

September 27, 2022

Connie Anderson
T&B Planning, Inc
Director of New Business Services/Project Manager
3200 El Camino Real, Suite 100
Irvine, California 92602

VIA EMAIL
canderson@tbplanning.com

Subject: Results of the Focused Special Status Plant/Desert Native Plant Survey Conducted for the Antelope Valley Commerce Center Project in the City of Palmdale, Los Angeles County, California

Dear Ms. Anderson:

This Letter Report presents the findings of special status plant/desert native plant surveys conducted for the Antelope Valley Commerce Center Project located in the City of Palmdale, Los Angeles County, California (Exhibit 1).

PROJECT LOCATION

The proposed Project is located on approximately 400-acres in the southern portion of the Antelope Valley in the City of Palmdale. The Project site is situated south of Columbia Way, east of Sierra Hwy and the Pacific Union railroad alignment, north of Avenue M-12, and west of 15th Street E (Exhibit 1). The Project site is located on the Lancaster East U.S. Geologic Survey (USGS) 7.5-minute quadrangle map (Exhibit 2).

METHODS

Botanical surveys were floristic in nature and consistent with the protocols created by the California Department of Fish and Wildlife (CDFW) (CDFW 2018). The purpose of the survey was to document all special status plant species including those plant and tree species regulated by the City of Palmdale Urgency Ordinance Amending Chapter 14.04 of the Palmdale Municipal Code (Joshua Tree and Native Desert Vegetation Preservation) and the California Desert Native Plants Act and Native Desert Vegetation Preservation Ordinance (Sections 14.04.010-14.04.120). Prior to the field surveys, a literature search was conducted to identify special status plant species reported from the vicinity of the proposed Project site. Sources reviewed include the USGS for Palmdale, Lancaster East, Lancaster West, Alpine Butte, Littlerock, and Ritter Ridge 7.5-minute quadrangles in the California Native Plant Society's Locational Inventory of Rare and Endangered Vascular Plants of California (CNPS 2022) and the CDFW's California Natural Diversity Database (CDFW 2022).

225 South Lake Avenue
Suite 1000
Pasadena, CA 91101

Tel 626.351.2000
Fax 626.351.2030
www.Psomas.com

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Plants regulated by the City of Palmdale and the California Desert Native Plants Act include the following:

- *Juniperus californica* (California juniper);
- All species of Burseraceae family (elephant tree);
- *Carnegiea gigantea* (sahuaro cactus);
- *Ferocactus acanthodes* (barrel cactus);
- *Castela emoryi* (crucifixion thorn);
- *Dudleya saxosa* (Panamint dudleya);
- *Pinus longaeva* (bristlecone pine);
- *Washingtonia filifera* (fan palm);
- All species of the family Agavaceae (century plants, nolinias, yuccas);
- All species of the family Cactaceae (cacti), except for the plants listed in subdivisions (b) and (c) of Section 80072 which may be harvested under a permit obtained pursuant to that section;
- All species of the family Fouquieriaceae (ocotillo, candlewood);
- All species of the genus Prosopis (mesquites);
- All species of the genus Cercidium (palos verdes);
- *Acacia greggii* (catclaw);
- *Atriplex hymenelytra* (desert-holly);
- *Dalea spinosa* (smoke tree); and
- *Olneya tesota* (desert ironwood), including dead .

According to the National Weather Service, Palmdale received 3.88 inches of precipitation for Water Year 2022 to date (i.e., October 1, 2021, through August 31, 2022), which is about 67 percent of the normal average (National Weather Service 2022). Where available, reference populations were monitored for annual and difficult-to-detect target species to ensure that the scheduled surveys were comprehensive. This is especially relevant during periods of unusual rainfall patterns or below-average rainfall. If conditions at a nearby reference population are suitable for germination and growth, then it can be inferred that conditions would also be suitable in the survey area. Reference populations were not monitored for species with a California Rare Plant Rank (CRPR) of 4; perennials (e.g., *Atriplex* species) which would be identifiable throughout the year; or for species with no extant, publicly accessible reference population in the Project region.

Psomas Senior Biologist Allison Rudalevige; Biologists Sarah Thomas, Jack Underwood, John Simon-Parent, and Miranda Scelaro; and Psomas Consulting Senior Botanist Sandy Leatherman conducted special status plant surveys on April 11, 12, 13; and May 9, 10, 11, 2022. The surveys comprised 162.5 total person-hours. The potentially suitable habitats for special status plants within the survey area were systematically surveyed to the extent possible during the site visits. A 50-foot buffer from the Project boundary was surveyed by walking 10 to 20 meter transects depending on shrub cover and habitat. All plant species observed were recorded in field notes. Plants were identified using taxonomic keys, descriptions, and illustrations in Jepson Flora Project (2022), Baldwin et al. (2012), Hickman (1993), and Munz (1974). Nomenclature of plant taxa conform to the *Special Vascular Plants, Bryophytes, and*

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Lichens List (CDFW 2020b) for special status species and the Jepson eFlora (Jepson Flora Project 2022) for all other taxa

Certified Arborist Trevor Bristle (ISA Certificate No. WE-10233A) documented trees regulated by the City of Palmdale during Joshua tree surveys. During the survey, the following data were collected: trunk diameter at breast height, tree height, and canopy width. Qualitative ratings for each tree's overall health and aesthetic quality were also given. Trees were affixed with a pre-numbered aluminum tag. The collected data are included in Table 1 in the Survey Results section below.

Any special status plant or tree species observed in the survey area were mapped with a handheld Garmin Global Positioning System unit. Data were collected on the number and phenology of individuals and microsite characteristics (e.g., slope, aspect, soil texture, surrounding habitat, and associated species).

