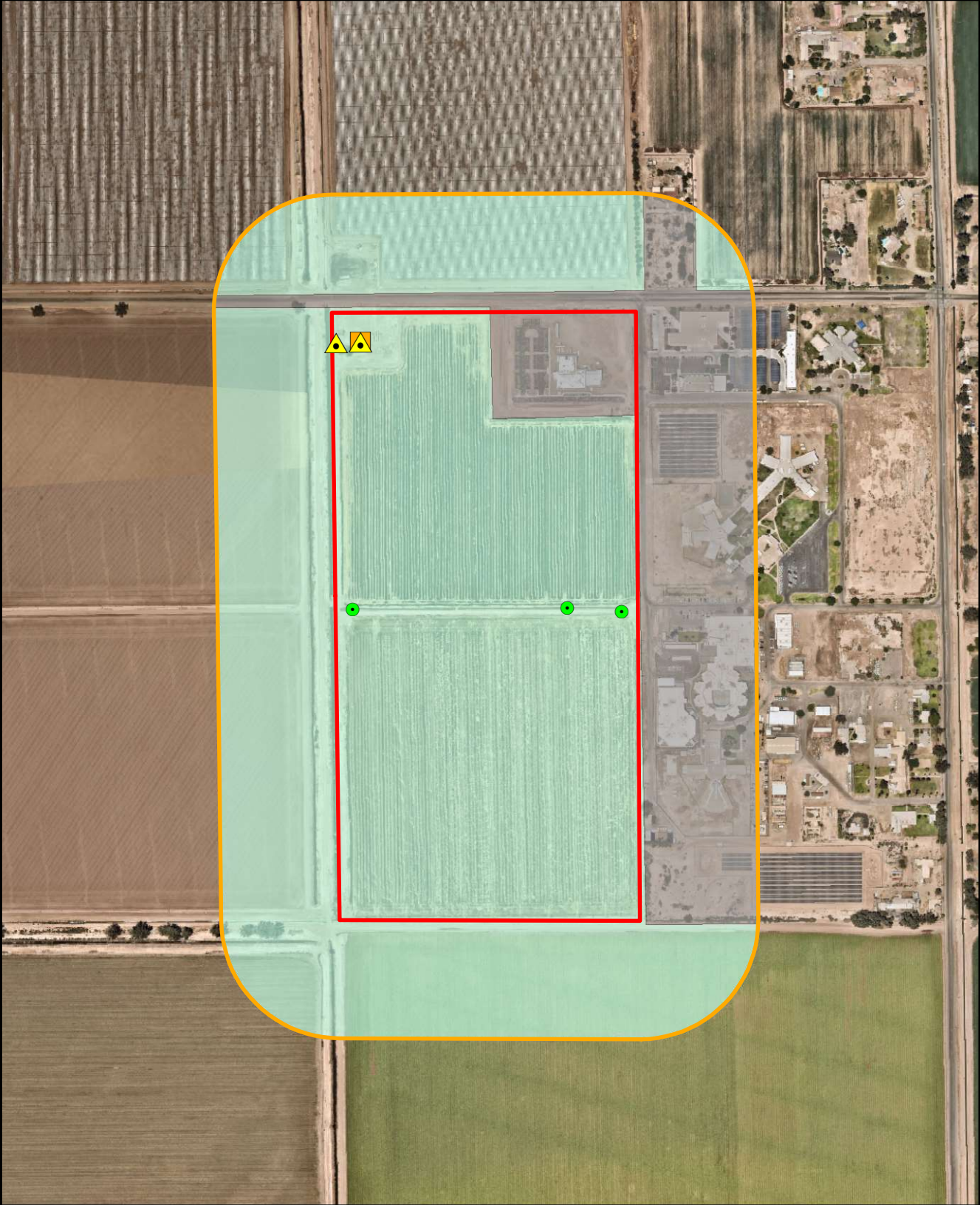









FIGURE 3
Project Location and Site Plan
on Aerial Photograph



- | | | | |
|---|---|-------------------------|--|
|  Project Boundary |  BUOW Observations | Land Cover Types | |
|  Survey Area |  Active Burrow | |  Active Agriculture |
|  Potential Burrows |  Developed | | |

