BIOLOGICAL RESOURCES ASSESSMENT, JURISDICTIONAL DELINEATION, AND NATIVE PLANT PROTECTION PLAN FOR THE YUCCA STORAGE PROJECT (APN: 0594-041-22) IN THE TOWN OF YUCCA VALLEY, SAN BERNARDINO COUNTY, CALIFORNIA

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SECTION 1.0 – INTRODUCTION

Jennings Environmental, LLC (Jennings) was retained by Evoque Modern (Owner) to conduct a literature review and reconnaissance-level survey for the proposed Yucca Storage Project in the Town of Yucca Valley, California (Project). The survey identified vegetation communities, the potential for the occurrence of special status species, or habitats that could support special status wildlife species, and recorded all plants and animals observed or detected within the Project boundary. This biological resources assessment is designed to address the potential effects of the proposed project on designated critical habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) or species designated as sensitive by the California Department of Fish and Wildlife (CDFW) or the California Native Plant Society (CNPS).

Information contained in this document is in accordance with accepted scientific and technical standards that are consistent with the requirements of the United States Fish and Wildlife Service (USFWS) and (CDFW). Additionally, the site was surveyed for any drainage features that would meet the definition of the Waters of the US (WOUS), Waters of the State (WOS), or CDFW jurisdiction. Also, the project is located within the desert of San Bernardino County. As such, this report also contains the results of the Native Plant Protection Plan in accordance with San Bernardino County Development Code Section 88.01.060.

1.1 PROJECT LOCATION

The project is generally located in Section 34, Township 1 North, Range 5 East, and is depicted within the *Yucca Valley South* U.S. Geological Survey's (USGS) 7.5-minute topographic map. More specifically the project is located within APN 0594-041-22, within the Town of Yucca Valley, San Bernardino County, California. The Project site is located 0.06 miles west of the intersection of Wall Street. and Yucca Trail. The site is surrounded by mobile home park to the west, vacant land to the north, and commercial development to the east and south (Figures 1 and 2 in Appendix A).

1.2 PROJECT DESCRIPTION

The proposed Project is for a 606-unit self-storage facility. Access to the Project will be provided off Yucca Trail. Additional improvements include parking, landscaping, and an on-site septic system.

SECTION 2.0 – METHODOLOGY

2.1 LITERATURE REVIEW

Prior to performing the field survey, existing documentation relevant to the Project site was reviewed. The most recent records of the California Natural Diversity Database (CNDDB) managed by CDFW (CDFW 2023), the USFWS Critical Habitat Mapper (USFWS 2023), and the California Native Plant Society's Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California (CNPS 2023) were reviewed for the following quadrangle containing and surrounding the Project site: *Yucca Valley South, Yucca Valley North, Rimrock, and Morongo Valley*, USGS 7.5-minute quadrangle. The *Yucca Valley North, Rimrock, and Morongo Valley* quads were included in the records search dur to the site's proximity to

their boarders. These databases contain records of reported occurrences of federal- or state-listed endangered or threatened species, California Species of Concern (SSC), or otherwise special status species or habitats that may occur within or in the immediate vicinity of the Project site. These sources include:

- California Natural Diversity Database (CNDDB) managed by CDFW (CDFW 2023)
- USFWS Critical Habitat Mapper (USFWS 2023)
- California Native Plant Society's Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California (CNPS 2023)
- U.S. Fish and Wildlife (USFWS) threatened and endangered species occurrence GIS overlay;
- USGS National Map;
- Calwater Watershed Maps
- USFWS Designated Critical Habitat Maps
- San Bernardino County Biotic Recourses Overlay
- San Bernardino County Development Code, 88.01.060 Desert Native Plant Protection

2.2 BIOLOGICAL RECONNAISSANCE-LEVEL SURVEY

Jennings biologist, Gene Jennings, conducted the general reconnaissance survey within the Project site to identify the potential for the occurrence of special status species, vegetation communities, or habitats that could support special status wildlife species. The survey was conducted on foot, throughout the Project site between 0900 and 1030 hours on October 24, 2023. Weather conditions during the survey included temperatures ranging from 68 to 72 degrees Fahrenheit, with no cloud cover, no precipitation, and 3.3 to 4.5 mile-per-hour winds. Photographs of the Project site were taken to document existing conditions (Appendix B).

2.3 JURISDICTIONAL FEATURES

A general assessment of jurisdictional waters regulated by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW was conducted for the proposed Project area. Pursuant to Section 404 of the Clean Water Act, USACE regulates the discharge of dredged and/or fill material into waters of the United States. The State of California (State) regulates the discharge of material into waters of the State pursuant to Section 401 of the Clean Water Act and the California Porter- Cologne Water Quality Control Act (California Water Code, Division 7, §13000 et seq.). Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, CDFW regulates all substantial diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. The initial assessment was conducted by a desktop survey through the USGS National Hydrography Dataset for hydrological connectivity. Additional assessment findings are discussed in Sections 3.1.2 and 3.2.5. A discussion of the regulatory framework is provided in Appendix C.

2.4 VEGETATION

All plant species observed within the Project site were recorded. Vegetation communities within the Project site were identified and qualitatively described. Plant communities were determined in accordance with the *Manual of California Vegetation*, *Second Edition* (Sawyer et al. 2009). Plant

nomenclature follows that of *The Jepson Manual, Second Edition* (Baldwin et al. 2012). A comprehensive list of the plant species observed during the survey is provided in Appendix D.

2.5 WILDLIFE

All wildlife and wildlife signs observed and detected, including tracks, scat, carcasses, burrows, excavations, and vocalizations, were recorded. Additional survey time was spent in those habitats most likely to be utilized by wildlife (native vegetation, wildlife trails, etc.) or in habitats with the potential to support state- and/or federally listed or otherwise special-status species. Notes were made on the general habitat types, species observed, and the conditions of the Project site. A comprehensive list of the wildlife species observed during the survey is provided in Appendix D.

2.6 WILDLIFE CORRIDORS AND HABITAT CONSERVATION PLAN

According to the California Essential Habitat Connectivity Project, the Project Site is not mapped within an area for wildlife movement and is not within a habitat conservation plan. Additionally, the site is not within a wildlife linkage as mapped by Mojave Desert Land Trust. Therefore, the proposed Project will have a less than significant impact on any current wildlife corridors or habitat conservation plans.

SECTION 3.0 – RESULTS

3.1 LITERATURE REVIEW RESULTS

According to the CNDDB, CNPSEI, and other relevant literature and databases, 44 sensitive species including 7 listed species, and 3 sensitive habitats have been documented in the *Yucca Valley South, Yucca Valley North, Rimrock, and Morongo Valley* quad. This list of sensitive species and habitats includes any State and/or federally-listed threatened or endangered species, CDFW-designated Species of Special Concern (SSC), and otherwise Special Animals. “Special Animals” is a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of “species at risk” or “special status species.” The CDFW considers the taxa on this list to be those of greatest conservation need.

An analysis of the likelihood of the occurrence of all CNDDB-sensitive species documented in the *Yucca Valley South, Yucca Valley North, Rimrock, and Morongo Valley* quad is provided in Table 2, in Appendix D. This analysis takes into account species range as well as documentation within the vicinity of the project area and includes the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements and range relative to the current site conditions. According to the databases, no USFWS-designated critical habitat occurs within or adjacent to the project site.

3.1.1 SPECIAL STATUS SPECIES

Desert Tortoise (Gopherus agassizii) (Fedal/State Threatened)

The desert tortoise is a State and federally listed threatened species. Throughout its range, it is threatened by habitat loss, domestic grazing, predation, collections, and increased mortality rates. The desert tortoise is typically found in creosote bush scrub. They are most often found on level or sloped ground where the

substrate is firm but not too rocky. Tortoise burrows are typically found at the base of shrubs, in the sides of washes and hillsides. Because a single tortoise may have many burrows distributed throughout its home range, it is not possible to predict the exact numbers of individuals on a site based upon burrow numbers.

In 1992 the US Bureau of Land Management issued the *California Statewide Desert Tortoise Management Policy* which included categorizing habitat into three levels of classification. The management goal for Category I areas is to maintain stable, viable populations and to increase the population where possible. The management goal for Category II areas is to maintain stable, viable populations. The management goal for Category III areas is to limit population declines to the extent feasible. In April 1993, the BLM amended the CDCA plan to delineate these three categories of desert tortoise habitat on public lands. Although habitat categories apply only to public lands administered by the BLM, regulatory agencies typically determine habitat compensation ratios based on the nearest BLM habitat categories (Desert Tortoise Compensation Team 1991). With the adoption of the West Mojave Plan (U.S. Bureau of Land Management 2005), all lands that are outside Desert Wildlife Management Areas, including the subject parcel, are characterized as Category 3 Habitat, which is the lowest priority management area for viable populations of the desert tortoise.

Burrowing Owl (Athene cunicularia) – Species of Species Concern (SSC)

The burrowing owl (BUOW) is a state and federal SSC. This owl is a mottled, brownish and sand-colored, dove-sized raptor, with large, yellow eyes, a rounded head lacking ear tufts, white eyebrows, and long legs compared to other owl species. It is a ground-dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. The BUOW is heavily dependent upon the presence of mammal burrows, with ground squirrel burrows being a common choice, in its habitat to provide shelter from predators, inclement weather, and to provide a nesting place (Coulombe 1971). They are also known to make use of human-created structures, such as cement culverts and pipes, for burrows.

BUOW spends a great deal of time standing on dirt mounds at the entrance to a burrow or perched on a fence post or other low to the ground perch from which they hunt for prey. BUOW frequently hunt by hovering in place above the ground and dropping on their prey from above. They feed primarily on insects such as grasshoppers, June beetles, and moths, but will also take small rodents, birds, and reptiles. They are active during the day and night but are considered a crepuscular owl; generally observed in the early morning hours or at twilight. The breeding season for BUOW is February 1 through August 31. Up to 11, but typically 7 to 9, eggs are laid in a burrow, abandoned pipe, or other subterranean hollows where incubation is complete in 28-30 days. Young BUOW fledges in 44 days. The BUOW is considered a migratory species in portions of its range, which includes western North America from Canada to Mexico, and east to Texas and Louisiana. BUOW populations in California are considered to be sedentary or locally migratory.

Throughout its range, the BUOW is vulnerable to habitat loss, predation, vehicular collisions, and destruction of burrow sites, and the poisoning of ground squirrels (Grinnell and Miller 1944, Zarn 1974, Remsen 1978). BUOW has disappeared from significant portions of their range in the last 15 years and, overall, nearly 60% of the breeding groups of owls known to have existed in California during the 1980s had disappeared by the early 1990s (Burrowing Owl Consortium 1993). The BUOW is not listed under the

state or federal Endangered Species Act but is considered both a federal and state Species of Special Concern. The BUOW is a migratory bird protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California Fish and Game Code (CDFG Code #3513 & #3503.5).

Desert Kit Fox (*Vulpes macrotis*)

The desert kit fox is not federally- or state-listed, but is considered a species of local concern by the County of Los Angeles. It is an uncommon to rare permanent resident in arid habitats within southern California (CDFW 2017b). Kit foxes are threatened by a number of human activities, including poaching, pesticide and rodenticide use, and direct poisoning, as well as heavy agricultural and urban development (Eder 2005). Desert kit foxes occur in the desert and other arid habitats, including sagebrush flats, creosote scrub, and annual grassland habitats, and other areas with scattered brush, scrub, and shrubs. They are an important predator of small mammals, preying on black-tailed jackrabbits (*Lepus californicus*), desert cottontails (*Sylvilagus audubonii*), kangaroo rats, ground squirrels, and other rodents, insects, reptiles, birds, and bird eggs. Limited vegetation may be taken. Desert kit foxes excavate burrows in loose-textured sandy or loamy soils for shelter, pupping, and as an escape from extreme heat and cold (Eder 2005, CDFW B). Open, level areas are preferred for burrowing. Man-made structures and infrastructure, including culverts and pipes, also may be used for denning where suitable friable soils are not present (CDFW B).

American Badger (*Taxidea taxus*)

The American badger is a CDFW Species of Special Concern. Badgers are uncommon, permanent residents throughout California, and occur most commonly in open stages of shrub, woodland, and herbaceous habitats. They are tenacious diggers and occur where friable soils support denning and burrowing activities. They are active year-round, and most often nocturnal, although they may be active during the day. They prey upon fossorial rodents, especially California ground squirrels and pocket gophers; rats and mice, some reptiles, insects, eggs, birds, and carrion also may be taken. Breeding typically occurs in the summer and early fall, with pups being born the following March or April in burrows dug in relatively dry, often sandy soil. American badgers are threatened primarily by indiscriminate trapping, agricultural conversion, and the eradication of ground squirrels and other fossorial rodents that comprise the majority of their prey base (CDFW B).

Western Joshua Tree (*Yucca brevifolia*) (State Candidate for Listing)

Western Joshua trees occur throughout the Mojave Desert in Southern California and are typically found at an elevation of 400 to 1,800 meters (~1,200 to ~5,400 feet). Western Joshua trees within the western portion of the Mojave Desert typically receive more annual precipitation during "normal" years; consequently, cloning occurs more often resulting in numerous trunks sprouting from the same root system. Western Joshua tree habitats provide habitat for a variety of wildlife species including desert woodrats *(Neotoma* sp.) and night lizards *(Xantusia* sp.) both of which utilize the base of the trees. A variety of birds also utilize Western Joshua trees for nesting such as hawks, common ravens, and cactus wrens. CDFW consider Western Joshua tree woodlands as areas that support relatively high species diversity and as such are considered to be a sensitive desert community. Western Joshua trees are also considered a significant resource under the California Environmental Quality Act (CEQA) and are included in the Desert Plant Protection Act, Food and Agricultural Code (80001 - 80006).

Additionally, pursuant to the provisions of Section 2074.2 of the Fish and Game Code, the California Fish and Game Commission (Commission), at its September 22, 2020, meeting, accepted for consideration the petition submitted to list the western Joshua tree (Yucca brevifolia) as threatened or endangered under the California Endangered Species Act. Based on that finding and the acceptance of the petition, the Commission also provided notice that the western Joshua tree is a candidate species as defined by Section 2068 of the Fish and Game Code.