SITE DESCRIPTION

Elevations range from approximately 2,500 feet above mean sea level (msl) in the northern portion of the site to approximately 2,555 feet above msl in the southern portion of the property. The Project site is currently undeveloped directly adjacent (north) to the Palmdale Regional Airport. Soil types in the survey area include Adelanto coarse sandy loam, 2 to 5 percent slopes; Cajon loamy sand, 0 to 2 percent slopes; Cajon loamy sand, 2 to 9 percent slopes; Cajon loamy sand, loamy substratum, 0 to 2 percent slopes; Cajon loamy fine sand, 0 to 2 percent slopes, hummocky; and Hesperia fine sandy loam, 0 to 2 percent slopes (USDA NRCS 2007). Exhibit 3 shows a map of soil types throughout the survey area.

Vegetation on the site is comprised of Joshua tree woodland, disturbed Joshua tree woodland, rubber rabbitbrush scrub, big sagebrush – rubber rabbitbrush scrub, creosote bush scrub, rubber rabbitbrush – Nevada joint-fir scrub, rubber rabbitbrush – Nevada joint-fir scrub/Joshua tree woodland, Nevada joint-fir – cheesebush – Cooper's box thorn scrub/Joshua tree woodland, and bare ground (Exhibit 4). Some portions of the site have been disturbed historically (e.g., evidence of Joshua trees removal and roadway creation via off-road vehicle use). Graded dirt roads traverse the perimeter of the site and two graded dirt roads run through the southern portion of the site.

SURVEY RESULTS

Four special status species were documented in the survey area: California juniper (*Juniperus californica*), western Joshua tree (*Yucca brevifolia*), crowned muilla (*Muilla coronata*), and silver cholla (*Cylindropuntia echinocarpa*) (Exhibit 5¹). The California juniper is regulated by the City of Palmdale Urgency Ordinance; the western Joshua tree is a California State Candidate Threatened species; the crowned muilla is a CRPR 4.2 species; and the silver cholla is regulated by the City of Palmdale and the California Desert Native Plants Act and Native Desert Vegetation Preservation Ordinance. A full detailed description of the location of Joshua trees in the survey area can be found under separate cover in the Joshua Tree Focused Survey Report prepared by Psomas for the proposed Project. Table 1 contains the regulatory information for the California juniper tree, and Table 2 contains data for the silver cholla observations. Details on the crowned muilla observation can be found in paragraph form below Table 3.

¹ Exhibit 5 does not depict locations for the western Joshua tree. Refer to the Joshua Tree Focused Survey Report for those locations.

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TABLE 1
TREES REGULATED BY THE CITY OF PALMDALE

Tree Species		Tree Tag ID	Health	DBH	Height (ft)	Canopy (ft)
Common Name	Botanical Name					
California juniper	<i>Juniperus californica</i>	3646	good	3	8	12
DBH: diameter at breast height; ft: feet						

TABLE 2
CALIFORNIA DESERT NATIVE PLANTS

Plant Species		Exhibit 5 ID	Health ^a	Approximate Height (ft)
Common Name	Botanical Name			
silver cholla	<i>Cylindropuntia echinocarpa</i>	1	3	4
silver cholla	<i>Cylindropuntia echinocarpa</i>	2	2	4
silver cholla	<i>Cylindropuntia echinocarpa</i>	3	4	2.5
silver cholla	<i>Cylindropuntia echinocarpa</i>	4	2	3
silver cholla	<i>Cylindropuntia echinocarpa</i>	5	2	4
silver cholla	<i>Cylindropuntia echinocarpa</i>	6	3	1.5
silver cholla	<i>Cylindropuntia echinocarpa</i>	7	3	3
silver cholla	<i>Cylindropuntia echinocarpa</i>	8	3	1.5
silver cholla	<i>Cylindropuntia echinocarpa</i>	9	3	3
silver cholla	<i>Cylindropuntia echinocarpa</i>	10	3	2
silver cholla	<i>Cylindropuntia echinocarpa</i>	11	2	3
silver cholla	<i>Cylindropuntia echinocarpa</i>	12	2	1.5
^a Health/Aesthetics Ratings: 1=Very Poor, 2=Poor, 3=Fair, 4=Good, and 5=Excellent; ft: feet				

A list of all plants observed within the survey area during the focused plant surveys can be found in Attachment A. Table 3 below lists the special status plant species known to occur in the vicinity of the Project site along with habitat suitability within the survey area and survey results.

TABLE 3
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR
IN THE SURVEY AREA VICINITY

