Baseline Biological Survey for
Amethyst Crossing
City of Victorville
County of San Bernardino
State of California

Prepared for:

Highland Park Developments
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Introduction:

At the request of Highland Park Developments (HPD), Phoenix Biological Consulting (Phoenix) conducted a biological baseline survey for a 24 acre site located in the city limits of Victorville, County of San Bernardino, State of California. The site was visited on July 20, 2021. The project site and the adjoining lands were assessed for the potential for various sensitive biological resources that are known to occur up to 10 miles from the site. The area surveyed included additional parcels that are not part of development area herein referred to as "Amethyst Crossing. The total area surveyed was 24 acres and included parcels 30722113, 30722114, 30722115, 30722116. The development area includes only the two upper parcels (30722113 & 30722116) for a total of 11.2 acres (Figure 2, 5, & 8).

Per the California Environmental Quality Act (CEQA), the lead agency requires a project proponent to initiate an initial biota survey to identify sensitive biological resources, if present, which need to be addressed through the permitting processes to offset and mitigate impacts to a less than significant level prior to development.

This report provides the results of a habitat assessment and initial biological survey for the species which have potential to occur within or adjacent to the project boundary and may be adversely affected. These species include, but are not limited to the following: Joshua trees, Burrowing Owl, Mohave Ground Squirrel, Loggerhead Shrike, LeConte's Thrasher and Desert Tortoise and rare plants.

A California Natural Diversity Database (CNDDB) search and literature review was also conducted prior to the survey effort (Table 1 & Figure 3).

Location:

The total rectangular-shaped polygon, 24 acre project site, (APN # 30722113, 30722114, 30722115, 30722116), is located at the southeast corner of Bear Valley and Amethyst Road. The property is situated in the NW ¼, NW ¼ of Section 1, T 4N, R 5W, City of Victorville, County of San Bernardino, State of California (Figure 1 & 5).

Project Description:

The project, Amethyst Crossing, is a new shopping center that will be located on an undeveloped 11.2 acre property at the southeast corner of the intersection of Bear Valley Road and Amethyst Road in Victorville, CA with APN 30722113 & 30722116. The total 24 acres was surveyed and analyzed in this report but only the two upper parcels (307-221-13 & -16) are slated for development. When fully built out it will have 98,000 square feet of new retail, restaurant, and office area. The main tenant building will have a 43,000 sf grocery (Major A), 29,500 sf single or double tenancy (Major B) and 5,100 sf of shops. In addition, there will be three restaurant pad buildings of 2,400 sf, 4,000 sf and 4,500 sf, each with an anticipated drive-

up service window, a 4,500 sf financial services building, and a 5,000 sf retail/shops building. Trash enclosures will occur throughout the site, proximate to the uses they serve. Approximately 464 parking spaces are provided. There will also be approximately 17 EV charging stations to help reduce the project's carbon footprint and minimize impacts to global warming.

Initial project activities will include grubbing and grading of the project site, excavation, trench digging, paving, and building construction.

Project construction is anticipated to take approximately one year. All equipment is planned to be staged, and materials (including a construction trailer) will be stored within the footprint of the planned development. Construction equipment will likely include the use of scrapers, graders, excavators, pavers and other small equipment (bobcats, lifts, etc.). The project site will be accessed from the existing Bear Valley Road and site disturbance associated with equipment access will be minimized as much as possible. The work will be completed generally during daylight hours; nighttime work is not anticipated at this time.

Habitat & Land Use:

The present land use within the site consists of semi-disturbed Creosote bush scrub. The adjoining land to the south and east consist of a semi-disturbed Creosote bush scrub. Commercial development is present on the west and north side across Amethyst and Bear Valley Road. The dominant shrubs include Creosote (*Larrea tridentata*), Bursage (*Ambrosia dumosa*) and California buckwheat (*Eriogonum fasciculatum*) and Mormon tea (*Ephedra nevadensis*). Habitat connectivity has been greatly reduced due to commercial development in the vicinity.

There is a lack of active small mammal burrows throughout the site. The burrows that are present appear to be old white tailed antelope ground squirrel burrows (AGS; *Ammospermophilus leucurus*). The burrows are inactive by evidence of thick cobwebs and plants and debris that are present in the burrow holes. There are no intermittent streams within or adjacent to the property. The elevation at the site is 3,220 feet.

The soils consist of only one type: (1) Cajon Sand, 0-2 % slopes. The soils are derived from granitic material. The soils are sandy and extend to over 60 inches. (USDA, 2021)

Methodologies:

The site was surveyed on July 20, 2021. The surveyor walked the site using 10 meter wide belt transects on a north-south axis within the project site. During the site visit, the weather consisted of clear skies, 5 MPH average wind speed and 85-90 °F temperature range.

Zone-of-influence (ZOI) surveys were not conducted due to surrounding private lands and development on the west and north side. However, burrowing owl buffer zones were surveyed to 150 feet from the project site on the south and east. All plant and animals detected were recorded in field notes and compiled into tables (Table 2 & 3). The surveyor paid particular attention to habitat considerations for potential listed species. The "sign" of sensitive species that was detected was also recorded (i.e.-small mammal burrows, owl pellets and tortoise scat, carcasses, drinking depressions, courtship rings and burrows.). Scientific nomenclature for this report is from the following standard reference sources: plant communities, Holland (1986); flora, Hickman (1993) and Munz (1974); common plant names Jaeger (1969); reptiles, Stebbins (2003); and birds Sibley (2000) and mammals Whitaker (1980).