3.1.2 JURISDICTIONAL WATERS

Aerial imagery of the site was examined and compared with the surrounding USGS 7.5-minute topographic quadrangle maps to identify drainage features within the survey area as indicated from topographic changes, blue-line features, or visible drainage patterns. The U.S. Fish and Wildlife Service National Wetland Inventory and Environmental Protection Agency (EPA) Water Program "My Waters" data layers were also reviewed to determine whether any hydrologic features and wetland areas had been documented within the vicinity of the site. Similarly, the Soil maps from the U.S. Department of Agriculture (USDA) - Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2023) were reviewed to identify the soil series on-site and to check if they have been identified regionally as hydric soils. Upstream and downstream connectivity of waterways (if present) was reviewed in the field, on aerial imagery, and topographic maps to determine jurisdictional status.

3.1.3 DESIGNATED CRITICAL HABITAT

The site is not located within or adjacent to any USFWS-designated Critical Habitat. No further action is required.

3.1.4 HYDROLOGY AND HYDROLOGIC CONNECTIVITY

Hydrologically, the project site is located within an undefined Hydrologic Sub-Area (HSA 708.20), as identified on the Calwater Watershed maps. This undefined area comprises a 34,389-acre drainage area within the larger Black Rock Spring-Coyote Well Hydrologic Area (Hydrologic Unit Code [HUC10] 1810010016) (CalTrans, 2023). The Black Rock Spring-Coyote Well watershed in Yucca Valley is bordered to the north by the Pipes Wash and Coyote Lake watersheds, to the east by the Mesquite Lake watershed, to the south by the Quail Wash and Upper White Water River watersheds, and to the west by the Little Morongo Creek-Morongo Wash watershed. (Figure 3 in Appendix A).

3.1.5 SAN BERNARDINO COUNTY DEVELOPMENT CODE

§ 88.01.060 Desert Native Plant Protection.

This Section provides regulations for the removal or harvesting of specified desert native plants in order to preserve and protect the plants and to provide for the conservation and wise use of desert resources. The provisions are intended to augment and coordinate with the Desert Native Plants Act (Food and Agricultural Code §§ 80001 *et seq.*) and the efforts of the State Department of Food and Agriculture to implement and enforce the Act.

(a) *Definitions.* Terms and phrases used within this Section shall be defined in Division 10 (Definitions) and/or defined by the California Food and Agricultural Code. The California Food and Agricultural Code definition, if one exists, shall prevail over a conflicting definition in this Development Code.

(b) *Applicability.* The provisions of this Section shall apply to desert native plants specified in Subdivision (c) (Regulated Desert Native Plants) that are growing on any of the following lands, unless exempt in compliance with § 88.01.030 (Exempt Activities):

(1) Privately owned or publicly owned land in the Desert Region.

(2) Privately owned or publicly owned land in any parts of the Mountain Region in which desert native plants naturally grow in a transitional habitat.

(c) *Regulated Desert Native Plants.* The following desert native plants or any part of them, except the fruit, shall not be removed except under a Tree or Plant Removal Permit in compliance with § 88.01.050 (Tree or Plant Removal Permits). In all cases the botanical names shall govern the interpretation of this Section.

(1) The following desert native plants with stems two inches or greater in diameter or six feet or greater in height:

(A) Dalea spinosa (smoketree).

(B) All species of the genus Prosopis (mesquites).

(2) All species of the family Agavaceae (century plants, nolinas, yuccas).

(3) Creosote Rings, ten feet or greater in diameter.

(4) All Western Joshua trees.

(5) Any part of any of the following species, whether living or dead:

(A) Olneya tesota (desert ironwood).

(B) All species of the genus Prosopis (mesquites).

(C) All species of the genus Cercidium (palos verdes).

(d) *Compliance with Desert Native Plants Act.* Removal actions of all plants protected or regulated by the Desert Native Plants Act (Food and Agricultural Code §§ 80001 *et seq.*) shall comply with the provisions of the Act before the issuance of a development permit or approval of a land use application.

3.2 FIELD STUDY RESULTS

3.2.1 HABITAT

The habitat on-site consists of a mix of Ambrosia salsola - Bebbia juncea Shrubland Alliance (Cheesebush - sweetbush scrub). The site did show signs of disturbance in the form of vehicle and pedestrian traffic. Additionally, the does contain an old structure foundatation and was previously developed. Table 1 in Appendix D contains a list of all plants found on-site. Surrounding land uses include undeveloped parcels and rural residential developments.

3.2.2 WILDLIFE

Species observed or otherwise detected on or in the vicinity of the project site during the surveys included; white-crowned sparrow (*Zonotrichia leucophrys*), cactus wren (*Campylorhynchus brunneicapillus*), and house finch (*Haemorhous mexicanus*). Table 1 in Appendix D contains a list of all wildlife observed on-site.

3.2.3 SPECIAL STATUS SPECIES

No State and/or federally listed threatened or endangered species or other sensitive species were observed on-site during surveys.

Desert Tortoise

The habitat on site is minimally suitable for desert tortoise. However, no sign of desert tortoise (i.e. burrows, tracks, or pellets) was observed during the survey. Additionally, no desert tortoise individuals were observed.

> ***Findings***: Because the site is minimally suitable, it is recommended that pre-construction surveys be completed for this species. These surveys should be conducted by a qualified biologist and at an appropriate time of day/year to observe signs of desert tortoise.

Burrowing Owl

Based on the October 2023 field survey, the site does not contain suitable habitat for this species. No burrowing owls were observed during the site visit. No burrows of any kind were located within the Project site. No portion of the Project site showed any evidence of past or present BUOW activity. No feathers, whitewash, or castings were found and no suitable burrow surrogate species are present on-site.

> ***Findings***: No suitable habitat exists on-site; therefore, no focused surveys are required.

Desert Kit Fox

The site is not suitable for this species. However, this species was not observed during the survey. No burrows or suitable size or shape were observed, and no evidence of this species was observed either (scat, predation remains, tracks, etc.).

Findings: This species is considered absent from the project site and no further surveys are required.

American Badger

The site is not suitable for this species. This species was not observed during the survey. No burrows or suitable size or shape we observed, and no evidence of this species were observed either (scat, predation remains, tracks, etc.).

Findings: This species is considered absent from the project site and no further surveys are required.

Western Joshua Tree

There are currently 51 western Joshua trees (WJT) present on-site. The proposed Project has been designed to minimize impacts to Joshua trees on-site as possible and construct around them. The Project proposes to remove 18 of the 51 WJTs on-site. The remainder WJTs will remain in their current positions with areas for water to percolate into the soils and mediate the potential root zone impacts to this species. As mentioned above this species is currently a candidate for listing under CESA. As such, any impacts to western Joshua trees will require an Incidental Take Permit (ITP) from the CDFW.

Tree ID	Tree Latitude	Tree Longitude	Size Class	Height (meters)	Live or Dead?	Mature Tree (branched)	Flowering or Fruiting Stage? (flowers, fruits, or none)	Impact to Tree	Project activities within 15 meters	Relocation Site
JT01	34.121909	-116.452437	C	5.20	L	yes	None	Remove	Yes	N/A
JT02	34.121835	-116.452239	C	5.03	L	Yes	None	None	Yes	N/A
JT03	34.12205	-116.452323	B	3.4	L	yes	None	None	Yes	N/A
JT04	34.12205	-116.452323	B	1.2	L	No	None	None	Yes	N/A
JT05	34.12205	-116.452323	A	0.61	L	No	None	None	Yes	N/A

Tree ID	Tree Latitude	Tree Longitude	Size Class	Height (meters)	Live or Dead?	Mature Tree (branched)	Flowering or Fruiting Stage? (flowers, fruits, or none)	Impact to Tree	Project activities within 15 meters	Relocation Site
JT06	34.12205	-116.452323	B	1.37	L	No	None	None	Yes	N/A
JT07	34.12205	-116.452323	B	3	L	No	None	None	Yes	N/A
JT08	34.12205	-116.452323	C	5.3	L	Yes	None	None	Yes	N/A
JT09	34.12205	-116.452323	A	0.91	L	No	None	None	Yes	N/A
JT10	34.12205	-116.452323	A	0.61	L	No	None	None	Yes	N/A
JT11	34.122066	-116.452277	B	3.35	L	Yes	None	None	Yes	N/A
JT12	34.122066	-116.452277	B	2	L	No	None	None	Yes	N/A
JT13	34.122066	-116.452277	B	1.9	L	No	None	None	Yes	N/A
JT14	34.122095	-116.452309	A	0.86	L	No	None	Remove	Yes	N/A
JT15	34.122095	-116.452309	B	2.5	L	No	None	Remove	Yes	N/A

Tree ID	Tree Latitude	Tree Longitude	Size Class	Height (meters)	Live or Dead?	Mature Tree (branched)	Flowering or Fruiting Stage? (flowers, fruits, or none)	Impact to Tree	Project activities within 15 meters	Relocation Site
JT16	34.122095	-116.452309	B	2.87	L	No	None	Remove	Yes	N/A
JT17	34.122095	-116.452309	B	4.67	L	Yes	None	Remove	Yes	N/A
JT18	34.122245	-116.452312	B	2.54	L	Yes	None	Remove	Yes	N/A
JT19	34.122176	-116.452131	C	5.08	L	Yes	None	Remove	Yes	N/A
JT20	34.122176	-116.452131	B	2.74	L	Yes	None	Remove	Yes	N/A
JT21	34.122176	-116.452131	C	5.03	L	Yes	None	Remove	Yes	N/A
JT22	34.122176	-116.452131	B	1.35	L	no	None	Remove	Yes	N/A
JT23	34.122176	-116.452131	B	3.66	L	No	None	Remove	Yes	N/A
JT24	34.122331	-116.452475	B	2.92	L	Yes	None	Remove	Yes	N/A
JT25	34.122589	-116.452264	B	1.70	L	No	None	Remove	Yes	N/A

Tree ID	Tree Latitude	Tree Longitude	Size Class	Height (meters)	Live or Dead?	Mature Tree (branched)	Flowering or Fruiting Stage? (flowers, fruits, or none)	Impact to Tree	Project activities within 15 meters	Relocation Site
JT26	34.122615	-116.452227	C	5.49	L	yes	None	None	Yes	N/A
JT27	34.122615	-116.452227	B	1.52	L	No	None	None	Yes	N/A
JT28	34.122615	-116.452227	A	0.38	L	No	None	None	Yes	N/A
JT29	34.122582	-116.452166	B	2.95	L	No	None	None	Yes	N/A
JT30	34.122746	-116.452241	B	4.27	L	Yes	None	None	Yes	N/A
JT31	34.122746	-116.452241	B	1.22	L	No	None	None	Yes	N/A
JT32	34.122746	-116.452241	A	0.91	L	No	None	None	Yes	N/A
JT33	34.122746	-116.452241	B	1.52	L	No	None	None	Yes	N/A
JT34	34.122746	-116.452241	B	1.09	L	No	None	None	Yes	N/A
JT35	34.122746	-116.452241	A	0.91	L	No	None	None	Yes	N/A

Tree ID	Tree Latitude	Tree Longitude	Size Class	Height (meters)	Live or Dead?	Mature Tree (branched)	Flowering or Fruiting Stage? (flowers, fruits, or none)	Impact to Tree	Project activities within 15 meters	Relocation Site
JT36	34.122813	-116.452173	B	2.26	L	Yes	None	None	Yes	N/A
JT37	34.122817	-116.452402	B	2.12	L	yes	None	None	Yes	N/A
JT38	34.122774	-116.452511	B	2.69	L	Yes	None	None	Yes	N/A
JT39	34.122774	-116.452511	B	1.37	L	No	None	None	Yes	N/A
JT40	34.122774	-116.452511	B	1.93	L	No	None	None	Yes	N/A
JT41	34.122731	-116.452634	B	2.34	L	Yes	None	None	Yes	N/A
JT42	34.122731	-116.452634	B	1.23	L	No	None	None	Yes	N/A
JT43	34.122731	-116.452634	B	3.28	L	Yes	None	None	Yes	N/A
JT44	34.122731	-116.452634	A	0.69	L	No	None	None	Yes	N/A
JT45	34.12276	-116.452643	B	2.82	L	yes	None	None	Yes	N/A

Tree ID	Tree Latitude	Tree Longitude	Size Class	Height (meters)	Live or Dead?	Mature Tree (branched)	Flowering or Fruiting Stage? (flowers, fruits, or none)	Impact to Tree	Project activities within 15 meters	Relocation Site
JT46	34.12276	-116.452643	B	2.01	L	No	None	None	Yes	N/A
JT47	34.122404	-116.453127	B	3.56	L	Yes	None	Remove	Yes	N/A
JT48	34.122404	-116.453127	C	5.79	L	yes	None	Remove	Yes	N/A
JT49	34.122404	-116.453127	B	2.57	L	No	None	Remove	Yes	N/A
JT50	34.122404	-116.453127	B	3.89	L	Yes	None	Remove	Yes	N/A
JT51	34.122294	-116.453049	B	2.95	L	Yes	None	Remove	Yes	N/A

The site plan currently has development taking place over 10 feet away from trees 2-13 and 26-46. Figure 4 in Appendix A shows the location of the western Josuha trees on site, while Figure 5 shows the location of the western Joshua trees in relation to the proposed site plan. Therefore, impacts are expected to WJTs 1, 14-25, and 47-51. The applicant will be required to obtain an ITP from CDFW prior to any removal activities.

3.2.4 NESTING BIRDS

The Project site and immediate surrounding area does contain habitat suitable for nesting birds. As such the Project is subject to the following nesting bird regulations. Recommendations for avoidance and minimization are in section 4.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918. This Act implements four international conservation treaties that the U.S. entered into with Canada in 1916, Mexico in 1936, Japan in 1972, and Russia in 1976. It is intended to ensure the sustainability of populations of all protected migratory bird species. The Act has been amended with the signing of each treaty, as well as when any of the treaties were amended, such as with Mexico in 1976 and Canada in 1995. The Act prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service.

California Fish and Game Code

The Project site is also subject to Sections 3503 and 3503.5 of the Fish and Game Code. Section 3503 states, "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto". And Section 3503.5 states, "It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto".