Scientific Name	Common Name	CDFW	CRPR	Species Background	Potential
<i>Astragalus hornii</i> var. <i>hornii</i>	Horn's milk-vetch		1B.1	Annual herb. Lake margins and alkaline soils in meadows, seeps, and playas; 196–2,788 ft. Southern California County Distribution: Kern, San Bernardino (Presumed extirpated). Blooming period: May–October	No suitable habitat present. Not observed during focused surveys.
<i>Astragalus preussii</i> var. <i>laxiflorus</i>	Lancaster milk-vetch		1B.1	Perennial herb. Chenopod scrub; elevation range unknown due to lack of records. Southern California County Distribution: Kern, Los Angeles, Riverside, San Bernardino. Blooming period: March–May	No suitable habitat present. Not observed during focused surveys.
<i>Calochortus striatus</i>	alkali mariposa lily		1B.2	Perennial bulbiferous herb. Alkaline and mesic soils in chaparral, chenopod scrub, Mojavean desert scrub, meadows, seeps, desert grasslands; 230–5,232 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: April–June	No suitable soils. Not observed during focused surveys.
<i>Calystegia peirsonii</i>	Peirson's morning-glory		4.2	Perennial rhizomatous herb. Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, grassland; 98–4,920 ft. Southern California County Distribution: Los Angeles. Blooming period: April–June	No suitable habitat present. Not observed during focused surveys.
<i>Canbya candida</i>	white pygmy-poppy		4.2	Annual herb. Gravelly, sandy, or granitic soils in Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland; 1,968–4,789 ft. Southern California County Distribution: Imperial, Kern, Los Angeles, San Bernardino. Blooming period: March–June	Potentially suitable habitat present. Not observed during focused surveys.
<i>Chorizanthe spinosa</i>	Mojave spineflower		4.2	Annual herb. Sometimes alkaline soils in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and playas; 20–4,264 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–July	Potentially suitable habitat present. Not observed during focused surveys.
<i>Cymopterus deserticola</i>	desert cymopterus		1B.2	Perennial herb. Sandy soil in Joshua tree woodland and Mojavean desert scrub; 2,066–4,920 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May.	Marginally suitable habitat present. Not observed during focused surveys.
<i>Eriastrum rosamondense</i>	Rosamond eriastrum		1B.1	Annual herb. Alkaline hummocks in often sandy soil in openings of chenopod scrub and the edges of vernal pools; 2,296–2,345 ft. Southern California County Distribution: Kern, Los Angeles. Blooming period: April–July	No suitable soils. Not observed during focused surveys.
<i>Eriophyllum mohavense</i>	Barstow woolly sunflower		1B.2	Annual herb. Chenopod scrub, Mojavean desert scrub, and playas; 1,640–3,149 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May	No suitable habitat present. Not observed during focused surveys.
<i>Gilia latiflora</i> ssp. <i>cuyamensis</i>	Cuyama gilia		4.3	Annual herb. Sandy soil in pinyon-juniper woodland; 1,952–6,560 ft. Southern California County Distribution: Kern, Los Angeles, Ventura. Blooming period: April–June	No suitable habitat present. Not observed during focused surveys.
<i>Goodmania luteola</i>	golden goodmania		4.2	Annual herb. Alkaline or clay soils in Mojavean desert scrub, meadows, seeps, playas, and grassland; 66–7,216 ft. Southern California County Distribution: Kern, Los Angeles. Blooming period: April–August	No suitable soils. Not observed during focused surveys.
<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>	sagebrush loeflingia		2B.2	Annual herb. Sandy soil in desert dunes, great basin scrub, and Sonoran desert scrub; 2,296–5,297 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: April–May	Potentially suitable habitat present. Not observed during focused surveys.
<i>Lycium torreyi</i>	Torrey's box-thorn		4.2	Perennial shrub. Coastal scrub and Sonoran desert scrub; 10–3,660 ft. Southern California County Distribution: Imperial, Riverside, San Bernardino, San Diego. Blooming period: January–November	Potentially suitable habitat present. Not observed during focused surveys.
<i>Muilla coronata</i>	crowned muilla		4.2	Perennial cormous herb. Chenopod scrub, Mojavean desert scrub, Joshua tree and pinyon-juniper woodland; 2,509–6,429 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–April (May)	Suitable habitat. Observed.
<i>Opuntia basilaris</i> var. <i>brachyclada</i>	short-joint beavertail		1B.2	Stem succulent shrub. Chaparral, Mojavean desert scrub, Joshua tree, pinyon-juniper woodland; 1,394–5,904 ft. Southern California County Distribution: Los Angeles, San Bernardino. Blooming period: April–August	Marginally suitable habitat present. Limited records in the region. Not observed during focused surveys.
<i>Perideridia pringlei</i>	adobe yampah		4.3	Perennial herb. Serpentine or often clay soils in chaparral, cismontane woodland, coastal scrub, pinyon-juniper woodland; 984–5,904 ft. Southern California County Distribution: Kern, Los Angeles, Ventura. Blooming period: April–July	No suitable soils. Not observed during focused surveys.
<i>Puccinellia simplex</i>	California alkali grass		1B.2	Annual herb. Saline flats, mineral springs; <2,953 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May	No suitable habitat present. Not observed during focused surveys.

TABLE 3
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR
IN THE SURVEY AREA VICINITY

Scientific Name	Common Name	CDFW	CRPR	Species Background	Potential
<i>Yucca brevifolia</i>	western Joshua tree	CST		Perennial herb. Desert flats, slopes; 1,312–7,546 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino, Riverside. Blooming period: March–June	Suitable habitat. Observed.
CDFW: California Department of Fish and Wildlife; CRPR: California Rare Plant Rank					
Species Status:					
State (CDFW)					
CST Candidate State Threatened					
CRPR					
1B Plants Rare, Threatened, or Endangered in California and elsewhere					
2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere					
4 Plants of limited distribution - watch list					
.1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)					
.2 Moderately threatened in California (20–80% of occurrences threatened; moderate degree and immediacy of threat)					
.3 Not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known)					
Species that were observed on site are shown in boldface type . For blooming period, months included in parentheses are uncommon.					
* Sources include CDFW 2022a, CNPS 2022, and Jepson Flora Project 2022.					

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Crowned Muilla

Crowned muilla has a CRPR of 4.2. It typically blooms between March and April (Jepson Flora Project 2022; CNPS 2022). This perennial herb (bulb) occurs in open desert scrub and woodland between approximately 2,509–6,429 feet above msl (Jepson Flora Project 2022; CNPS 2022). This species is known from the Mojave Desert, desert mountains, Tehachapi Mountain area, southern high Sierra Nevada and east to the White and Inyo Mountains (Jepson Flora Project 2022).

One confirmed crowned muilla observation (one individual) was documented along the southern edge of the Project site (Exhibit 5). This individual was desiccated and contained one seed. Considering the time of year the observation was made (early April), it can be inferred this individual bloomed in the previous season. In addition, a population of approximately ten individuals in Themidaceae (Brodiaea) family were observed in the eastern portion of the site (Exhibit 5). These individuals were observed in a vegetative state and could not be positively identified at the time of the survey. Blooming never occurred (multiple checks were performed) so further identification was not possible. Given the structure of the leaves, it is likely that this population is also crowned muilla. Both locations occur in Joshua tree woodland in sandy soils.