Results:

1) Field Surveys:

A total of twenty-six species were detected during the habitat assessment (Table 2 & 3). Within the site there appears to be low potential for most sensitive species and the site in general lacks species diversity. The potential for occupied MGS habitat does not seem likely. The sandy-loamy soil is conducive to fossorial mammal burrows but the burrows present appear inactive; no signs of activity and filled with cobwebs. No squirrels were observed during the site visit. MGS have not been documented in an urban context such as this with a lack of connectivity and development on two sides. This would inhibit immigration and emigration of nearby squirrels.

No desert tortoises and/or their sign were detected during the survey effort. No tortoise scat, bones, scutes or drinking depressions were detected on the site.

Joshua trees are present on the site and were recently listed as a candidate threatened species in California. There are approximately nineteen Joshua trees on entire site and they are depicted on Figure 2 and Table 4. Approximately six Joshua trees are expected to be impacted during the development of the upper two parcels of the project area. The trees that will be impacted include # 11, 12, 13, 14, 15 & 16. There is no sign of rodent activity on the trees such as gnawing of branches and fronds. Some of the trees appear stressed from the ongoing drought but would tolerate transplanting assuming they are watered two times, one and two weeks prior and they are relocated with a tree spade and watered immediately after and two weeks after transplanting. These method will also help decrease air pockets in the root mass and minimize shock during the transplanting. No other sensitive plant species were detected during the focus plant survey. The potential plant species which were considered include: Small-flowered androstephium (*Androstephium brevifolium*), Booth's evening primrose (*Camissonia boothii*), San Bernardino Aster (*Symphyotrichum defoliatum*), Pygmy poppy (*Canbya candida*), Sagebrush loeflingia (*Loeflingia squarosa var. artemesium*), Short-joint beavertail (*Opuntia basilaris var brachyclada*), and Southern skullcap (*Scutellaria bolanderi*).

Potential habitat did not appear to be present on site for the Coast Horned Lizard (*Phrynosoma coronatum blainvillei*). Furthermore, the site is most likely outside the range of

the Coast Horned lizard based on known habitat preferences and the CNDDB results (Figure 3). Loggerhead Shrike (*Elanius ludovicianus*) were not present during the survey. The site was also assessed for LeConte's Thrasher (*Toxostoma lecontei)* habitat but the species was not present during the surveys and the site appears too small and isolated for nesting habitat. This species prefers saltbush scrub which is absent.

Burrowing owls and/or their sign were not detected within the property boundary nor along the buffer zone. The CNDDB records indicate several burrowing owl locations to the west-southeast (Table 1 & Figure 3). No raptors were seen during the site visit. No raptor nests were detected on or near the project site.

2) CNDDB and Literature Search Results:

A California Natural Diversity Database (CNDDB) search was conducted using the Rarefind 3 Database (Table 1 & Figure 3). The results of the database search indicate that up to twenty-seven sensitive species occur in the vicinity. Joshua trees are not present in the CNDDB database but are present on site.

Reptiles

According to the literature review, the site is located within Desert Tortoise (*Gopherus agassizii*) range (CNDDB, 2021). The BLM density maps indicate the project site is in an area of 1-20 Desert Tortoise per square mile. Coast horned lizard (*Phrynosoma coronatum blainvillei)*, a California Special Concern Species, is identified on the CNDDB rarefind database. However, the site is likely outside the current range of this species due to land use. The majority of occurrences are along the foothills of the San Gabriel Mountains and along the Mojave River.

Mammals

There are seven Mohave Ground Squirrel detections within the CNDDB Rarefind 3 database that are within 10 miles from the site. The two most recent records both occur in areas of relatively open desert with limited human disturbance. Other species detections include the Mohave River Vole (*Microtus californicus mohavensis*) and Pallid San Diego mouse (*Chaetodipus fallax pallidus*). Habitat is not present for these species on or near the project site.

Birds

Loggerhead shrikes (*Lanius ludovicianus)* were not detected within 10 miles in the CNDDB database. There are six LeConte's Thrasher (*Toxostoma lecontei)* occurrences to the north, approximately 3-5 miles from the 1980s. Over thirty-six Burrowing Owls (BUOW; *Athene cuncicularia*) records exist in the database, many are within close proximity. Southwestern Willow flycatcher (*Empidonax trailli extimus*), Western Yellow–billed cuckoo (*Coccyzus*

americanus) and Summer tanager (*Piranga rubra*) were detected in the CNDDB database search but habitat is not present on site nor within the nearby vicinity to support these species.

Plants

A CNDDB database and literature review search indicated six plant species which occur within 10 miles of the site: Small-flowered androstephium (*Androstephium brevifolium*), Booth's evening primrose (*Camissonia boothii*), San Bernardino Aster (*Symphyotrichum defoliatum*), Mojave monkeyflower (Mimulus mohavensis), White pygmy poppy (*Canbya candida*) and Southern skullcap (*Scutellaria bolanderi*) were detected in the database but none were detected during the site visit (Table 1 & Figure 3).