3.2.5 JURISDICTIONAL WATERS

Waters of the United States and Waters of the State

The USACE has the authority to permit the discharge of dredged or fill material in Waters of the U.S. (WOUS) under Section 404 CWA. While the Regional Water Quality Board has authority over the discharge of dredged or fill material in Waters of the State under Section 401 CWA as well as the Porter-Cologne Water Quality Control Act. The Project area was surveyed with 100 percent visual coverage and no drainage features were present on site that met the definition for WOUS. As such, the subject parcel does not contain any wetlands, Waters of the U.S., or Waters of the State.

Fish and Game Code Section 1602 - State Lake and/or Streambed

The CDFW asserts jurisdiction over any drainage feature that contains a definable bed and bank or associated riparian vegetation. The Project area was surveyed with 100 percent visual coverage and no definable bed or bank features exist on the project site. As such, the subject parcel does not contain any areas under CDFW jurisdiction.

3.2.6 WETLANDS AND BLUE LINE STREAM

NWI maps did not identify portions within the Project site as a Riverine/Riparian system. Additionally, none of the requirements for wetland designation (hydric vegetation, hydric soils, and/or wetland hydrology) were present on site. As such, there are no wetlands currently present on site.

3.2.7 NATIVE PLANT PROTECTION PLAN

The Proposed Project Site does contain Silver cholla (*Cylindropuntia echinocarpa*), Mojave yucca (*Yucca schidigera*), pencil cholla (*Cylindropuntia leptocaulis*), harem cactus (*Echinocactus polycephalus*), and

beavertail cactus (*Opuntia basilaris*), which are protected species under San Bernardino County Development Code § 88.01.060 and the California Desert Native Plant Act. See section 4 for recommendations on required permits for compliance.

SECTION 4.0 – CONCLUSIONS AND RECOMMENDATIONS

Based on the literature review and personal observations made in the immediate vicinity, no State and/or federally-listed threatened or endangered species are documented/or expected to occur within the Project site. Additionally, no plant species with the California Rare Plant Rank (CRPR) of 1 or 2 were observed on-site or documented to occur on-site in the relevant databases. No other sensitive species were observed within the project area or buffer area.

4.1 JURISDICTIONAL AREAS

There are no streams, channels, washes, or swales that meet the definitions of Section 1600 of the State of California Fish and Game Code (FGC) under the jurisdiction of the CDFW, Section 401 ("Waters of the State") of the Clean Water Act (CWA) under the jurisdiction of the Regional Water Quality Control Board (RWQCB), or "Waters of the United States" (WoUS) as defined by Section 404 of the CWA under the jurisdiction of the U.S. Army Corps of Engineers (Corps) within the subject parcel. Therefore, no permit from any regulatory agency will be required.

4.2 SENSITIVE SPECIES

Desert tortoise

Although desert tortoise was absent from the site during the survey, there is minimally suitable habitat within the parcel. As such, it is recommended that pre-construction surveys be completed for this species prior to any ground-disturbing activities. These surveys should be conducted by a qualified biologist and at an appropriate time of day/year to observe signs of desert tortoise. Surveys should also be conducted using the current survey protocol from the USFWS.

western Joshua tree

The proposed Project does impact western Joshua trees within the Project boundary. Therefore, an incidental take permit (ITP) will be required from the CDFW. The ITP will need to detail all impacts on the species and what alternative mitigation measures are proposed.

Additionally, to protect the root system of each remaining tree during construction, the following disturbance limits should be observed and delineated with highly visible construction fencing, when ground disturbance activities are proposed within 12 feet of any western Joshua tree:

- 10 feet for any western Joshua trees

4.3 SAN BERNARDINO COUNTY DEVELOPMENT CODE AND THE CALIFORNIA DESERT NATIVE PLANT ACT

As stated above, the Project is subject to compliance with the San Bernardino County Development Code § 88.01.060 and the California Desert Native Plant Act. Therefore, the following mitigation measure should be put in place:

> Jennings recommends flagging and relocation on-site, to a nursery, or suitable other entity prior to construction of any species that is protected by the California Desert Native Plant Act. Any construction that removes any protected plant species would require a permit from the agricultural commissioner or local sheriff in the county where protected plants will be removed.

4.4 NESTING BIRDS

Nesting Birds

Since there is some habitat within the Project site and adjacent area that is suitable for nesting birds in general, the following mitigation measure should be implemented.

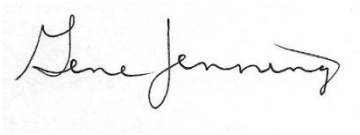
> Nesting bird nesting season generally extends from February 1 through September 15 in southern California and specifically, March 15 through August 31 for migratory passerine birds. To avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist will conduct pre-construction Nesting Bird Surveys (NBS) prior to Project-related disturbance to nestable vegetation to identify any active nests. If no active nests are found, no further action will be required. If an active nest is found, the biologist will set appropriate no-work buffers around the nest which will be based upon the nesting species, its sensitivity to disturbance, nesting stage, and expected types, intensity, and duration of the disturbance. The nests and buffer zones shall be field-checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

4.5 CERTIFICATION

I hereby certify that the statements furnished herein, and in the attached exhibits present data and information required for this analysis to the best of my ability, and the facts, statements, and information presented are true and correct to the best of my knowledge and belief. This report was prepared in accordance with professional requirements and standards. Fieldwork conducted for this assessment was performed by me. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project proponent and that I have no financial interest in the project.

Please do not hesitate to contact me at 909-534-4547 should you have any questions or require further information.

Sincerely,



Gene Jennings
Principal/Regulatory Specialist

Appendices:

- Appendix A – Figures
- Appendix B – Site Photos
- Appendix C – Regulatory Framework
- Appendix D – Tables