CONCLUSIONS

A total of 8,196 Joshua trees were documented in the survey area. The City of Palmdale requires avoidance of Joshua trees to the maximum extent practicable. A qualified City-approved biologist or arborist should be retained to conduct any future relocation/transplanting activities and should follow Cities Municipal Code protocols in Section 14.04.060, titled Joshua Tree Relocation Methodology.

One California juniper was documented in the survey area. The City of Palmdale requires provisions regarding the preservation of native desert vegetation both on- and off-site. A qualified City-approved biologist or arborist should be retained to conduct any future relocation/transplanting activities and should follow Cities Municipal Code protocols in Section 14.04.070, titled Desert Vegetation Preservation Criteria; and Section 14.04.080 Maintenance Requirements.

A total of six silver cholla were documented in the survey area. Silver cholla is regulated by the City of Palmdale and the California Desert Native Plants Act and Native Desert Vegetation Preservation Ordinance. Any impacts to silver cholla would require compliance with both the City and State Ordinances.

Psomas appreciates the opportunity to assist on this Project. If you have any comments or questions, please call Marc Blain at 626.351.2000.

Sincerely,

P S O M A S



Marc T. Blain
Senior Project Manager



Sarah Thomas
Biologist

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Enclosures: Exhibit 1 – Project Location
 Exhibit 2 – USGS Quadrangle Map
 Exhibit 3 – Soils Map
 Exhibit 4 – Soils Map
 Exhibit 5 – Survey Results
 Attachment A – Plant Compendium

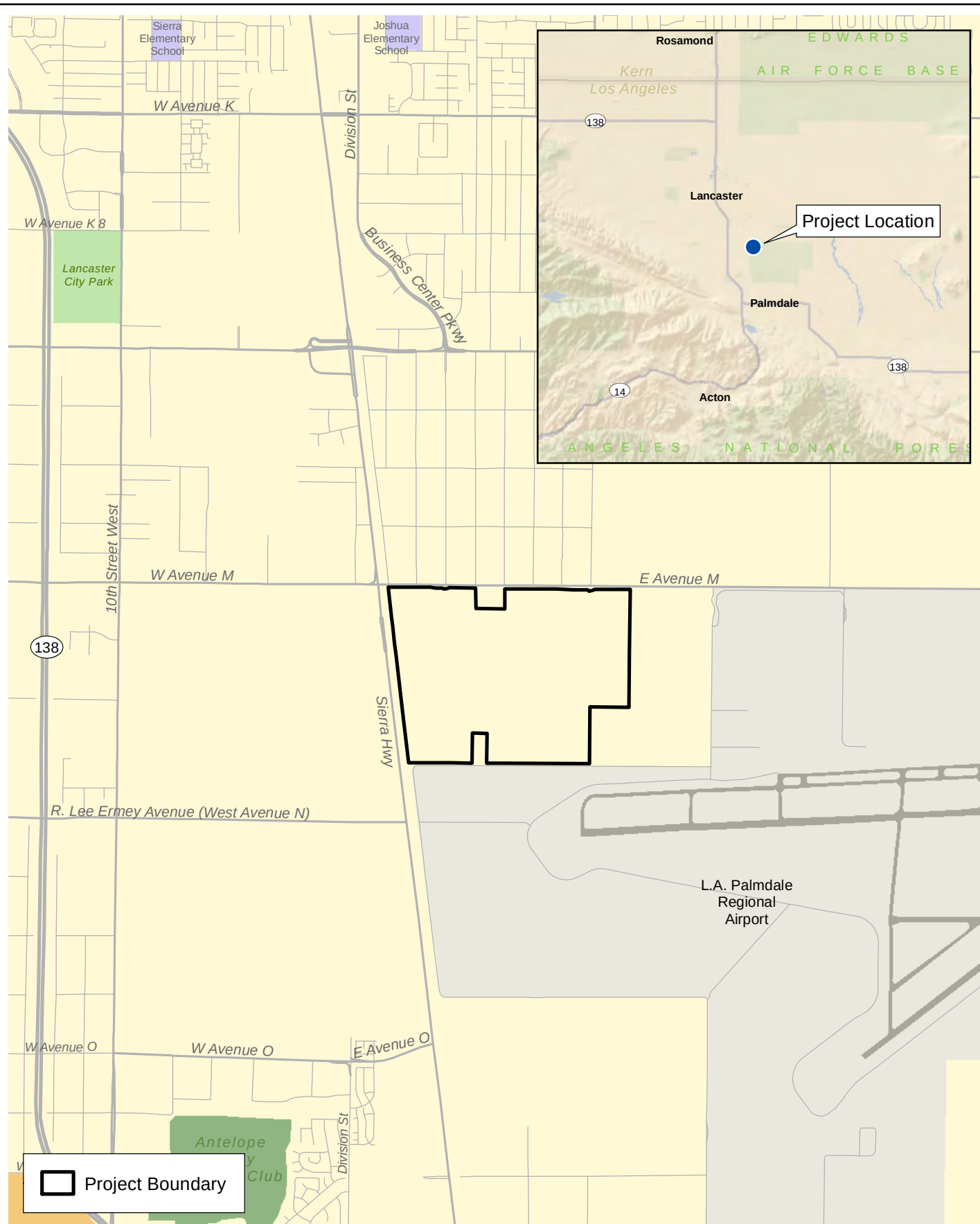
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Project Location