Table 1 CNDDB Biological Search Results & Habitat Potential

Scientific Name	Common Name	Occurrence Numbers	Federal Status	State Status	CNPS Status	Potential For Occurrence On Site
Birds						
Accipiter cooperii	Cooper's hawk	5, 4	None	None	N/A	Low nesting potential. Not detected during survey.
Athene cunicularia	burrowing owl	36 Occurrences	None	None	N/A	High nesting potential. Not detected during survey.
Coccyzus americanus occidentalis	western yellow-billed cuckoo	138	Candidate	Endangered	N/A	Low nesting potential. Not detected during survey.
Empidonax traillii extimus	southwestern willow flycatcher	36	Endangered	Endangered	N/A	Low nesting potential. Not detected during survey.
Icteria virens	yellow-breasted chat	55	None	None	N/A	Low nesting potential. Not detected during survey.
Piranga rubra	summer tanager	18, 19	None	None	N/A	Low nesting potential. Not detected during survey.
Toxostoma lecontei	Le Conte's thrasher	21, 138, 137, 136, 17, 162	None	None	N/A	Low nesting potential. Not detected during survey.
Vireo bellii pusillus	least Bell's vireo	265	Endangered	Endangered	N/A	Low nesting potential. Not detected during survey.
Vireo vicinior	gray vireo	34	None	None	N/A	Low nesting potential. Not detected during survey.
Plants						
Androstephium breviflorum	small-flowered androstephium	3	None	None	2.3	Medium potential to occur on site. Not detected during survey.
Camissonia boothii ssp. boothii	Booth's evening-primrose	2,3,5,4	None	None	2.3	Low potential to occur on site. Not detected during survey.
Canbya candida	white pygmy-poppy	5,8	None	None	4.2	Low potential to occur on site. Not detected during survey.
Cymopterus deserticola	desert cymopterus	10	None	None	1B.2	Low potential to occur on site. Not detected during survey.

Loeflingia squarrosa var. artemisiarum	sagebrush loeflingia	20	None	None	2.2	Low potential to occur on site. Not detected during survey.
Opuntia basilaris var. brachyclada	short-joint beavertail	20	None	None	1B.2	Low potential to occur on site. Not detected during survey.
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	15	None	None	1B.2	Low potential to occur on site. Not detected during survey.
Symphyotrichum defoliatum	San Bernardino aster	39	None	None	1B.2	Low potential to occur on site. Not detected during survey.
Mammals						
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	53,58	None	None	N/A	Low potential to occur on site. Not detected during survey.
Lasiurus cinereus	hoary bat	90	None	None	N/A	Low potential to occur on site. Not detected during survey.
Microtus californicus mohavensis	Mohave river vole	1,5,6	None	None	N/A	Low potential to occur on site. Not detected during survey.
Spermophilus mohavensis	Mohave ground squirrel	22, 47, 269, 11, 283, 12, 318	None	Threatened	N/A	Low potential to occur on site. Detection is not possible without trapping efforts.
Reptiles & Amphibians						
Gopherus agassizii	desert tortoise	1,51	Threatened	Threatened	N/A	Low potential to occur on site. Not detected during survey.
Phrynosoma coronatum (blainvillii population)	coast (San Diego) horned lizard	238, 217, 215	None	None	N/A	Low potential to occur on site. Not detected during survey.
Rana draytonii	California red-legged frog	13	Threatened	None	N/A	Low potential to occur on site. Not detected during survey.
Sauromalus ater	chuckwalla	2	None	None	N/A	Low potential to occur on site. Not detected during survey.
Invertebrates					N/A	
Helminthoglypta mohaveana	Victorville shoulderband	1,3	None	None	N/A	Low potential to occur on site. Not detected during survey.
Plebulina emigdionis	San Emigdio blue butterfly	5, 6	None	None	N/A	Low potential to occur on site. Not detected during survey.

Recommendations:

The field survey results were negative for any sign of burrowing owl, desert tortoise, nesting birds, Mohave ground squirrel and desert kit fox. No sign of desert tortoise or burrowing owls was present. No annual rare plants were detected which would have been detectable given the time of year the survey was conducted. No sensitive bird species were detected nesting on site. There are nineteen Joshua trees present and scattered throughout the site. The average height of the trees is 6.3 feet.

It is the opinion of the author that maintains an MOU with CDFW that Mohave Ground Squirrel habitat is not present. This opinion is asserted based on the disturbed habitat, relative isolation without connecting corridors to other potential habitat and lack of records within the vicinity.

Presence was negative for Desert Tortoise within the project footprint. USFWS/CDFW will not likely require mitigation for this species since they are not present and no sign was observed. The Desert Tortoise is listed as a threatened species by the CDFG and the United States Fish and Wildlife Service (USFWS).

Presence was negative for Burrowing Owl. CDFW will not likely require mitigation for this species. However, a 30-day preconstruction survey will be needed, prior to clearing and grubbing the site to ensure owls have not immigrated onto the site since the initial biological study was performed. A preconstruction survey must be reinitiated after expiration of thirty days. In the event a Burrowing Owl is detected, the project proponent will have to consult with the CDFW to determine the amount of habitat needed to mitigate the impacts to the owl habitat on site and to successfully relocate the owls prior to clearing and grubbing.