Section 5 – REFERENCES

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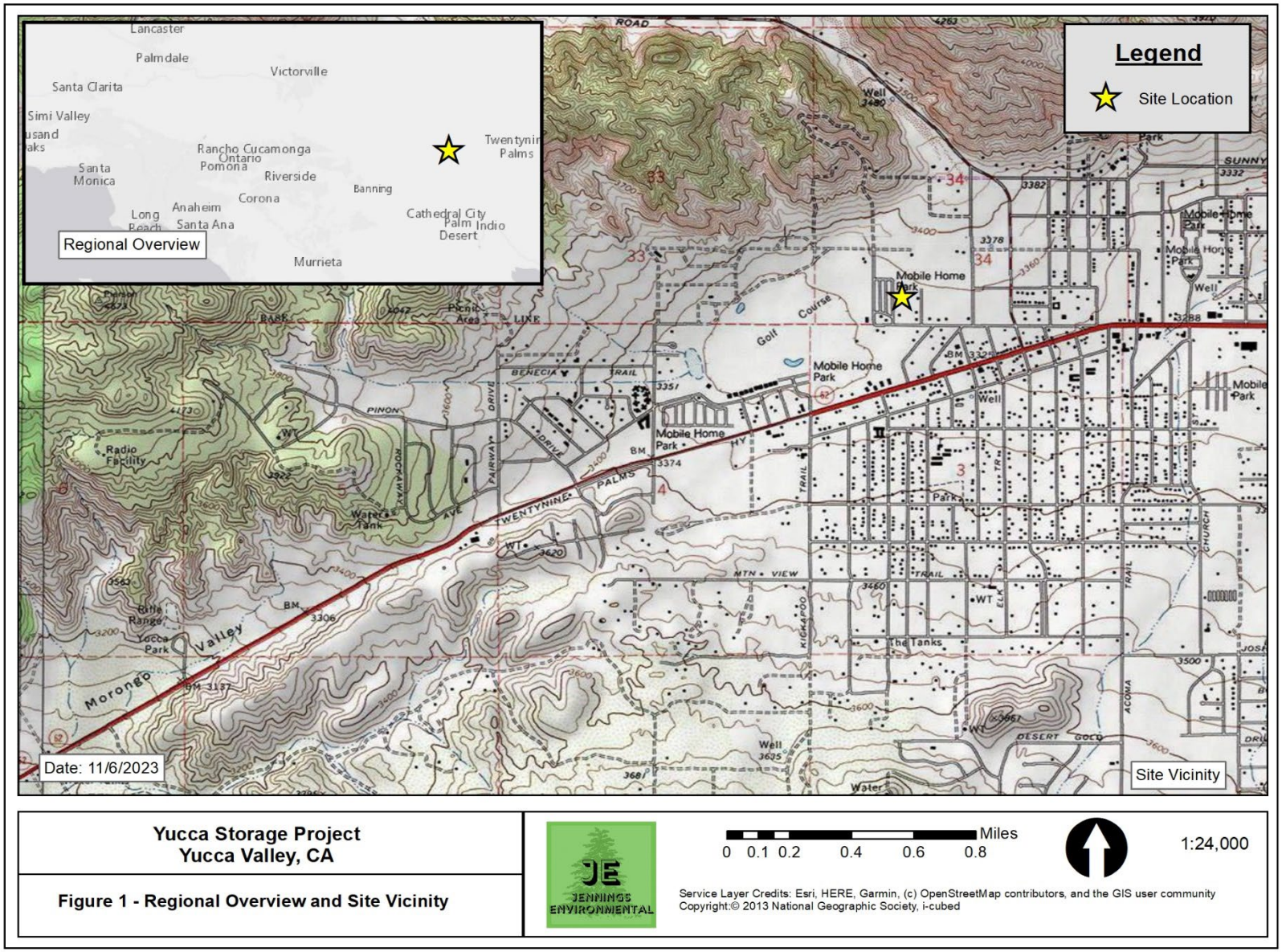
Appendix A – Figures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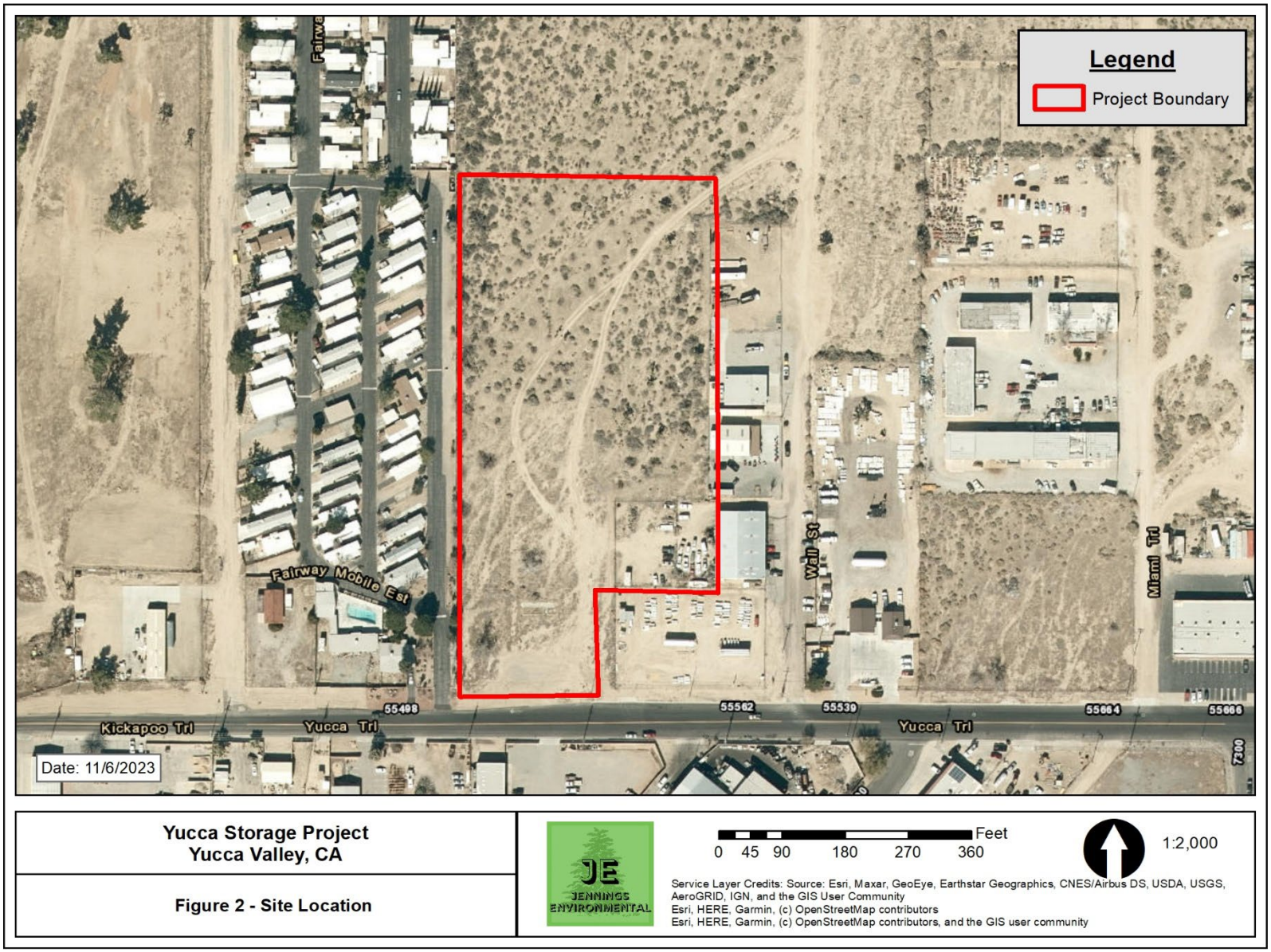
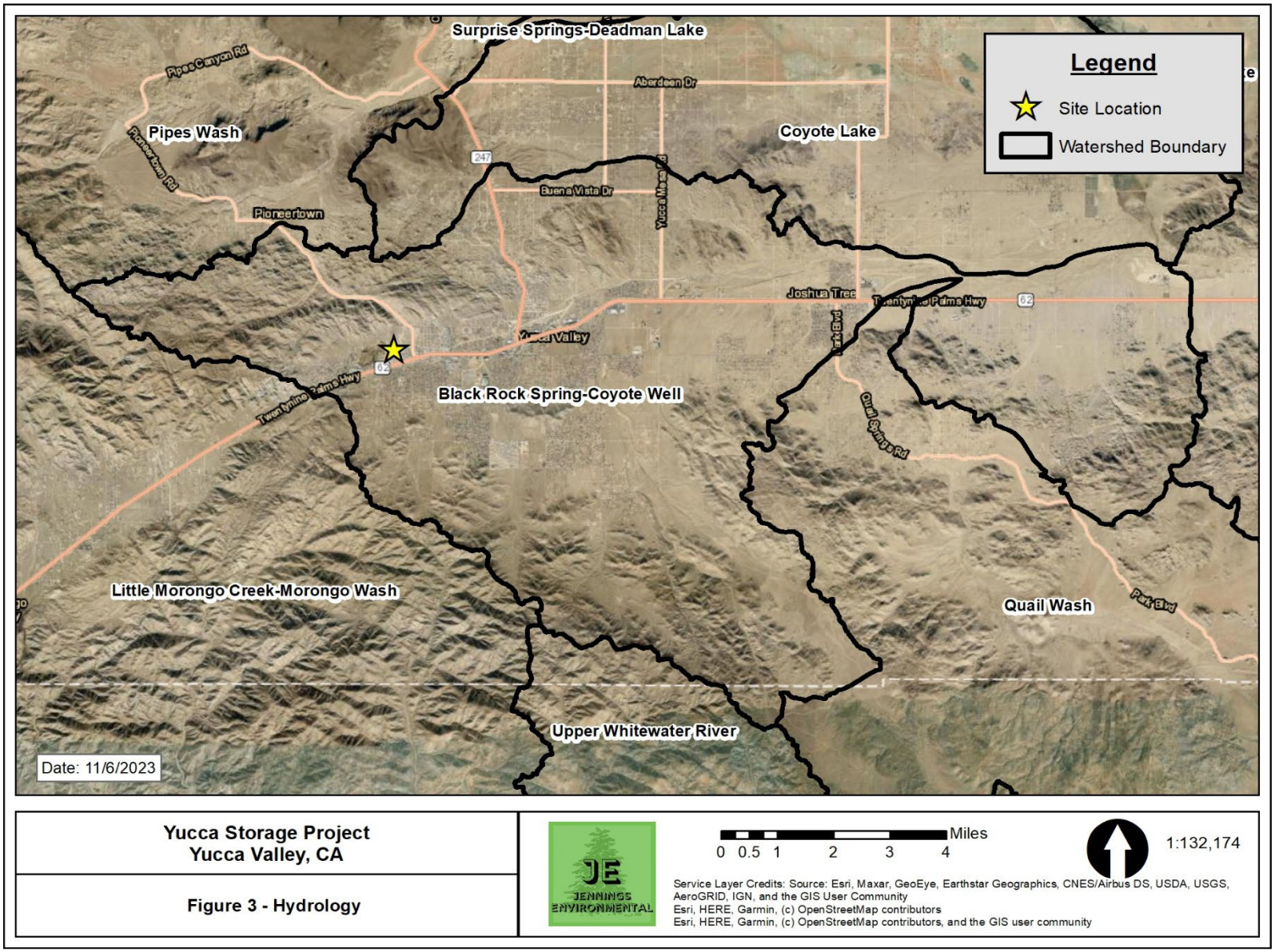
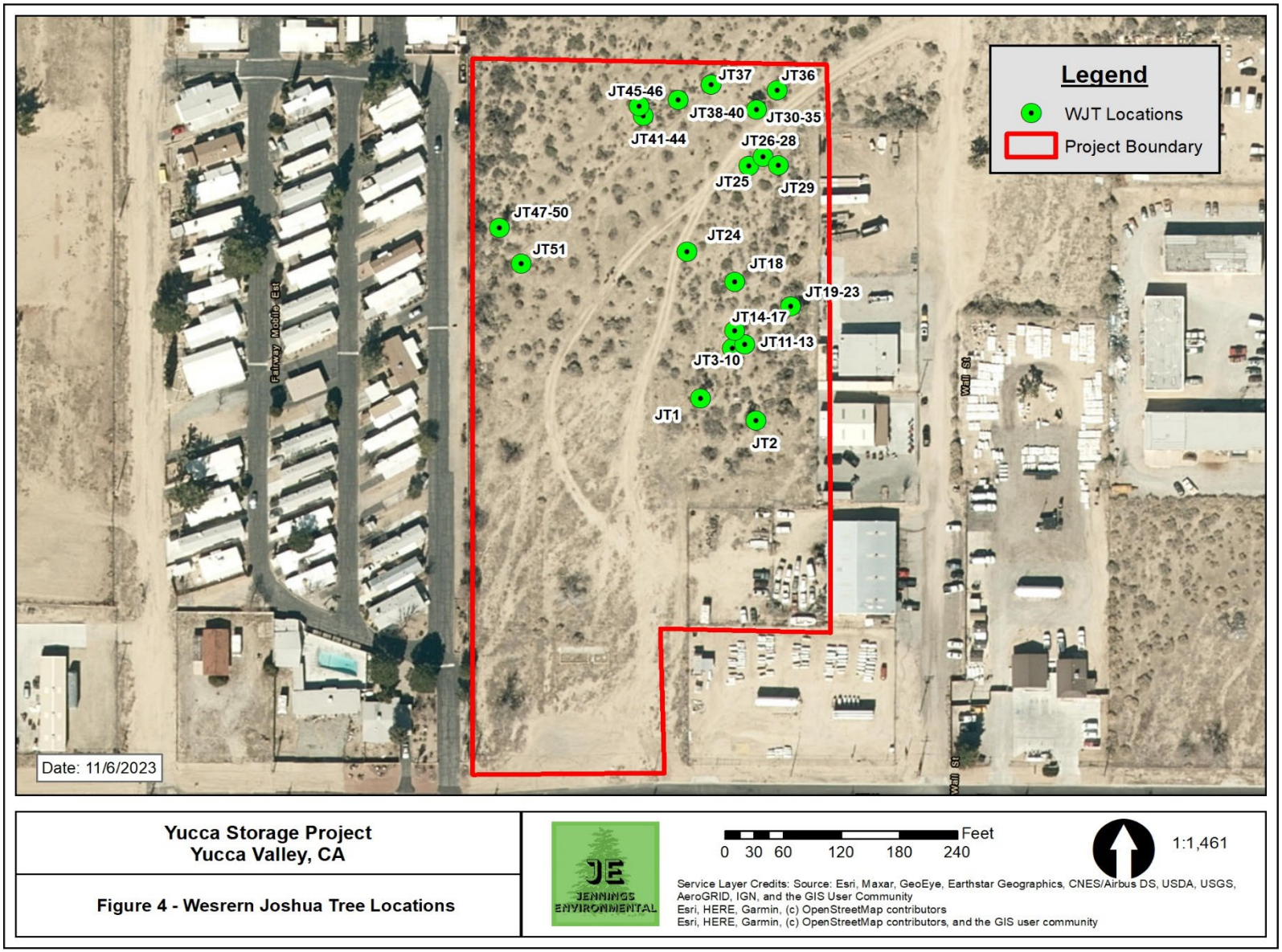
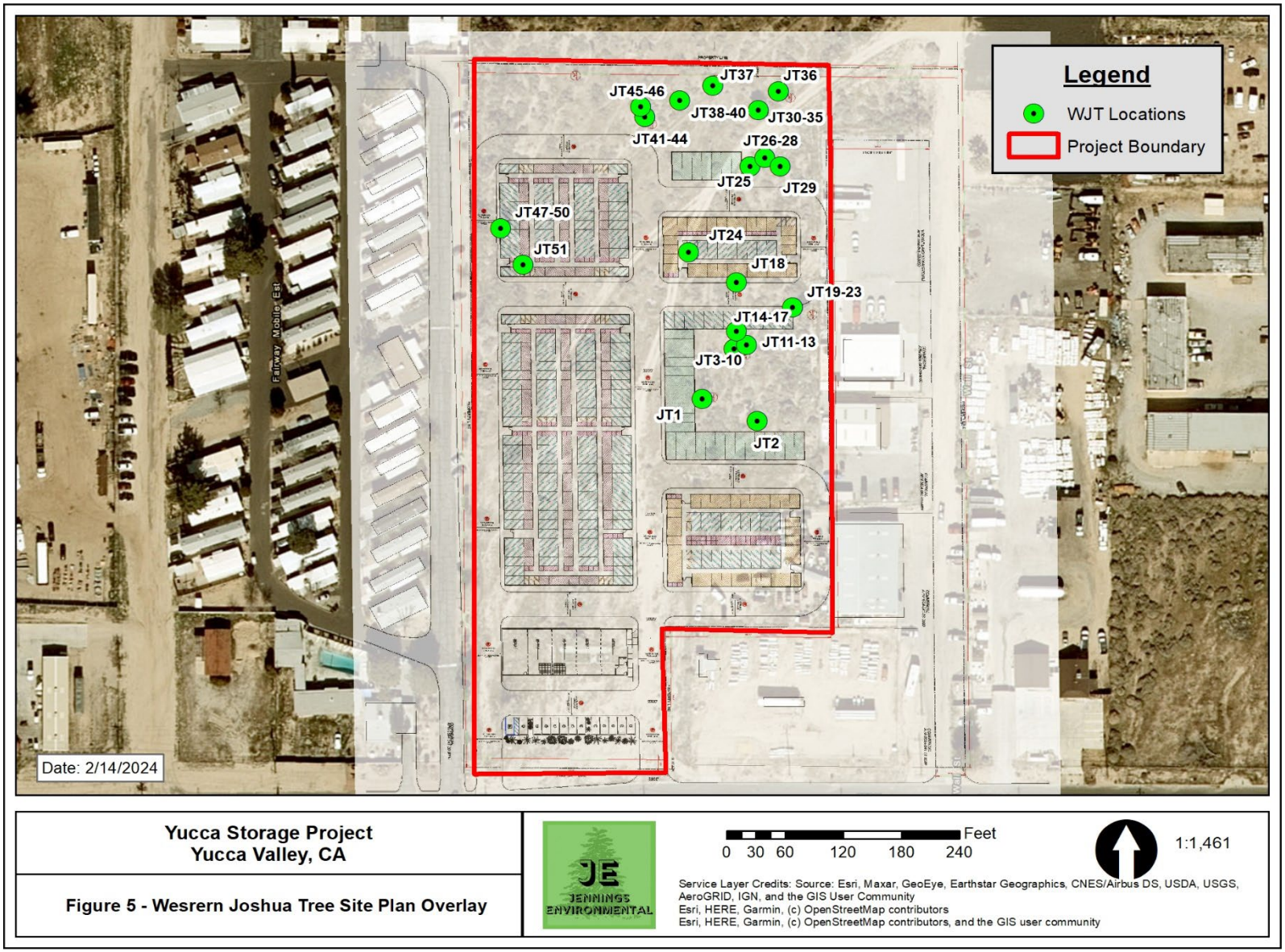
Site Location
Regional Overview
Lancaster
Palmdale
Victorville
Santa Clarita
Simi Valley
Rancho Cucamonga
Ontario
Pomona
Riverside
Twentynine Palms
Santa Monica
Banning
Corona
Anaheim
Long Beach
Santa Ana
Cathedral City
Palm Desert
Indio
Murrieta
Mobile Home Park
Golf Course
Radio Facility
Water Tank
Twentynine Palms
Morongo Valley
Yucca Park
The Tanks
Well
Water
Date: 11/6/2023
Site Vicinity
Yucca Storage Project
Yucca Valley, CA
Figure 1 - Regional Overview and Site Vicinity
JE
JENNINGS ENVIRONMENTAL
0 0.1 0.2 0.4 0.6 0.8 Miles
1:24,000
Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Copyright:© 2013 National Geographic Society, i-cubed


Legend
Project Boundary
Fairway Mobile Est
Wall St
Miami Trl
Kickapoo Trl
Yucca Trl
Yucca Trl
55498
55562
55530
55564
55566
7200
Date: 11/6/2023
Yucca Storage Project
Yucca Valley, CA
Figure 2 - Site Location
JE
JENNINGS ENVIRONMENTAL
0 45 90 180 270 360
Feet
1:2,000
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community


Surprise Springs-Deadman Lake
Pipes Canyon Rd
Aberdeen Dr
Pipes Wash
Coyote Lake
Pioneertown Rd
247
Buena Vista Dr
Yucca Mesa Rd
Pioneertown
Joshua Tree
Twentynine Palms Hwy
62
Yucca Valley
Park Blvd
Black Rock Spring-Coyote Well
Quail Springs Rd
Little Morongo Creek-Morongo Wash
Quail Wash
Upper Whitewater River
Date: 11/6/2023
Legend
Site Location
Watershed Boundary
Yucca Storage Project
Yucca Valley, CA
Figure 3 - Hydrology
JE
JENNINGS ENVIRONMENTAL
0 0.5 1 2 3 4
Miles
1:132,174
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community


Legend
WJT Locations
Project Boundary
JT37
JT36
JT45-46
JT38-40
JT30-35
JT41-44
JT26-28
JT25
JT29
JT47-50
JT24
JT51
JT18
JT19-23
JT14-17
JT11-13
JT3-10
JT1
JT2
Fairway Middle Est
Wall St
Date: 11/6/2023
Yucca Storage Project
Yucca Valley, CA
Figure 4 - Wesrern Joshua Tree Locations
JE
JENNINGS ENVIRONMENTAL
0 30 60 120 180 240
Feet
1:1,461
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community