Antelope Valley Commerce Center

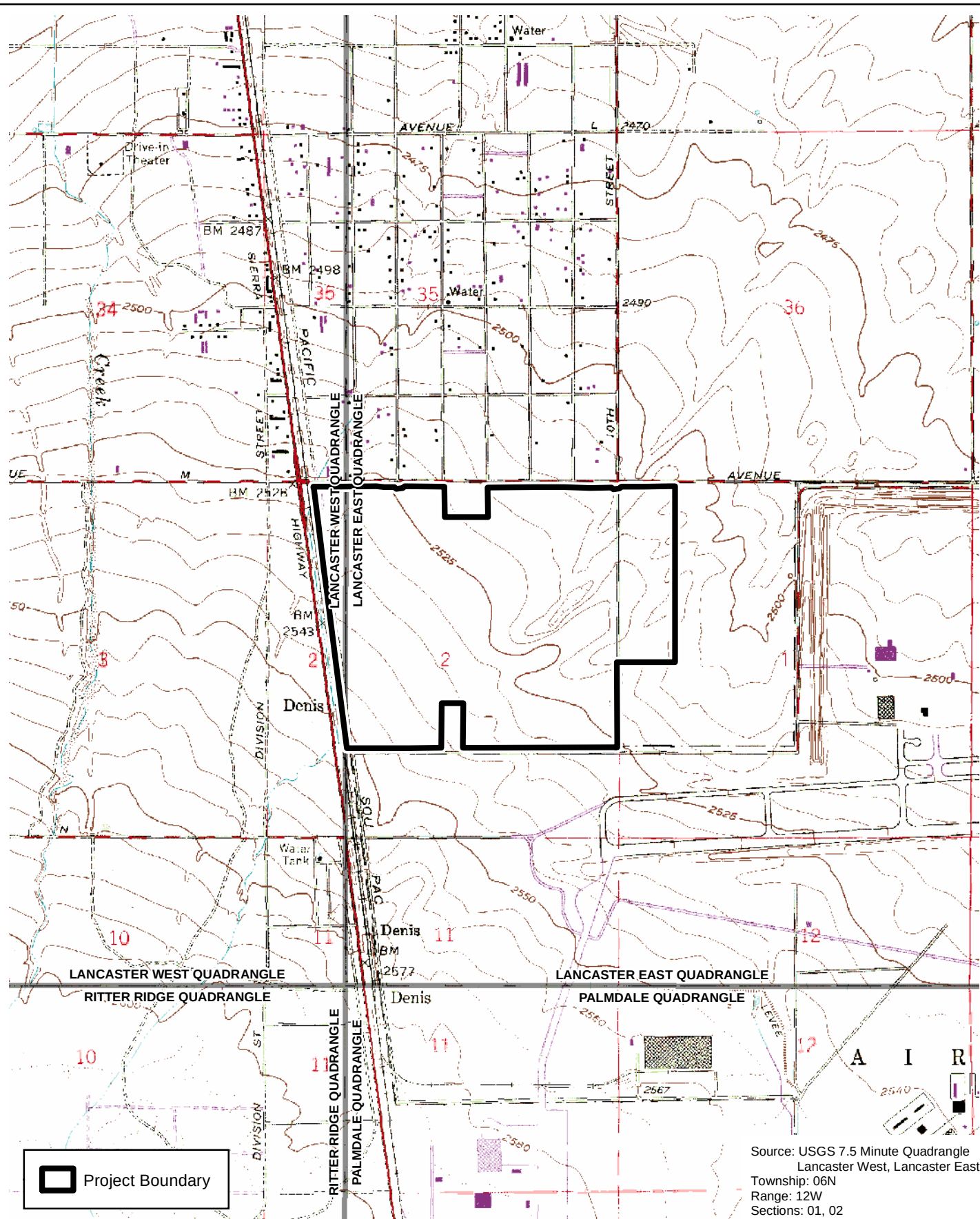


3,000 1,500 0 3,000 Feet

Exhibit 1



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USGS 7.5-Minute Digital Quadrangle