If the project proponent wishes to construct during the breeding bird season (February to August), a breeding bird survey is recommended to determine if birds are nesting on the site and to fully comply with the Migratory Bird Treaty Act and the California Fish and Game Code Sections 3503 and 3513. If breeding birds are detected on site, the project proponent should either modify the grading operations to avoid those nesting areas or postpone the grading operations until the breeding season is over.

A streambed alteration agreement (1600 Permit) is not needed since there are no jurisdictional drainages on the site.

There are approximately nineteen Joshua Trees (*Yucca brevifolia*) present on site. Due to the recent listing by CDFW of the Joshua tree as a candidate threatened species the project proponent will need to obtain an Incidental Take Permit prior to relocation or removing the Joshua trees. The project proponent will also incorporate the Joshua trees into the landscape plan and relocate the six trees that will be impacted during development.

If you have any questions regarding the results of this report, please contact Ryan Young at (949) 887-0859. The results of this report are good for up to one year from the date of this report.

Certification: *I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological report and that the facts, statements and information presented are true and correct to the best of my knowledge.*

Date: __August 27, 2021_____Signature: _____

Ryan Young, Senior Biologist & Principal

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Table 2 List of Dominant Vascular Plants Detected During Site Visit

FAMILY Species	Common Name	Habit
ASTERACEAE		
Amrbosia dumosa	White bur-sage	Perennial shrub
Chrysothamnus nauseosus	Rabbitbrush	Shrub
Hymenoclea salsola	Cheesebush	Perennial shrub
Ericameria cooperi	Goldenbush	shrub
Hymenoclea salsola	Cheesebush	shrub
BORAGINACEAE		
Amsinckia tessellata	Fiddleneck	annual
CACTACEAE		
Opuntia echinocarpa	Silver cholla	Shrub
CHENOPODIACEAE		
Grayia spinosa	Spiny hopsage	Perennial shrub
Krasheninnikovia lanata	Winterfat	Perennial shrub
*Salsola tragus**	Russian thistle	annual
EPHEDRACEAE		
Ephedra nevadensis	Mormon tea	
EUPHORBIACEAE		
Chamaesyce albomarginata	Rattlesnake weed	annual
GERANIACEAE		
*Erodium cicutarium**	Red-stemmed filaree	annual
LILIACEAE		
Yucca brevifolia	Joshua Tree	Tree
POACEAE		
Achnatherum hymenoides	Indian ricegrass	perennial
Bromus madritensis ssp. *rubens**	Foxtail chess	annual
*Bromus tectorum**	Cheat grass	annual
*Schismus arabicus**	Arabian grass	annual
*Vulpia bromoides**	Fescue	annual
SOLANACAE		
Lycium cooperi	Cooper's boxthorn	Shrub

ZYGOPHYLLACEAE

Larrea tridentata	Creosote	shrub

Table 3 Vertebrate Species Detected During Habitat Assessment

Birds	**Number Detected**
Common Raven (*Corvus corax*)	5
Horned lark (*Eremophila alpestris*)	10
House finch (*Carpodacus mexicanus*)	5
Northern Mockingbird (*Mimus polyglottos*)	2
Sage sparrow (*Amphispiza belli*)	10

Table 4 Joshua Tree Census Results

ID	Easting	Northing	Height	Branches	Clonal	Health	Transplantable	Comments
2	466806	3814120	5	0	yes-1	good	yes	No sign of rodent activity (gnawing on fronds).
4	466805	3814081	6	0	yes-1	good	yes	No sign of rodent activity (gnawing on fronds).
5	466757	3814095	6	0	No	good	yes	No sign of rodent activity (gnawing on fronds).
6	466749	3814099	8	0	No	good	yes	No sign of rodent activity (gnawing on fronds).
7	466749	3814113	7	1	No	average	yes	Yellow fronds. No sign of rodent activity (gnawing on fronds).
8	466738	3814120	12	1	No	good	yes	No sign of rodent activity (gnawing on fronds).
9	466721	3814128	7	1	No	good	yes	No sign of rodent activity (gnawing on fronds).
10	466759	3814184	4	0	No	poor	no	Yellow/dead fronds. No sign of rodent activity (gnawing on fronds).
11	466795	3814210	4	0	No	good	yes	No sign of rodent activity (gnawing on fronds).
12	466803	3814287	2	0	No	good	yes	No sign of rodent activity (gnawing on fronds).
13	466713	3814285	5	0	No	good	yes	No sign of rodent activity (gnawing on fronds).
14	466728	3814229	7	1	No	good	yes	No sign of rodent activity (gnawing on fronds).
15	466721	3814208	3	0	No	good	yes	No sign of rodent activity (gnawing on fronds).
16	466621	3814246	4	0	No	good	yes	No sign of rodent activity (gnawing on fronds).
17	466685	3814000	9	2	No	good	yes	No sign of rodent activity (gnawing on fronds).
18	466721	3814032	6	1	No	good	yes	No sign of rodent activity (gnawing on fronds).
19	466757	3814043	15	2	No	good	yes	No sign of rodent activity (gnawing on fronds).
20	466790	3814044	3	0	No	good	yes	No sign of rodent activity (gnawing on fronds).
21	466799	3814043	7	0	No	poor	no	Tree appears to be dying. Yellow fronds. Laying on side
22	466567	3814349	N/A	N/A	N/A	N/A	N/A	Photo Point. NW Corner
23	466827	3813982	N/A	N/A	N/A	N/A	N/A	Photo Point. SE Corner
1	466579	3813987	N/A	N/A	N/A	N/A	N/A	Photo Point. SW Corner
3	466818	3814351	N/A	N/A	N/A	N/A	N/A	Photo Point. NE Corner