Legend
WJT Locations
Project Boundary
JT37
JT36
JT45-46
JT38-40
JT30-35
JT41-44
JT26-28
JT25
JT29
JT47-50
JT24
JT51
JT18
JT19-23
JT14-17
JT11-13
JT3-10
JT1
JT2
Fairway Mobile Est
Date: 2/14/2024
Yucca Storage Project
Yucca Valley, CA
Figure 5 - Wesrern Joshua Tree Site Plan Overlay
JE
JENNINGS ENVIRONMENTAL
0 30 60 120 180 240
Feet
1:1,461
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors
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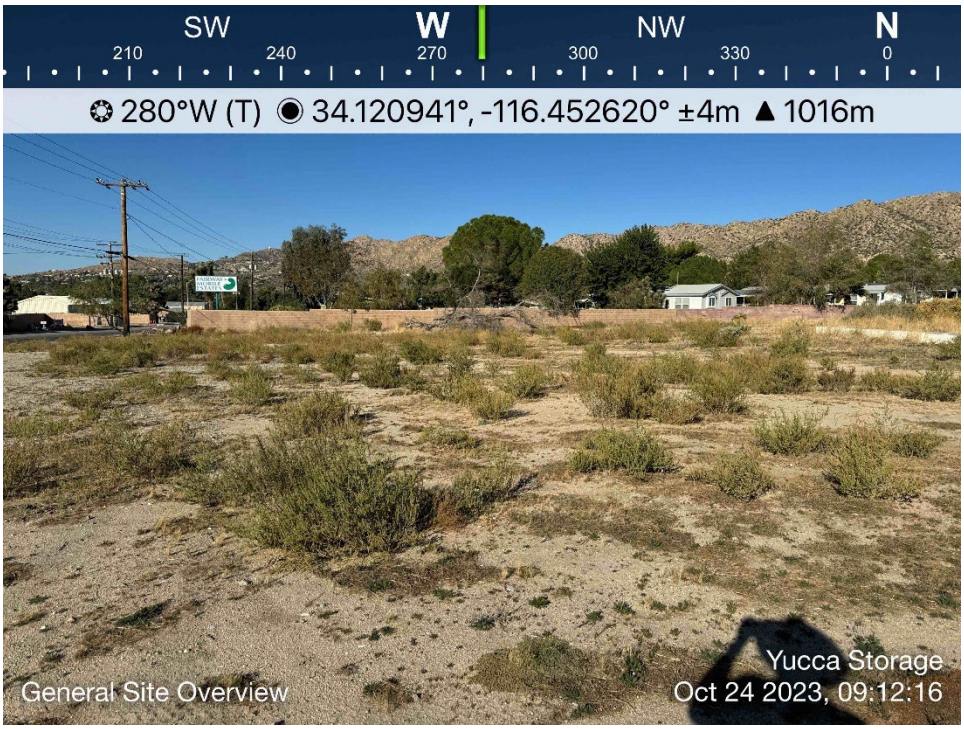
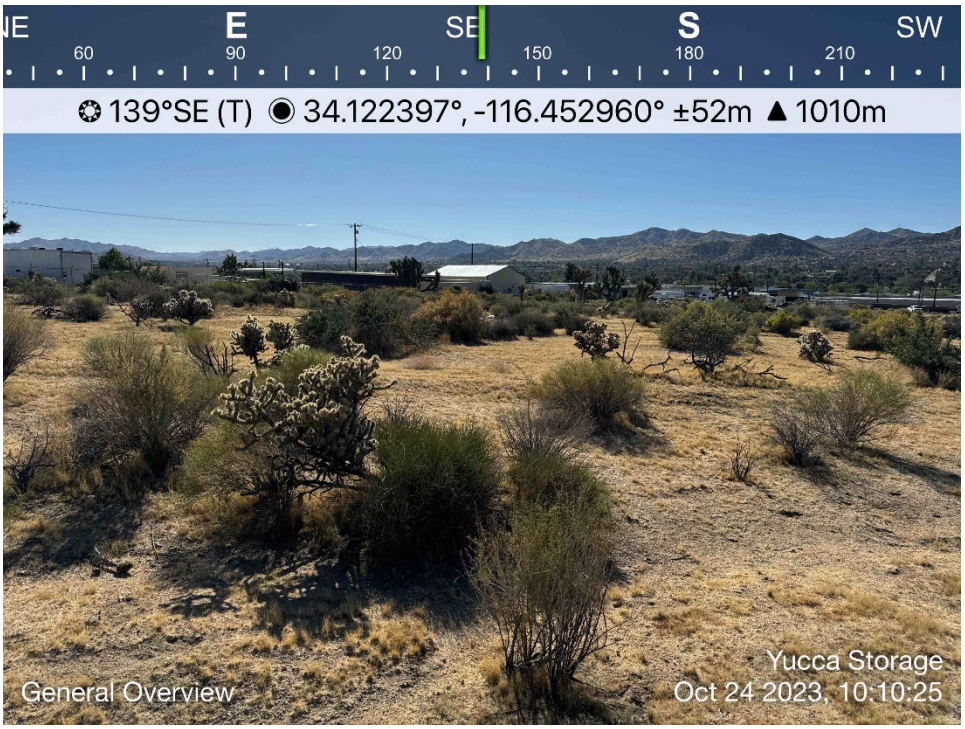
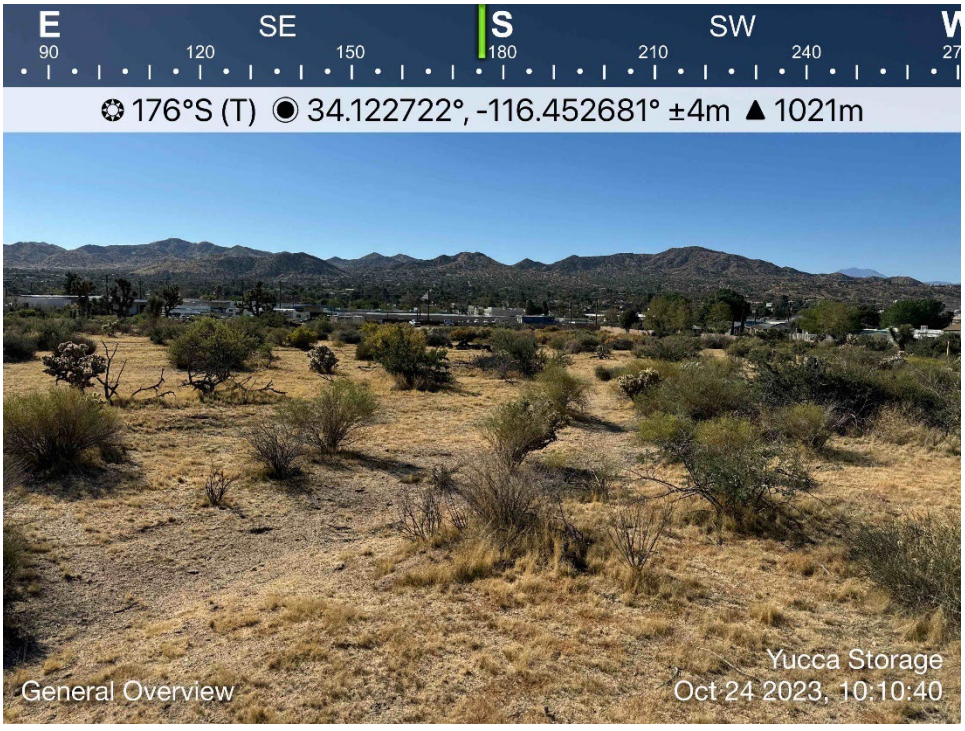
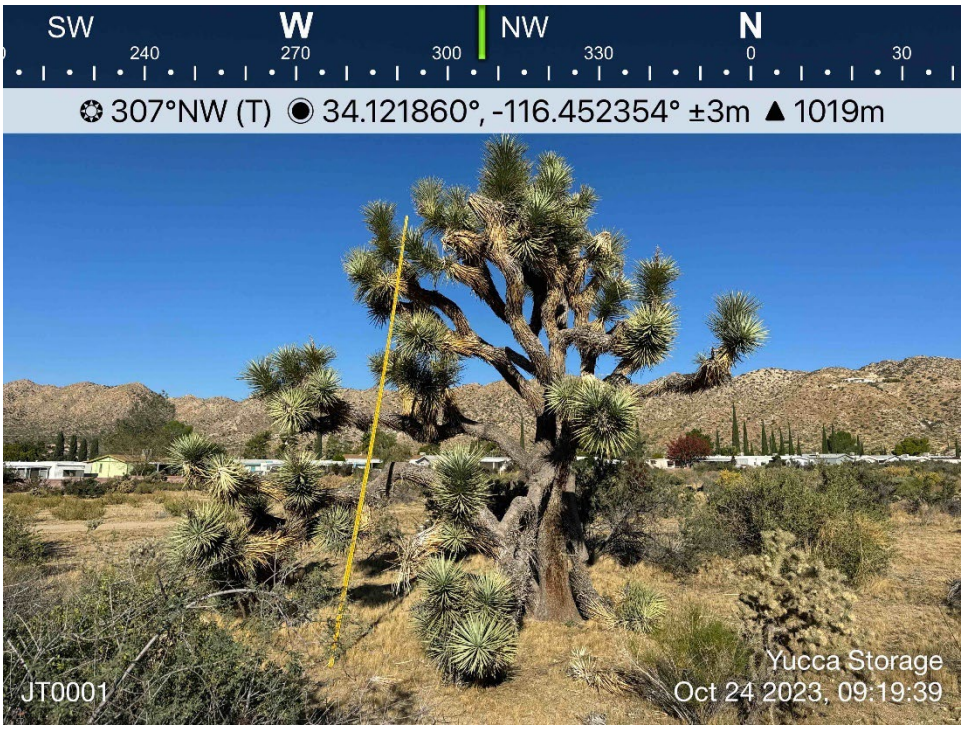
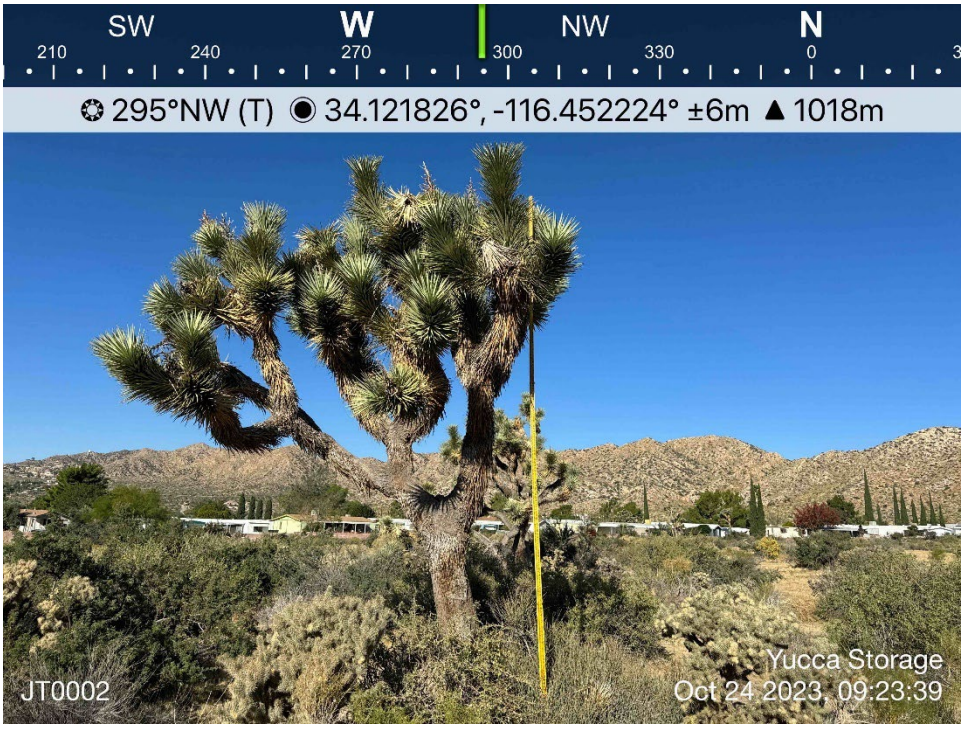
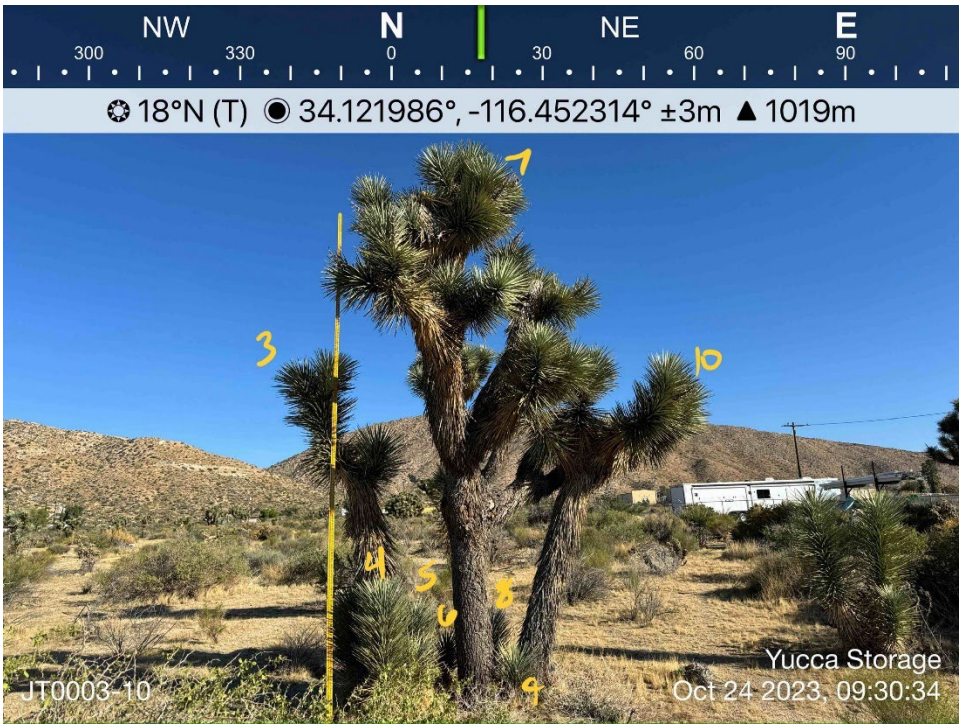
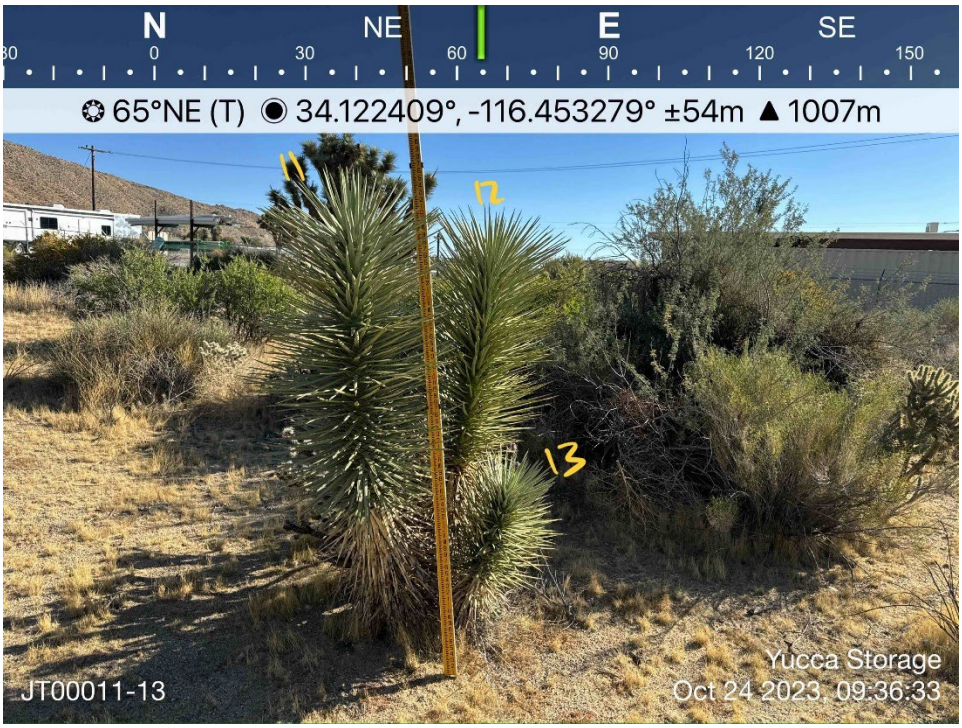
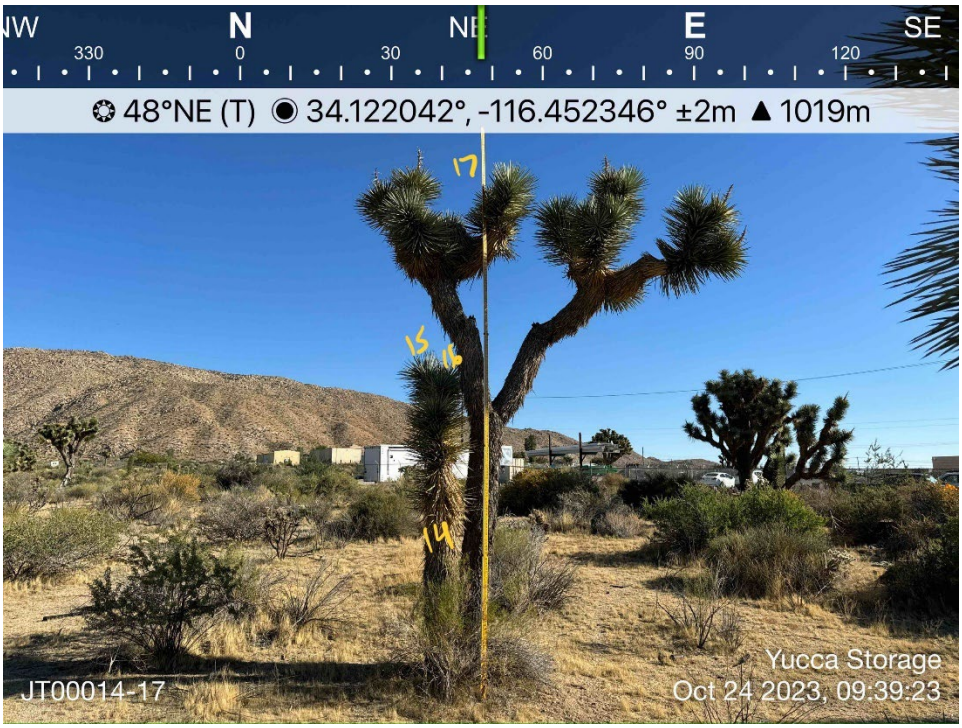
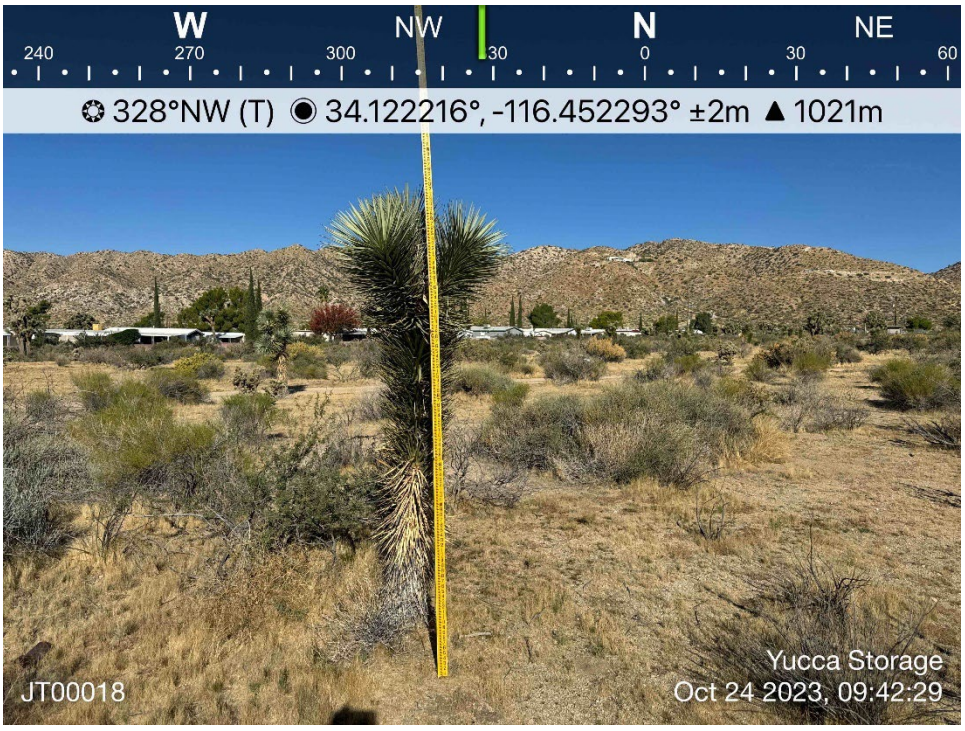
Appendix B – Photos