Antelope Valley Commerce Center

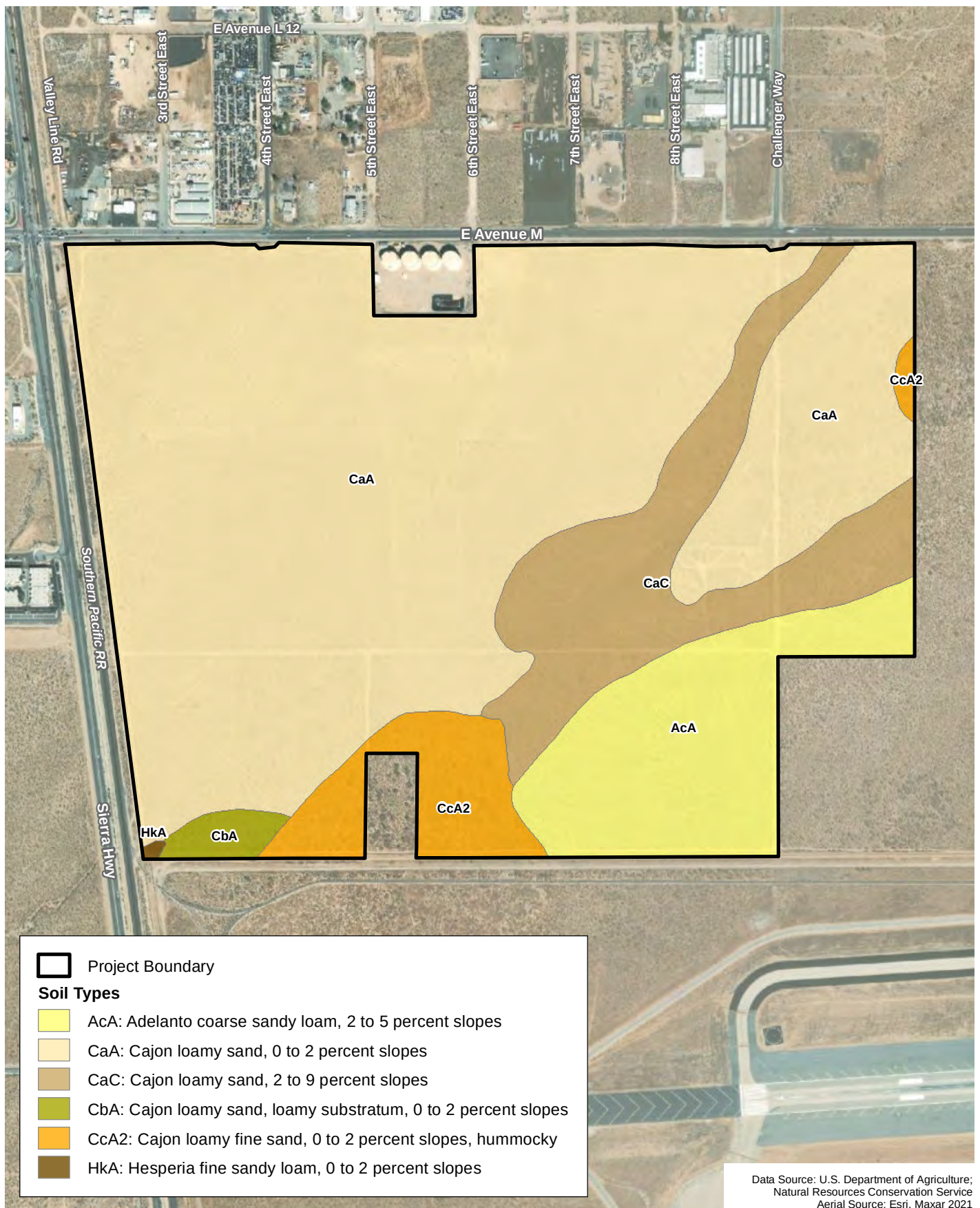
Exhibit 2



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Soils Map

Antelope Valley Commerce Center



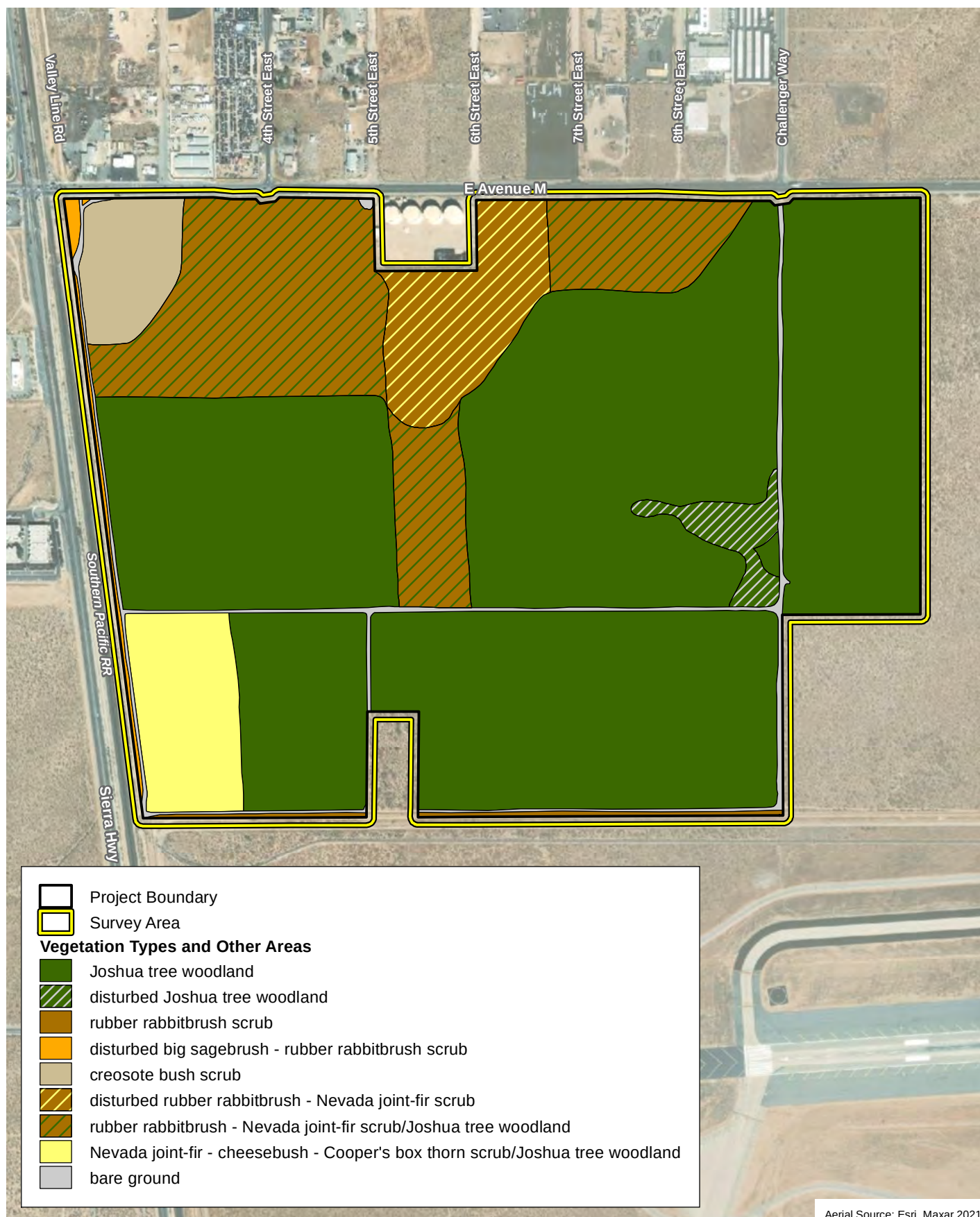
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Exhibit 3



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Vegetation Types and Other Areas