___ = Trees planned for relocation based on Alta Survey Design (Figure 8).

Figure 1: Regional View

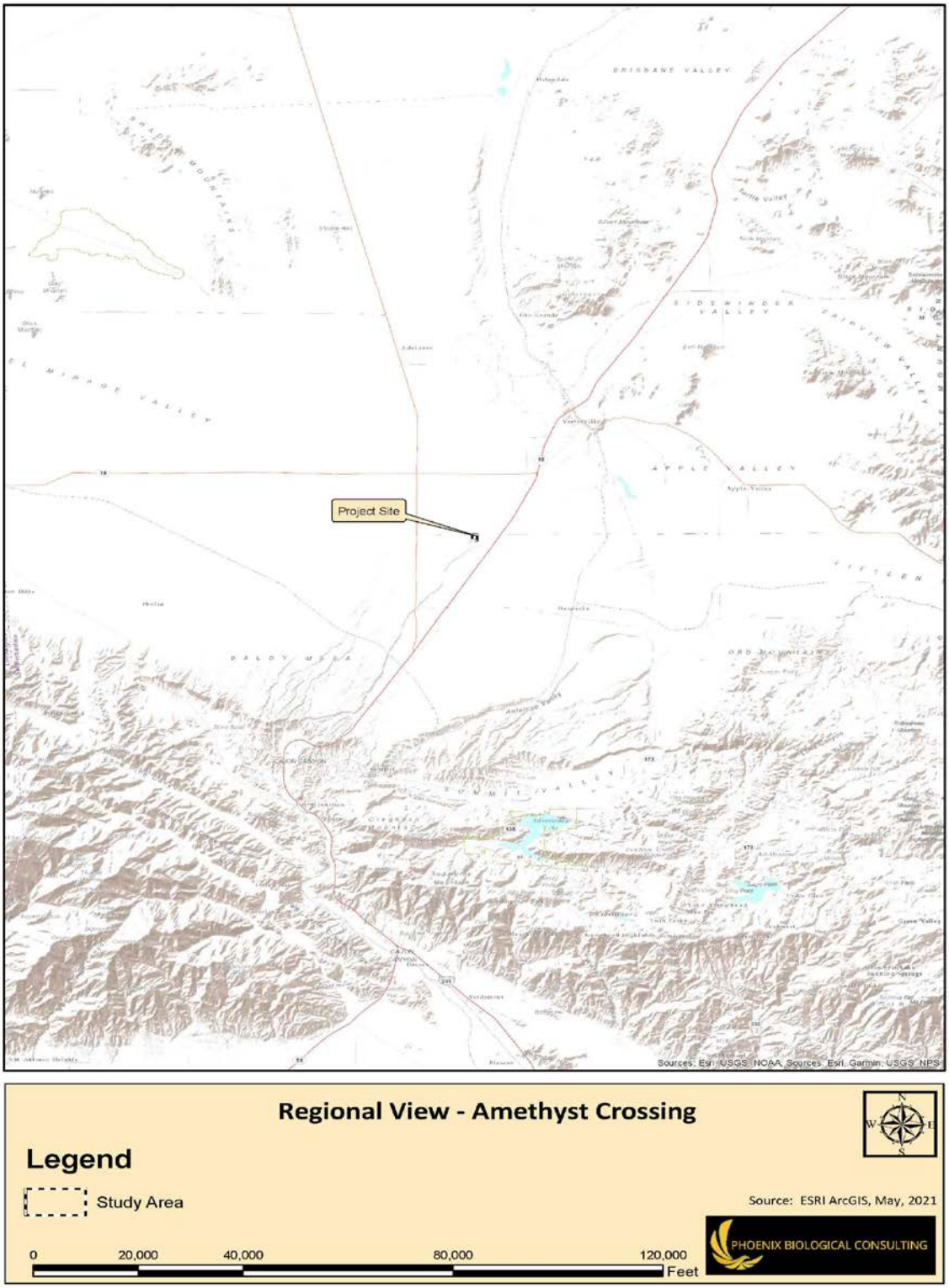