0 Feet 600



FIGURE 4
Land Cover Types and Survey Results

ATTACHMENTS

ATTACHMENT 1

Wildlife Species Observed

**Attachment 1
Wildlife Species Observed**

Scientific Name	Common Name	Occupied Habitat	Evidence of Occurrence
BIRDS (Nomenclature from Chesser et al. 2019 and CDFW 2020)			
ARDEIDAE	HERONS & BITTERNS		
<i>Ardea alba</i>	great egret	Ag	O
<i>Butorides virescens</i>	green heron	Ag	O
THRESKIORNITHIDAE	IBISES		
<i>Plegadis chihi</i>	white-faced ibis	Ag	O
CATHARTIDAE	NEW WORLD VULTURES		
<i>Cathartes aura</i>	turkey vulture	F	O
ACCIPITRIDAE	HAWKS, KITES, & EAGLES		
<i>Circus hudsonius</i>	northern harrier	Ag	O
FALCONIDAE	FALCONS & CARACARAS		
<i>Falco peregrinus anatum</i>	American peregrine falcon	Ag / Dev	O
<i>Falco sparverius</i>	American kestrel	Ag	O
CHARADRIIDAE	LAPWINGS & PLOVERS		
<i>Charadrius vociferus</i>	killdeer	Ag	O
COLUMBIDAE	PIGEONS & DOVES		
<i>Columba livia</i>	rock dove (I)	Ag / Dev	O
<i>Columbina passerina</i>	common ground dove	Ag	O
<i>Streptopelia decaocto</i>	Eurasian collared-dove (I)	Ag / Dev	O
<i>Zenaida macroura</i>	mourning dove	Ag / Dev	O
CUCULIDAE	CUCKOOS & ROADRUNNERS		
<i>Geococcyx californianus</i>	greater roadrunner	Ag	O
STRIGIDAE	TYPICAL OWLS		
<i>Athene cunicularia</i>	burrowing owl	Ag	O
TROCHILIDAE	HUMMINGBIRDS		
<i>Calypte anna</i>	Anna's hummingbird	Ag	O
ALCEDINIDAE	KINGFISHERS		
<i>Megaceryle alcyon</i>	belted kingfisher	Ag	O
TYRANNIDAE	TYRANT FLYCATCHERS		
<i>Sayornis nigricans</i>	black phoebe	Ag	O

**Attachment 1
Wildlife Species Observed**

Scientific Name	Common Name	Occupied Habitat	Evidence of Occurrence
<i>Sayornis saya</i>	Say's phoebe	Ag	O
LANIIDAE	SHRIKES		
<i>Lanius ludovicianus</i>	loggerhead shrike	Ag	O
CORVIDAE	CROWS, JAYS, & MAGPIES		
<i>Corvus corax</i>	common raven	Ag / Dev	O
REMIZIDAE	VERDIN		
<i>Auriparus flaviceps</i>	verdin	Ag / Dev	O
MOTACILLIDAE	WAGTAILS & PIPITS		
<i>Anthus rubescens</i>	American pipit	Ag	O
PARULIDAE	WOOD WARBLERS		
<i>Setophaga [=Dendroica] coronata</i>	yellow-rumped warbler	Ag	O
<i>Setophaga [=Dendroica] petechial</i>	yellow warbler	Ag	O
PASSERELLIDAE	NEW WORLD PASSERINES		
<i>Melospiza melodia</i>	song sparrow	Ag / Dev	O
<i>Passerculus sandwichensis nevadensis</i>	western savannah sparrow	Ag	O
ICTERIDAE	BLACKBIRDS & NEW WORLD ORIOLES		
<i>Quiscalus mexicanus</i>	great-tailed grackle	Ag / Dev	O
<i>Sturnella neglecta</i>	western meadowlark	Ag	O
FRINGILLIDAE	FINCHES		
<i>Haemorhous [=Carpodacus] mexicanus</i>	house finch	Ag / Dev	O
(I) = Introduced species HABITATS Ag = Agriculture Dev = Developed F = Flying overhead <div style="text-align: right;">EVIDENCE OF OCCURRENCE O = Observed</div>			

ATTACHMENT 2

Photographs



PHOTOGRAPH 1
View of Project Area, Facing Southeast, September 24, 2020



PHOTOGRAPH 2
View of Project Area, Facing East, September 24, 2020



PHOTOGRAPH 3
View of Adjacent Active Agricultural Area, Facing West,
September 24, 2020



PHOTOGRAPH 4
View of Adjacent Suitable Disturbed Habitat, Facing Northeast,
September 24, 2020



PHOTOGRAPH 5

View of Southern Portion of Project Area and Adjacent Agricultural Area, Facing East, September 24, 2020



PHOTOGRAPH 6

View of Active Agricultural Activities in Foreground and Active Construction Activities in Background, Facing Northwest, September 28, 2020



PHOTOGRAPH 7

View of Active Western Burrowing Owl Burrow, Facing Southwest,
November 11, 2020



PHOTOGRAPH 8

Adult Western Burrowing Owl within the Project Area,
November 11, 2020

ATTACHMENT 3

Field Notes

9/24/20

9781

APF

BIO SURVEY / BUOW HAB. ASSESS.