Antelope Valley Commerce Center

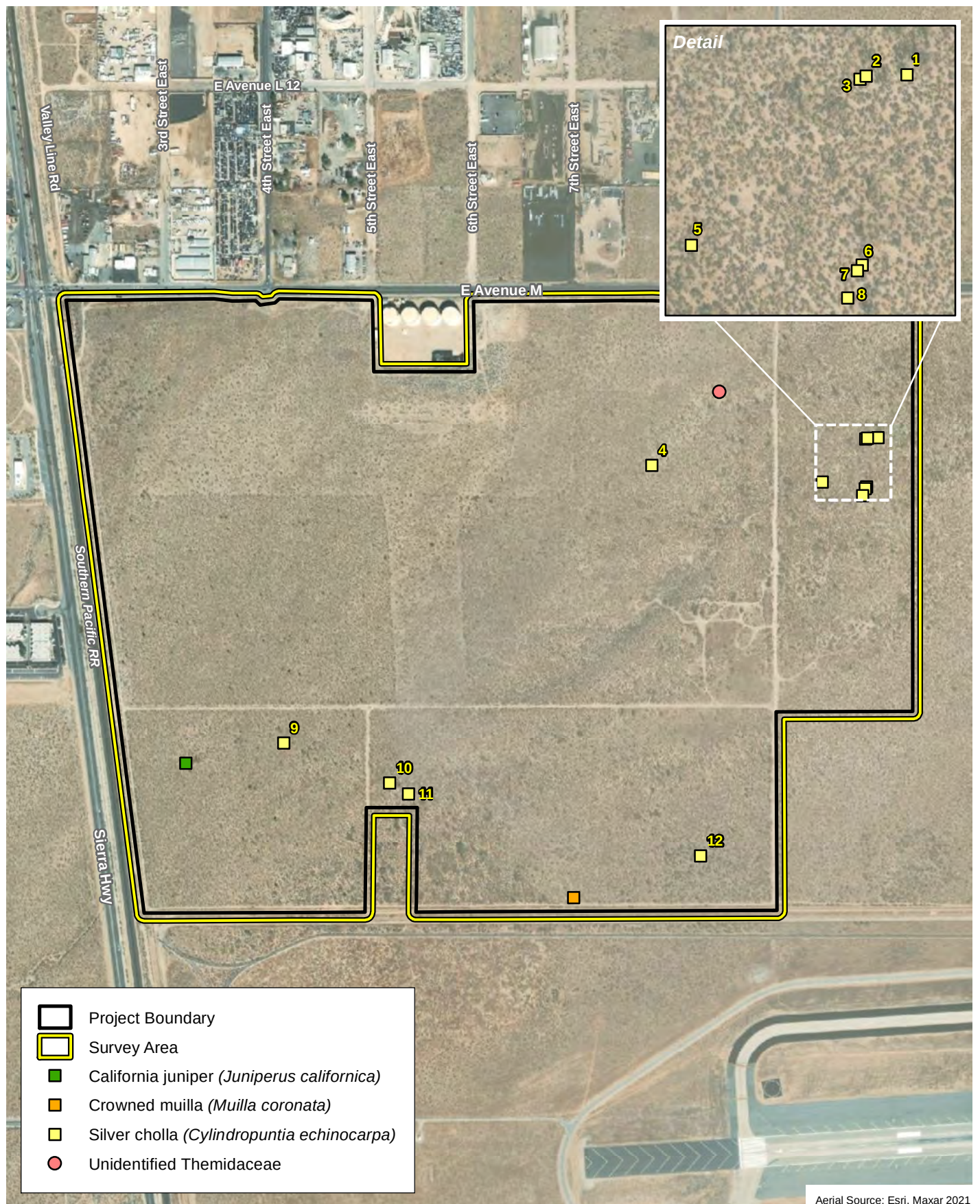


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Exhibit 4



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Survey Results

Antelope Valley Commerce Center



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Feet

Exhibit 5



ATTACHMENT A
PLANT COMPENDIUM

**PLANT SPECIES OBSERVED WITHIN THE SURVEY AREA
DURING FOCUSED PLANT SURVEYS**

Species		Special Status
Scientific Name	Common Name	
GYMNOSPERMS		
EPHEDRACEAE – EPHEDRA FAMILY		
<i>Ephedra nevadensis</i>	Nevada ephedra	
EUDICOTS		
APIACEAE – CARROT FAMILY		
<i>Lomatium mohavense</i>	Mojave lomatium	
ASTERACEAE – SUNFLOWER FAMILY		
<i>Acamptopappus sphaerocephalus</i>	rayless goldenhead	
<i>Ambrosia acanthicarpa</i>	annual bur-sage	
<i>Ambrosia dumosa</i>	white bur-sage	
<i>Ambrosia salsola</i>	common burrobrush	
<i>Artemisia tridentata</i>	big sagebrush	
<i>Chaenactis fremontii</i>	Fremont pincushion	
<i>Chaenactis xantiana</i>	fleshy pincushion	
<i>Ericameria nauseosa</i>	rubber rabbitbrush	
<i>Eriophyllum pringlei</i>	Pringle's woolly sunflower	
<i>Eriophyllum wallacei</i>	Wallace's woolly sunflower	
<i>Lasthenia gracilis</i>	common goldfields	
<i>Layia glandulosa</i>	white layia	
<i>Leptosyne sp.</i>	tickseed	
<i>Malacothrix coulteri</i>	snake's-head	
<i>Malacothrix glabrata</i>	desert dandelion	
<i>Stephanomeria exigua ssp. exigua</i>	little stephanomeria	
<i>Stephanomeria pauciflora</i>	wire-lettuce	
<i>Stylocline gnaphaloides</i>	everlasting neststraw	
<i>Tetradymia axillaris</i>	axillary cottonthorn	
<i>Tetradymia stenolepis</i>	narrow-scaled cottonthorn	
<i>Uropappus lindleyi</i>	Lindley's silverpuffs	
BORAGINACEAE – BORAGE FAMILY		
<i>Amsinckia tessellata</i>	tessellated fiddleneck	
<i>Cryptantha circumscissa var. circumscissa</i>	cushion cryptantha	
<i>Cryptantha micrantha var. micrantha</i>	red-root cryptantha	
<i>Cryptantha sp.</i>	cryptantha	
<i>Nama demissum</i>	weak purple mat	
<i>Pectocarya linearis ssp. ferocula</i>	narrow-toothed pectocarya	
<i>Pectocarya penicillata</i>	northern pectocarya	
<i>Phacelia distans</i>	distant phacelia	
<i>Phacelia fremontii</i>	Fremont's phacelia	
<i>Plagiobothrys arizonicus</i>	Arizona popcornflower	
<i>Tiquilia nuttallii</i>	annual tiquilia	
BRASSICACEAE – MUSTARD FAMILY		
<i>Caulanthus lasiophyllus</i>	California mustard	
<i>Descurainia sophia*</i>	wise tansy mustard	