Figure 2: Aerial View Results

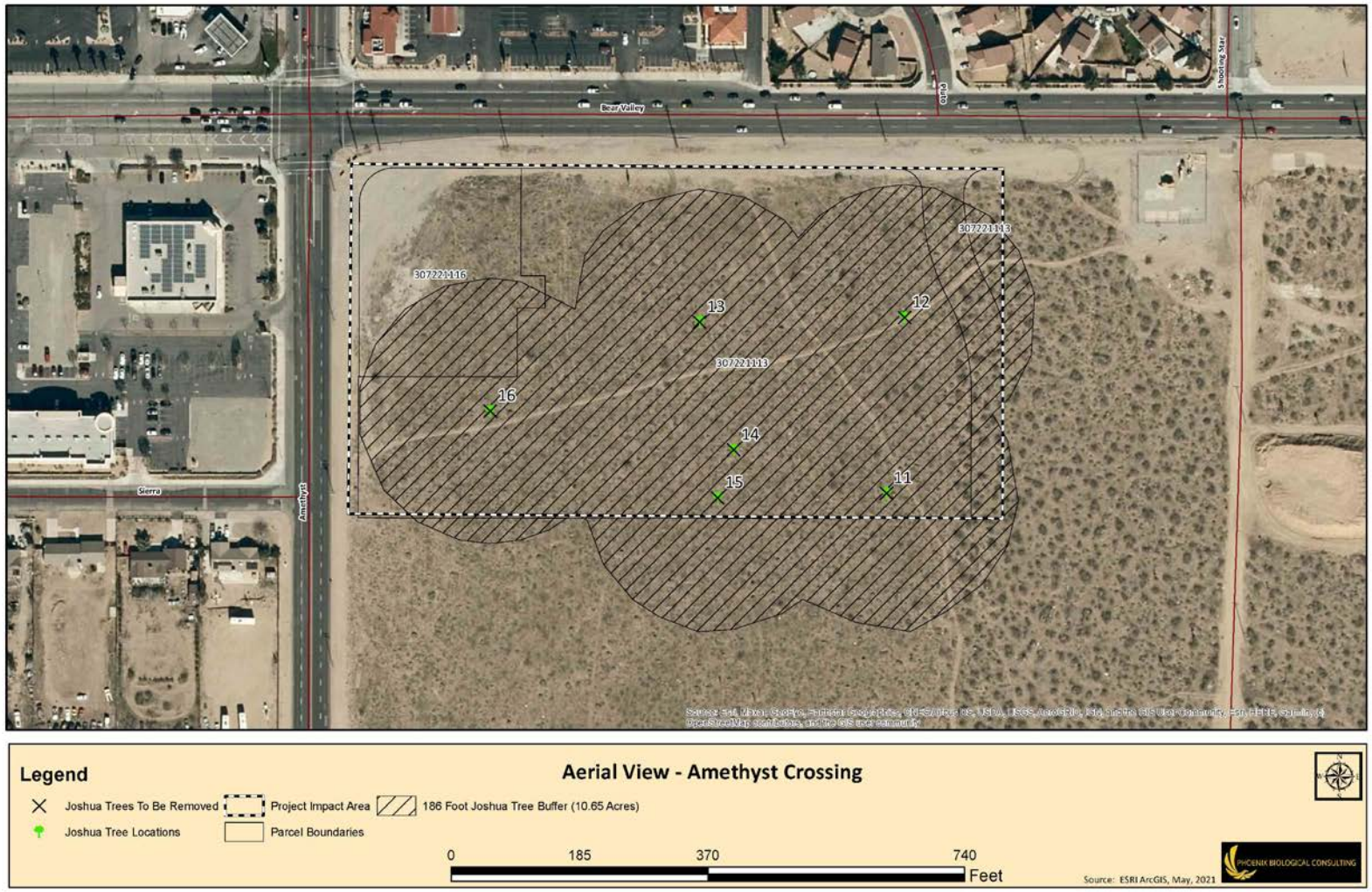

Figure 3: CNDDB Results

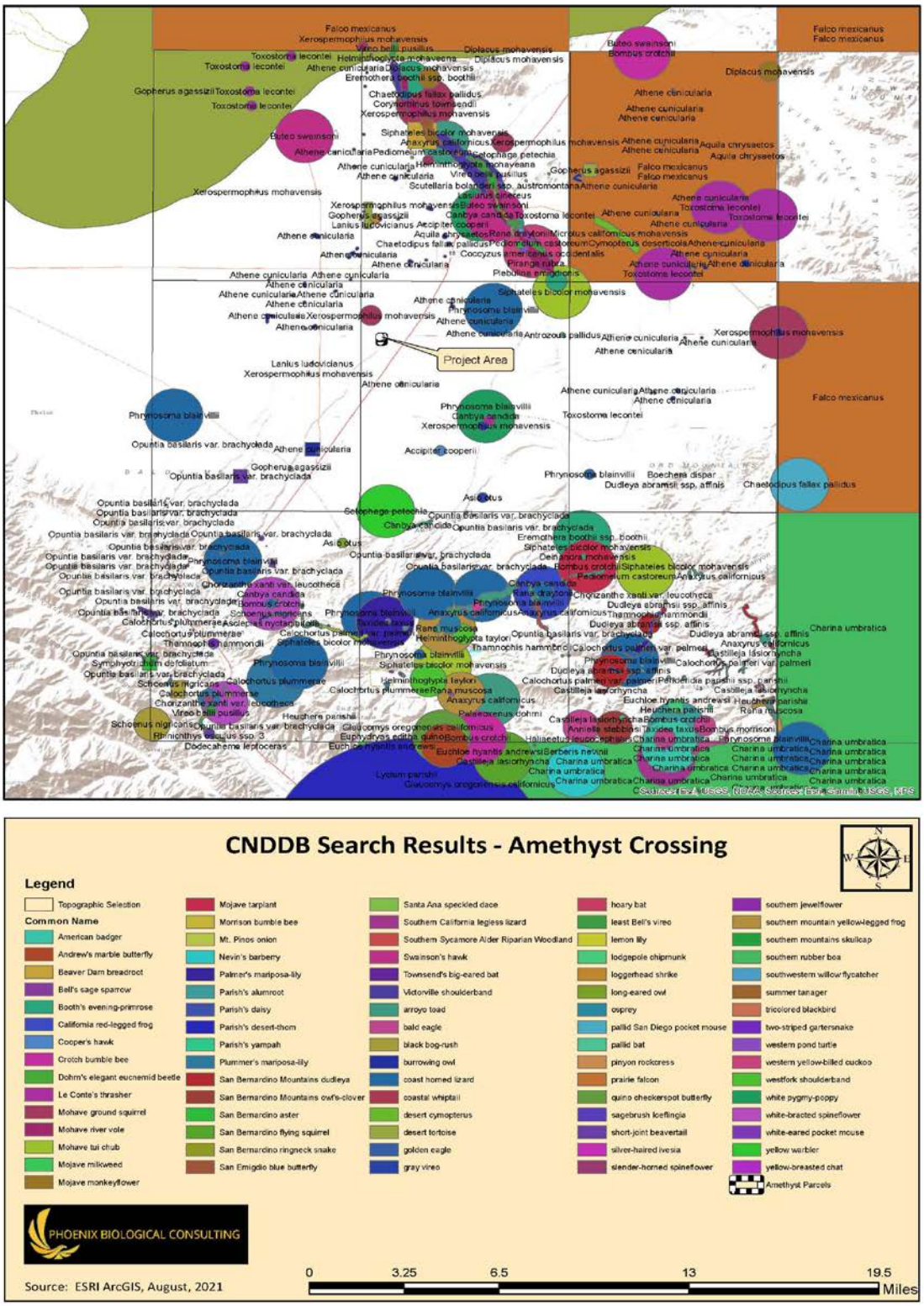