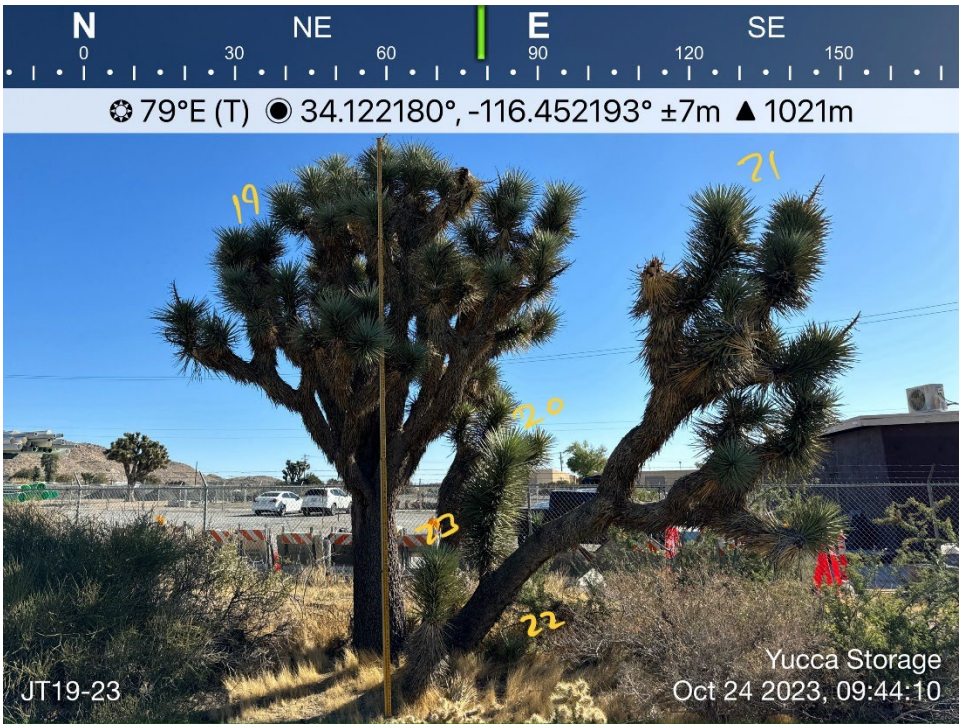
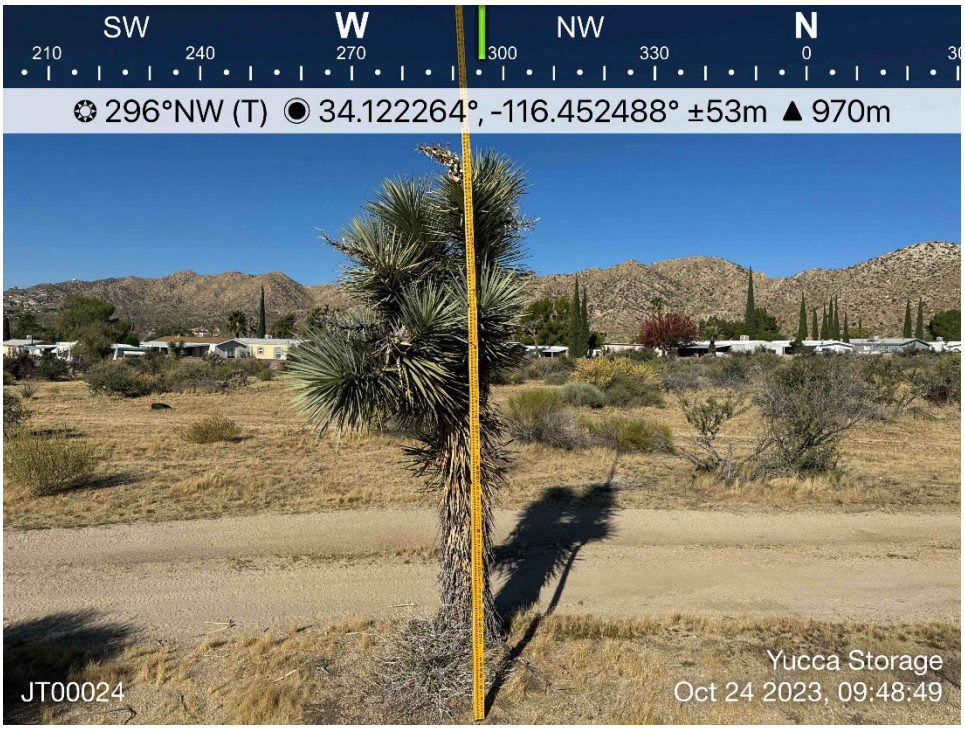
	Photo 1 – Southeast corner of Project Site, facing west.
	Photo 2 – Southeast corner of Project Site, facing North.

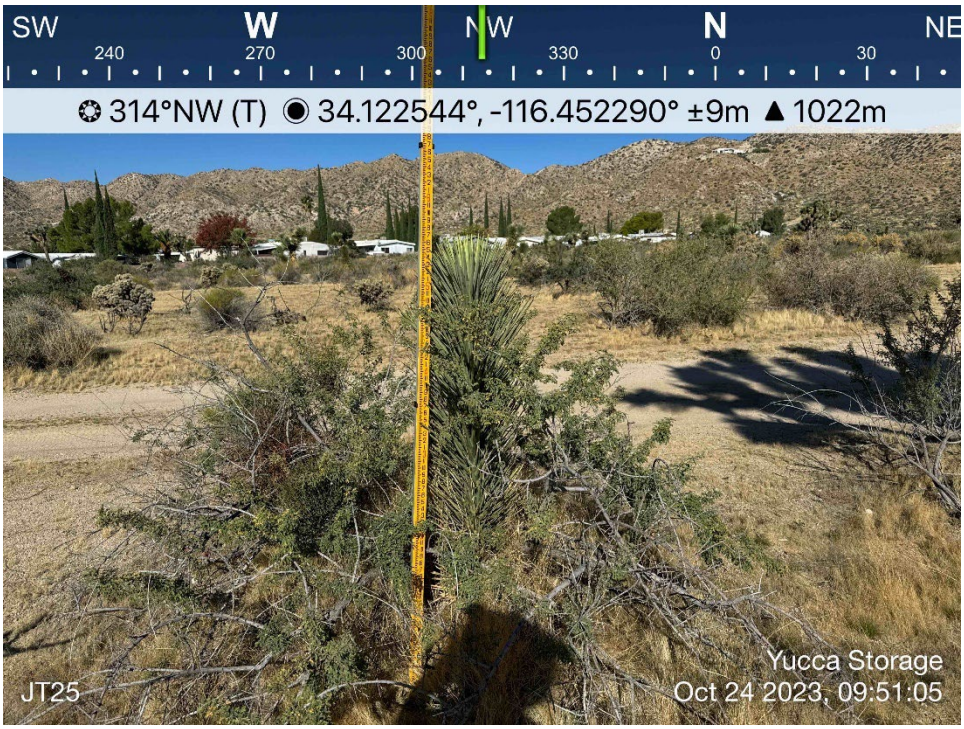
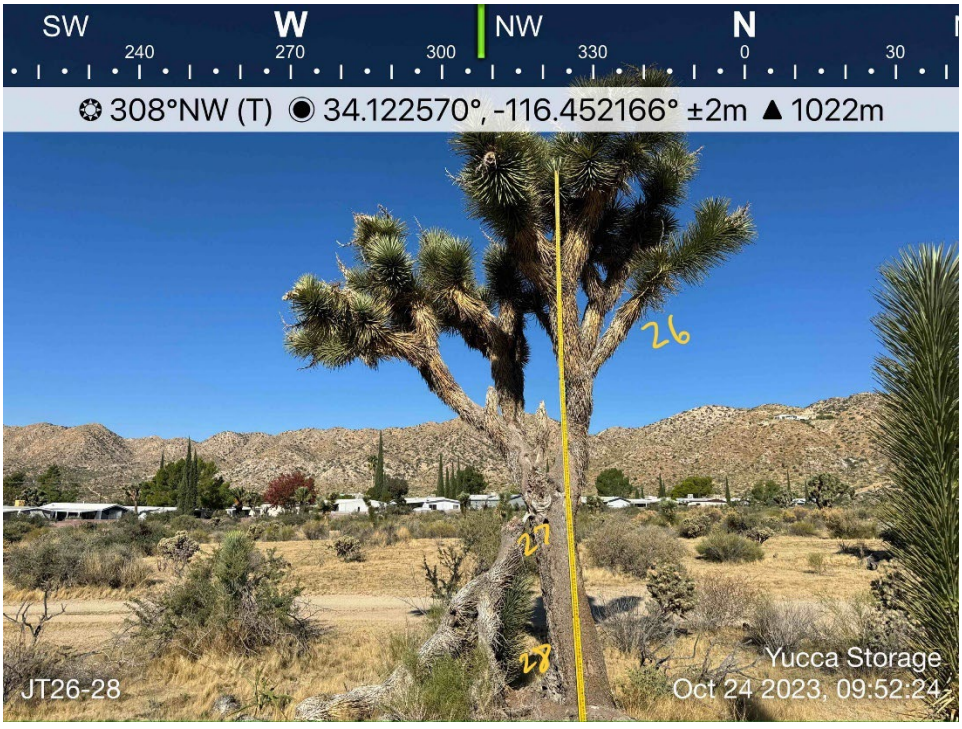
	Photo 3 – Northwest corner of Project Site, facing southeast.
	Photo 4 – Northwest corner of Project Site, facing south.