**PLANT SPECIES OBSERVED WITHIN THE SURVEY AREA
DURING FOCUSED PLANT SURVEYS**

Species		Special Status
Scientific Name	Common Name	
<i>Sisymbrium irio</i> *	London rocket	
<i>Tropidocarpum gracile</i>	slender tropidocarpum	
CACTACEAE – CACTUS FAMILY		
<i>Cylindropuntia echinocarpa</i>	silver cholla	
CARYOPHYLLACEAE – PINK FAMILY		
<i>Loeflingia squarrosa</i>	spreading pygmyleaf	
CHENOPODIACEAE – GOOSEFOOT FAMILY		
<i>Atriplex canescens</i>	four-wing saltbush	
<i>Grayia spinosa</i>	thorny hop-sage	
<i>Krascheninnikovia lanata</i>	winter fat	
EUPHORBIACEAE – SPURGE FAMILY		
<i>Croton setiger</i>	turkey-mullein	
<i>Euphorbia albomarginata</i>	rattlesnake sandmat	
<i>Stillingia paucidentata</i>	few-toothed stillingia	
FABACEAE – LEGUME FAMILY		
<i>Acmispon sp.</i>	deervetch	
<i>Astragalus cf. lentiginosus</i>	freckled milkvetch	
<i>Lupinus sp.</i>	lupine	
GERANIACEAE – GERANIUM FAMILY		
<i>Erodium cicutarium</i> *	redstem filaree	
LAMIACEAE – MINT FAMILY		
<i>Monardella exilis</i>	small monardella	
<i>Salvia carduacea</i>	thistle sage	
<i>Scutellaria mexicana</i>	bladder-sage	
<i>Trichostema lanceolatum</i>	vinegar weed	
LOASACEAE – BLAZING STAR FAMILY		
<i>Mentzelia albicaulis</i>	white-stemmed blazing star	
MALVACEAE – MALLOW FAMILY		
<i>Eremalche exilis</i>	white mallow	
MONTIACEAE – MINER'S-LETTUCE FAMILY		
<i>Calyptidium monandrum</i>	one-stamened pussypaws	
NYCTAGINACEAE – FOUR O'CLOCK FAMILY		
<i>Abronia pogonantha</i>	beard-flowered sand-verbena	
<i>Mirabilis laevis</i>	smooth four o'clock	
ONAGRACEAE – EVENING PRIMROSE FAMILY		
<i>Camissonia campestris ssp. campestris</i>	field sun cup	
<i>Camissonia sp.</i>	sun cup	
<i>Camissoniopsis pallida ssp. pallida</i>	pallid camissoniopsis	
<i>Oenothera deltoides</i>	devil's lantern	
<i>Oenothera sp.</i>	evening-primrose	
PAPAVERACEAE – POPPY FAMILY		
<i>Eschscholzia minutiflora</i>	minute-flowered eschscholzia	

**PLANT SPECIES OBSERVED WITHIN THE SURVEY AREA
DURING FOCUSED PLANT SURVEYS**

Species		Special Status
Scientific Name	Common Name	
POLEMONIACEAE – PHLOX FAMILY		
<i>Eriastrum saphirinum</i>	sapphire eriastrum	
<i>Eriastrum sp.</i>	eriastrum	
<i>Gilia sp.</i>	gilia	
<i>Leptosiphon aureus ssp. aureus</i>	golden leptosiphon	
<i>Linanthus parryae</i>	Parry's linanthus	
<i>Loeseliastrum matthewsii</i>	desert calico	
POLYGONACEAE – BUCKWHEAT FAMILY		
<i>Centrostegia thurberi</i>	red triangles	
<i>Chorizanthe brevicornu</i>	brittle spineflower	
<i>Chorizanthe watsonii</i>	Watson's spineflower	
<i>Eriogonum brachyanthum</i>	short-flower wild buckwheat	
<i>Eriogonum gracillimum</i>	rose-and-white wild buckwheat	
<i>Eriogonum mohavense</i>	western Mojave wild buckwheat	
<i>Eriogonum viridescens</i>	two-toothed wild buckwheat	
<i>Rumex hymenosepalus</i>	canaigre	
SOLANACEAE – NIGHTSHADE FAMILY		
<i>Lycium andersonii</i>	Anderson's box-thorn	
<i>Lycium cooperi</i>	Cooper's box-thorn	
ZYGOPHYLLACEAE – CALTROP FAMILY		
<i>Larrea tridentata</i>	creosote bush	
MONOCOTS		
AGAVACEAE – AGAVE FAMILY		
<i>Yucca brevifolia</i>	western Joshua tree	CST
POACEAE – GRASS FAMILY		
<i>Bromus rubens*</i>	red brome	
<i>Bromus tectorum*</i>	cheat grass	
<i>Schismus barbatus*</i>	barbed Mediterranean grass	
<i>Stipa hymenoides</i>	sand rice grass	
<i>Stipa speciosa</i>	desert needle grass	
THEMIDACEAE – BRODIAEA FAMILY		
<i>Dipterostemon capitatus</i>	blue dicks	
<i>Muilla coronata</i>	crowned muilla	CRPR 4.2
* Non-native or invasive species		
State (CDFW)		
CST Candidate State Threatened		
CRPR Threat Code Extensions		
4 Plants of limited distribution - watch list		
.2 Moderately threatened in California (20–80% of occurrences threatened; moderate degree and immediacy of threat)		