9:00 12:30

87°F 99°F

0-1 MPH 1-3 MPH

<5% CC <5% CC

MALACOTHAMNUS

POLYPODON

RUCCIA

HELICOP

TAM RAM

CRAB

~~GRASS~~ GRASS

ARROW BUSH

ERI CAN

LAC SER

MADO

BLPH

BUOW

TUVH

AMCO

AMICE

GRGR

SULPHUR SP.

S.B. LEE

9/23/20

9781

APF KVI

BUOW #1

START END

8:00 10:00

76°F 90°F

0-2 mph 2-4 mph

0% cc 0% cc

No BUOW, POT. BURROWS, OR SIGN ASIDE
OCCASIONAL WHITE-WASH.

KALL

BLPH

GTGR

GRDO

NOHA

GREG

SAPH

SOSP

SAVS

WEME

Yewa

LOSH

GRRO

AMKE

EYCD

1KV 9/28/20

w/ APF (PM)

9781 BUOW #1

Start: 0800, 76°F, wind 0-3 mph (variable), 0% ^{cloud} cover
End: 1000, 90°F, wind 1-4 mph (NW), 0% cloud cover

- see APF's bird list

Birds

- Mourning dove
- American crow
- black phoebe

* No BUOW ~~obs~~ or sign observed

10/19/20

9781

APR JRS

Buow #2

START END

74°F 83°F

8:00 10:00

0-1 MPH 0-1 MPH

<5% CC <5% CC

GTGR

ANNU

MOOD

ALPH

HOPR

AMKE

SAYS

WEME

FOOD

ELCD

NOPO

WFIB (F)

PEFA (A)

9781

BUOW#

Start

74°

0-1 mph 5% clouds

End 1005

83°

0-1 mph < 5% cloud

Chilean Mesquite

Prosopis chilensis

Aster Erigeron weed

Chloracantha spin

Cyn dac

Cynodon

Alkali mallow

Malvella leprosa

Barnyard grass

Echinochloa crus-galli

Atriplex (hastate lf)

A. suberecta

Sorghum sp. (sudan grass?)

Johnson

Arrow bush

Pluchea sericea

Pol mon

Polypogon

Hel cur

Heliotropium

Grass 1

Leptochloa fusca

Tall weedy fabaceae

Sebania herbacea

Washingtonia robusta

Tamar

Tamarix

Lac ser

Parkinsonia acu

Medicago sat

Panic grass

Panicum sp.

Birds

AAHV

GTGR

MODO

HOPI

Sparrow

KEST

BLPH

MEAD

11/10/20

9731

APF TOL

BUOW #3

START END

8:00 10:00

53°F 60°F

1-3 MPH 0-2 MPH

0 BCE 0 BCE

NOHA

OTER

Nemo

MORO

BLPH

LOSH

WLEG

ANNA

WEME

WHE

BEKI

YRWA

SAPA

MOFI

KILL

AMKE

SAVS

PEFA

GRPO

RODO

BUOW

P. LADY

Date: 11/10/2020
Start Time: 8:10 AM
End Time: 10:10 AM

Start Temp: 48 Degrees F
End Temp: 60 Degrees F

Cloud Cover: 0%
Precipitation: 0 in

Species List:
Mourning Dove
Great Tail Grackle
Greater Egret
Common Raven
Eurasian Collard Dove
American Pipit
House Finch
Loggerhead Shrike
Kestrel
Belted Kingfisher
Roadrunner
Burrowing Owl

I put a wildlife point down on the map where we saw the owl at the end.

Taylor Chase

11/30/20

9781

APF JCW TDC

BUDW #4

START END

8:05 10:00

54°F 63°F

0-1 MPH 1-2 MPH

20%cc 20%cc

OTOR

BLPH

BADW

HOPE

AMIE

HOPE

WEME

YRWA

WETB

SAVS

WLEG

VERD

ROOD

PEFA

NOHA

Date: 11/30/2020
Start Time: 8:00AM
End Time: 10:00 AM

Start Temp: 46 Degrees F
End Temp: 62 Degrees F

Cloud Cover: 5%
Precipitation: 0 in

Species List:
Mourning Dove
Great Tail Grackle
Greater Egret
Common Raven
Eurasian Collard Dove
House Finch
Loggerhead Shrike
Kestrel
Belted Kingfisher
Burrowing Owl
Peregrine Falcon

Taylor Chase