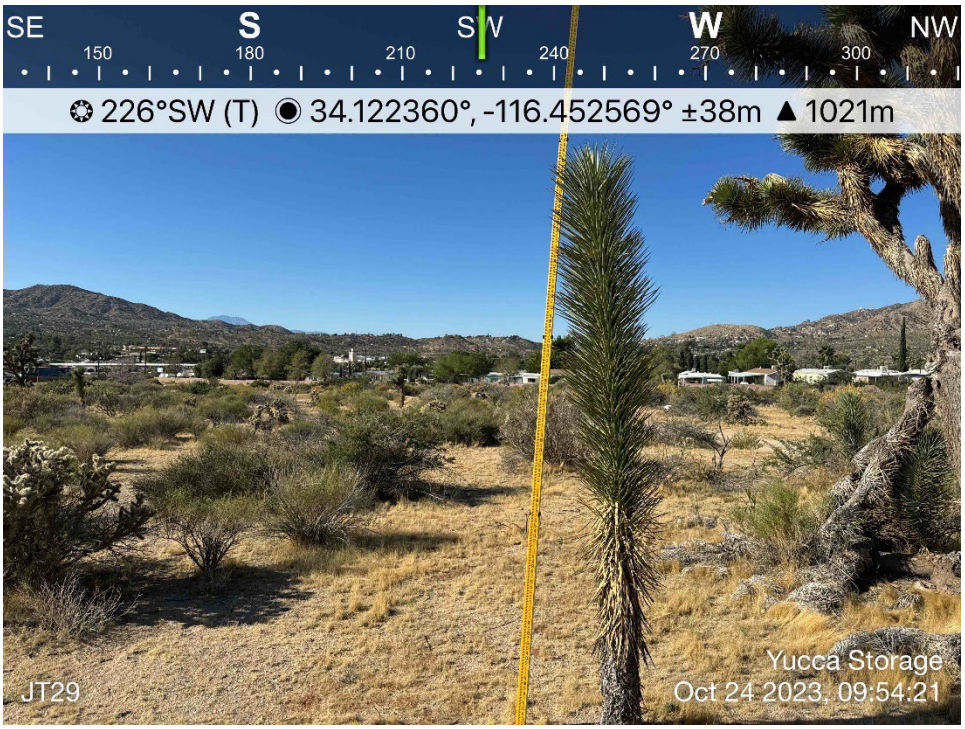
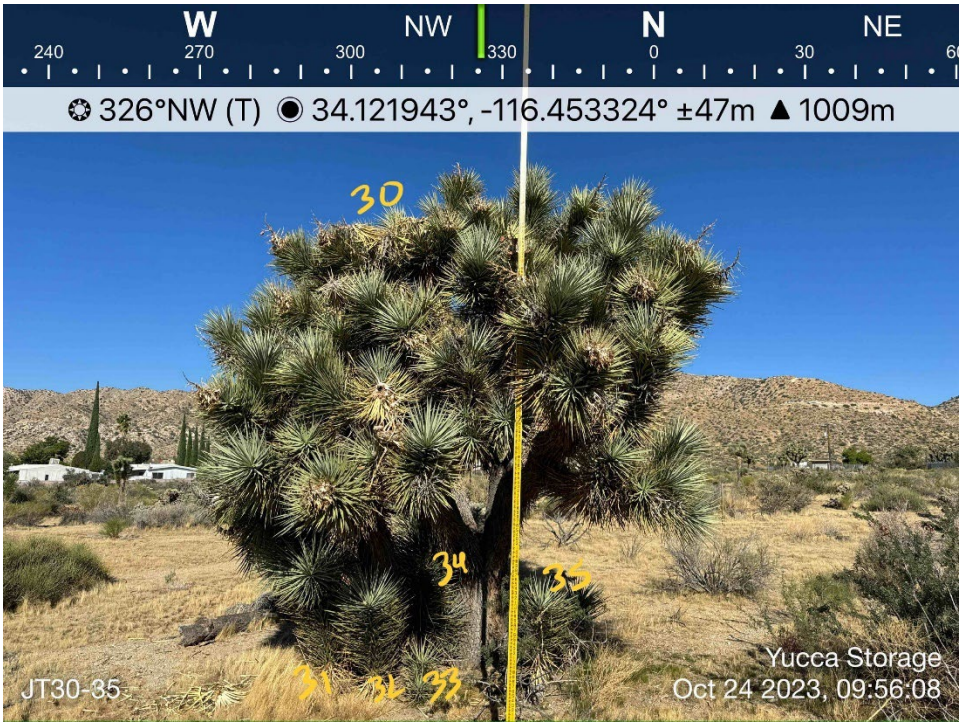
	Photo 5 – western Joshua tree 1 (JT1).
	Photo 6 – western Joshua tree 2 (JT2).

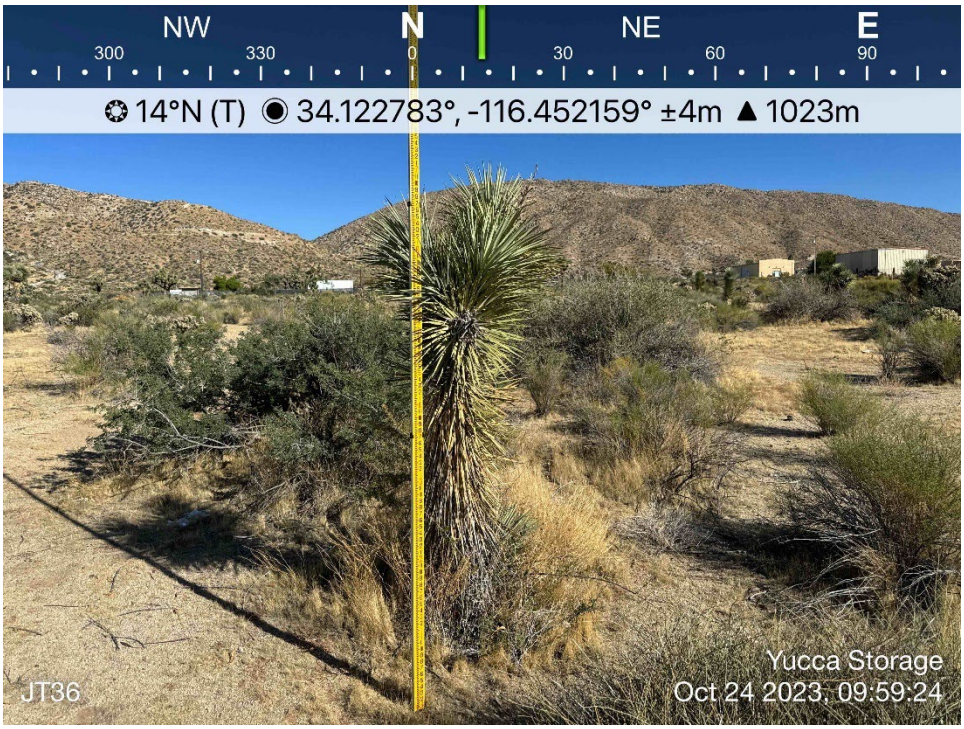
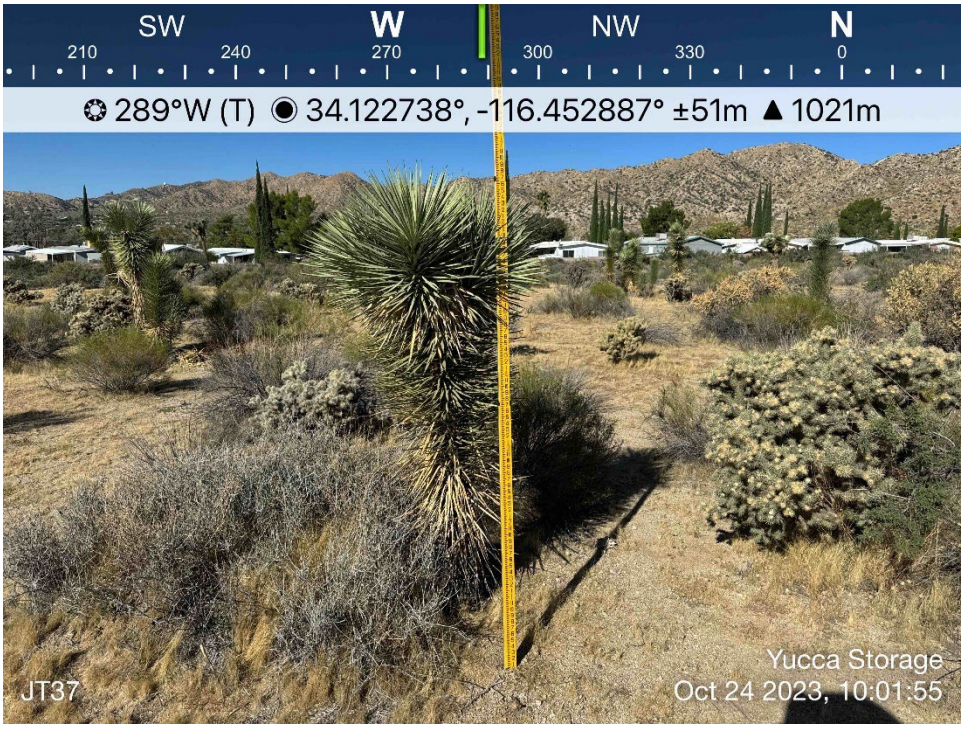
	Photo 7 – western Joshua tree 3-10 (JT3-10).
	Photo 8 – western Joshua tree 11-13 (JT11-13).

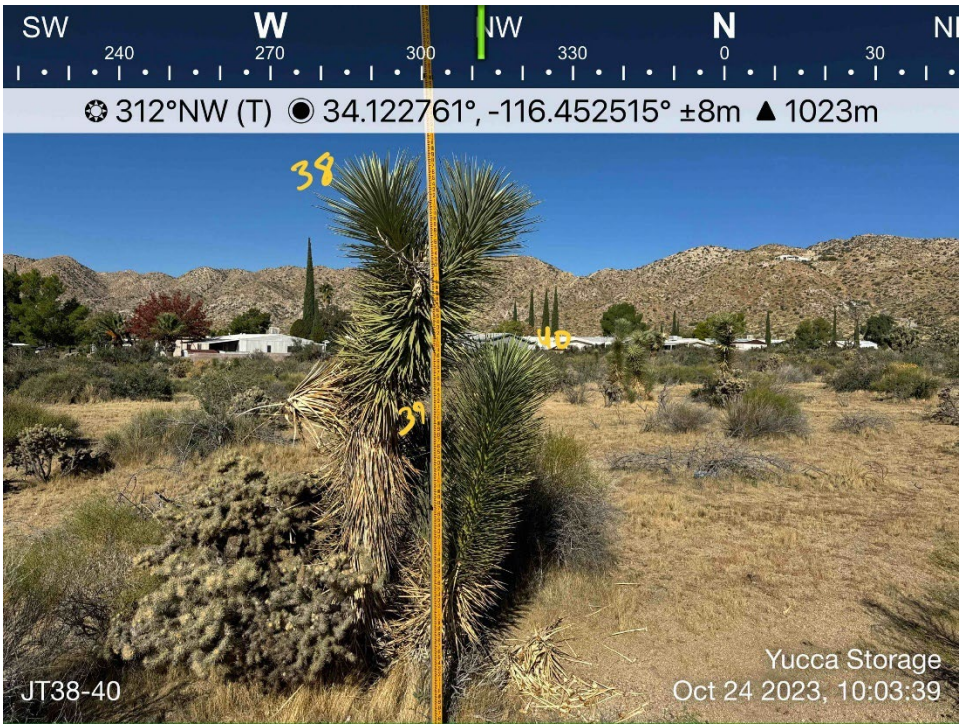
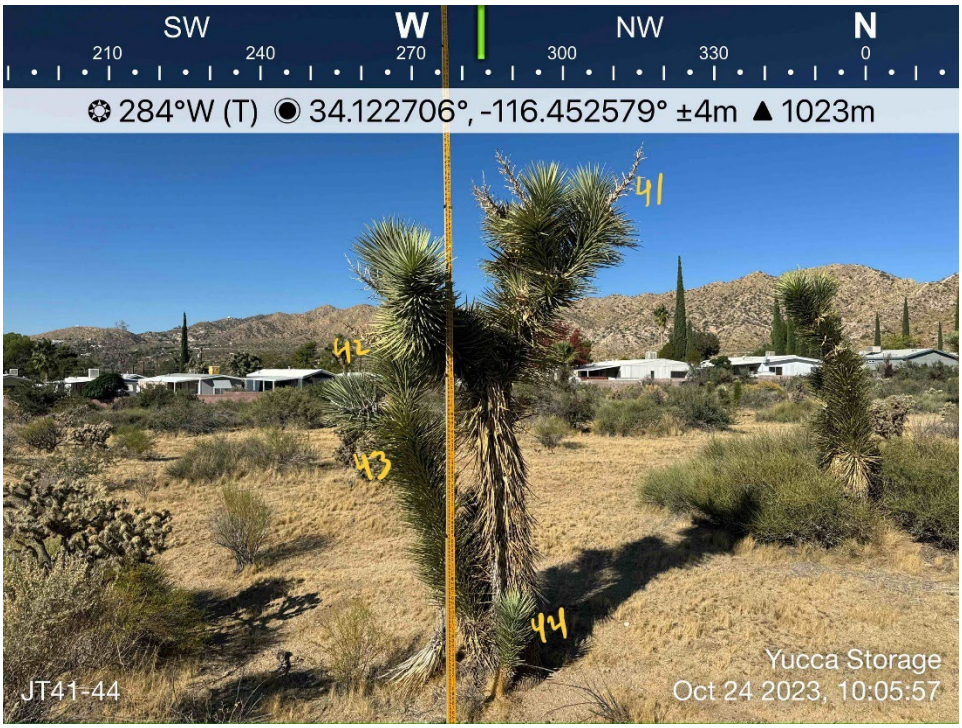
	Photo 9 – western Joshua tree 14-17 (JT14-17).
	Photo 10 – western Joshua tree 18 (JT18).