Figure 4: USDA Soils Map

Figure 5: Topographic Map

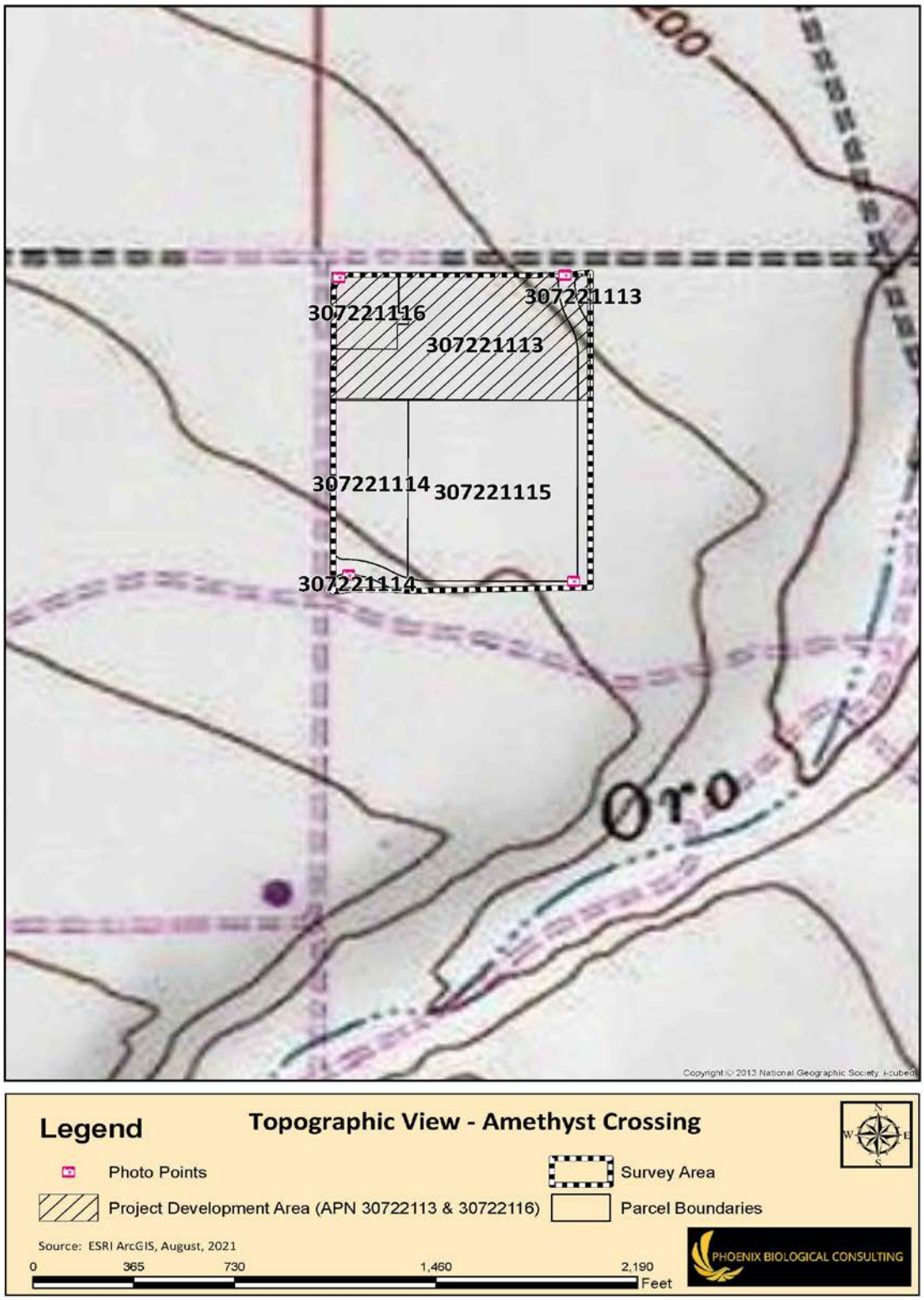

Figure 6: Drainages

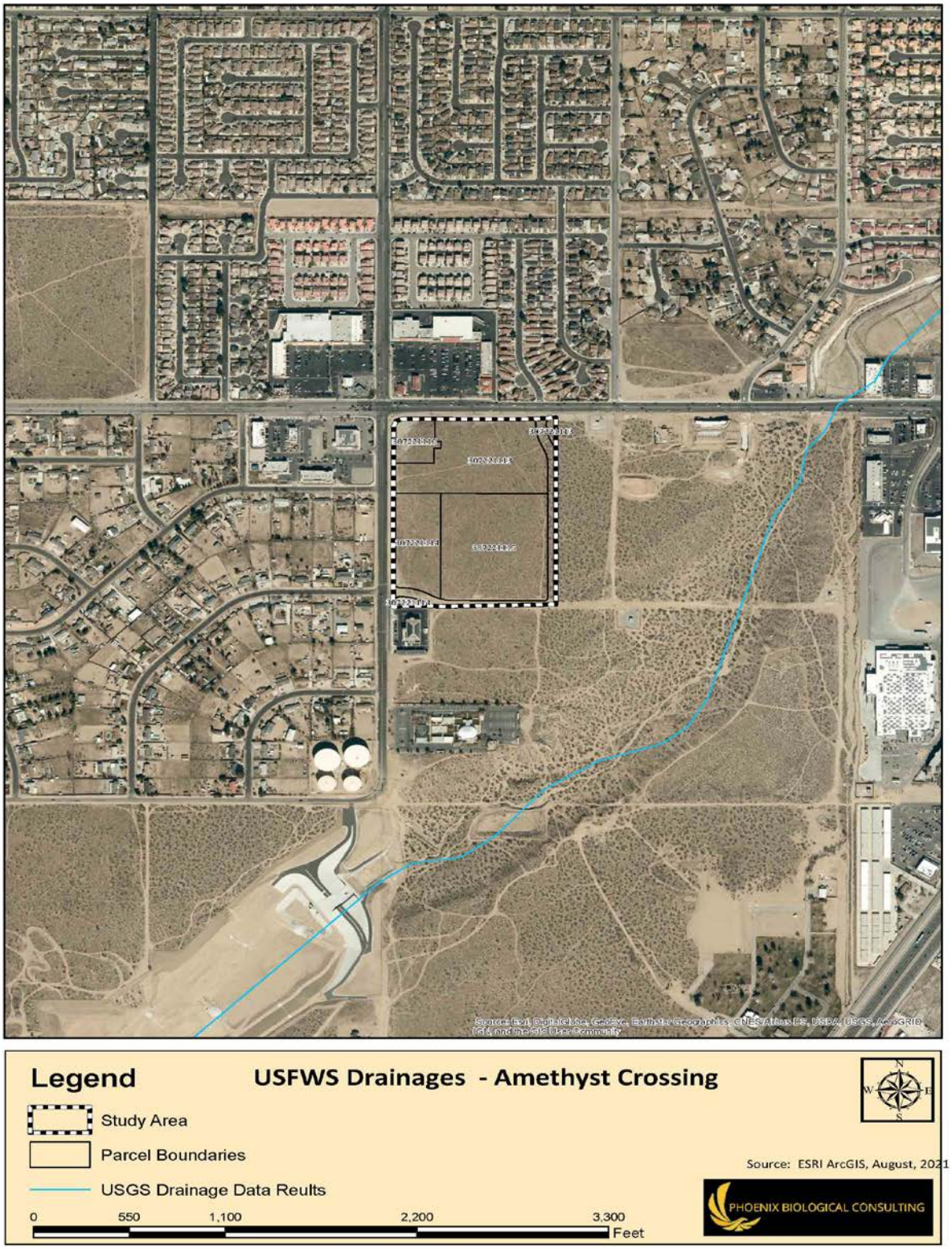

Figure 7: Site Photos

	NE Corner. Facing SW
	NW Corner. Facing SE

	SE Corner. Facing NW
	SW Corner. Facing NE.

Figure 8: Alta Survey Project Design