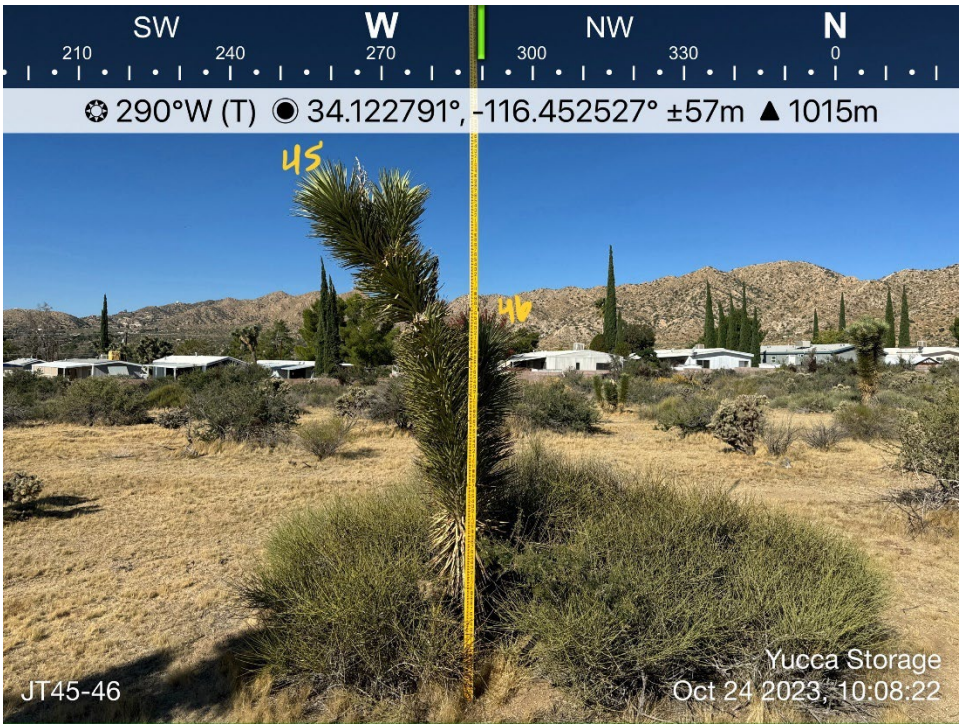
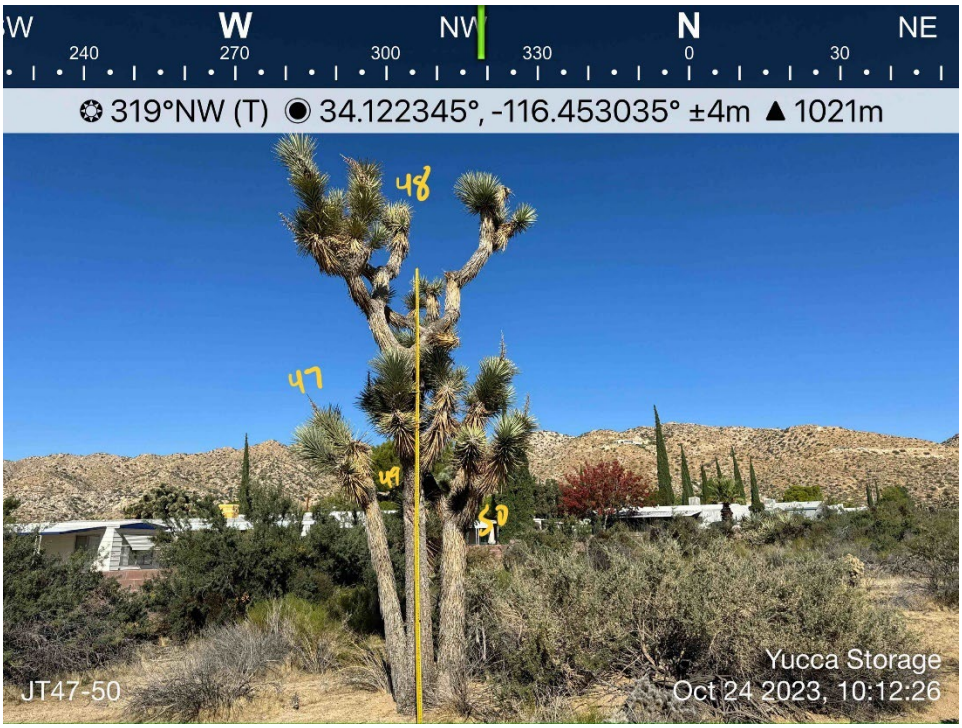
	Photo 11 – western Joshua tree 19-23 (JT19-23).
	Photo 12 – western Joshua tree 24 (JT24).

	Photo 13 – western Joshua tree 25 (JT25).
	Photo 14 – western Joshua tree 26-28 (26-28).

	Photo 15 – western Joshua tree 29 (JT29).
	Photo 16 – western Joshua tree 30-35 (JT30-35).

	Photo 17 – western Joshua tree 36 (JT36).
	Photo 18 – western Joshua tree 37 (JT37).

	Photo 19 – western Joshua tree 38-40 (JT38-40).
	Photo 20 – western Joshua tree 41-44 (JT41-44).

	Photo 21 – western Joshua tree 45-46 (JT45-46).
	Photo 22 – western Joshua tree 47-50 (JT47-50).

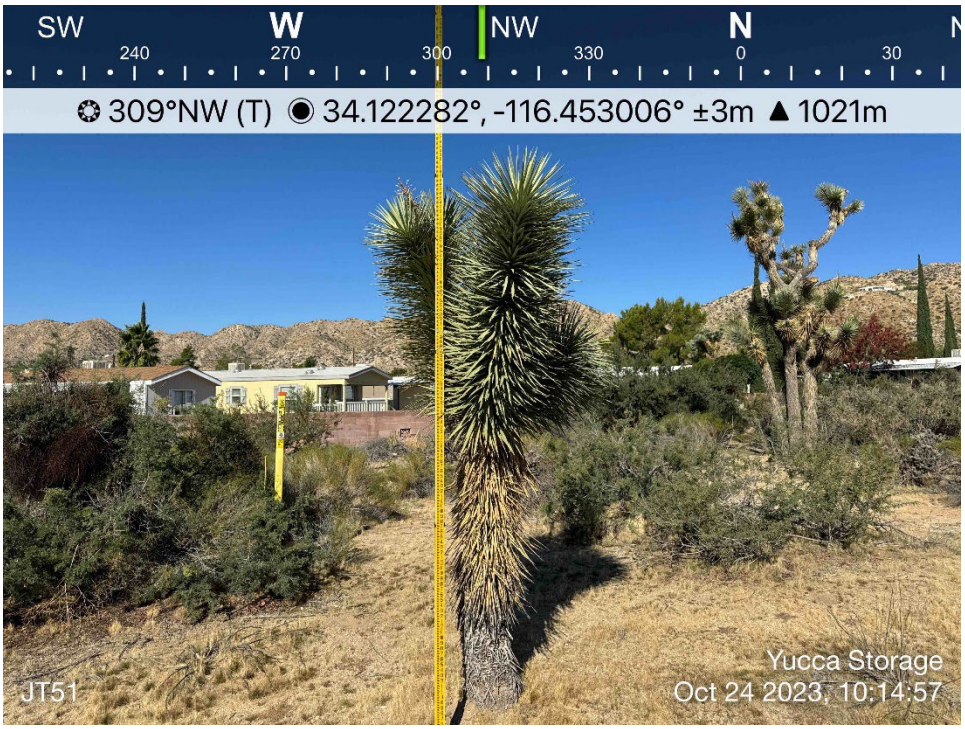


Photo 23 – western Joshua tree 51 (JT51).

Appendix C – Regulatory Framework

1.1 FEDERAL JURISDICTION

1.1.1 United States Army Corps of Engineers

Activities within inland streams, wetlands, and riparian areas in California are regulated by agencies at the federal, state, and regional levels. At the federal level, the U.S. Army Corps of Engineers (USACE) Regulatory Program regulates activities within wetlands and waters of the US pursuant to Section 404 of the Federal Clean Water Act (CWA).

At the state level, the California Department of Fish and Wildlife (CDFW) regulates activities within the bed, bank, and associated habitat of a stream under the Fish and Game Code §§ 1600–1616. The California State Water Resources Board (SWRB) delegates authority at the regional level to Regional Water Quality Control Boards (RWQCB) that are responsible for regulating discharge into waters of the US under Section 401 of the federal CWA and waters of the State under the California Porter-Cologne Water Quality Act.

The CWA was implemented to maintain and restore the chemical, physical, and biological integrity of the Waters of the United States (33 Code of Federal Regulations [CFR] Part 328 Section 328.3). "Waters of the US" are defined as follows:

> **§ 328.3 Definitions.**
> For the purpose of this regulation these terms are defined as follows:
> (a) *Waters of the United States* means:
> (1) Waters which are:
> (i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
> (ii) The territorial seas; or
> (iii) Interstate waters, including interstate wetlands;
> (2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;
> (3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section:
> (i) That are relatively permanent, standing or continuously flowing bodies of water; or
> (ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section;
> (4) Wetlands adjacent to the following waters:
> (i) Waters identified in paragraph (a)(1) of this section; or
> (ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3)(i) of this section and with a continuous surface connection to those waters; or

(iii) Waters identified in paragraph (a)(2) or (3) of this section when the wetlands either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section;

(5) Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) of this section:

(i) That are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3)(i) of this section; or

(ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section.

(b) The following are not ‘‘waters of the United States’’ even where they otherwise meet the terms of paragraphs (a)(2) through (5) of this section:

(1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;

(2) Prior converted cropland designated by the Secretary of Agriculture The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area’s status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;

(3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

(4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;

(5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;

(6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and

(8) Swales and erosional features (*e.g.,* gullies, small washes) characterized by low volume, infrequent, or short duration flow.

(c) In this section, the following definitions apply:

(1) *Wetlands* means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically

adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(2) *Adjacent* means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes, and the like are ‘‘adjacent wetlands.’’

(3) *High tide line* means the line of intersection of the land with the water’s surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such at those accompanying a hurricane or other intense storm.

(4) *Ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(5) *Tidal waters* means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

(6) *Significantly affect* means a material influence on the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section. To determine whether waters, either alone or in combination with similarly situated waters in the region, have a material influence on the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section, the

functions identified in paragraph (c)(6)(i) of this section will be assessed and the factors identified in paragraph (c)(6)(ii) of this section will be considered:

(i) Functions to be assessed:

(A) Contribution of flow;

(B) Trapping, transformation, filtering, and transport of materials (including nutrients, sediment, and other pollutants);

(C) Retention and attenuation of floodwaters and runoff;

(D) Modulation of temperature in waters identified in paragraph (a)(1) of this section; or

(E) Provision of habitat and food resources for aquatic species located in waters identified in paragraph (a)(1) of this section;

(ii) Factors to be considered:

(A) The distance from a water identified in paragraph (a)(1) of this section;

(B) Hydrologic factors, such as the frequency, duration, magnitude, timing, and rate of hydrologic connections, including shallow subsurface flow;

(C) The size, density, or number of waters that have been determined to be similarly situated;

(D) Landscape position and geomorphology; an

(E) Climatological variables such as temperature, rainfall, and snowpack.

1.2 STATE JURISDICTION

The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the CWA as well as the California Porter-Cologne Water Quality Control Act (Porter-Cologne; California Water Code, Division 7, §13000 et seq.). Waters of the State are defined by Porter-Cologne as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code Section 13050(e)). Waters of the State broadly includes all waters within the State's boundaries (public or private), including waters in both natural and artificial channels.

1.2.1 Regional Water Quality Control Board

Under Porter-Cologne, the State Water Resources Control Board (SWRCB) and the local Regional Water Quality Control Boards (RWQCB) regulate the discharge of waste into waters of the State. Discharges of waste include "fill, any material resulting from human activity, or any other 'discharge' that may directly or indirectly impact 'waters of the state.'" Porter-Cologne reserves

the right for the State to regulate activities that could affect the quantity and/or quality of surface and/or groundwaters, including isolated wetlands, within the State. Wetlands were defined as waters of the State if they demonstrated both wetland hydrology and hydric soils. Waters of the State determined to be jurisdictional for these purposes require, if impacted, waste discharge requirements (WDRs).

When an activity results in fill or discharge directly below the OHWM of jurisdictional waters of the United States (federal jurisdiction), including wetlands, a CWA Section 401 Water Quality Certification is required. If a proposed project is not subject to CWA Section 401 certification but involves activities that may result in a discharge to waters of the State, the project may still be regulated under Porter-Cologne and may be subject to waste discharge requirements. In cases where waters apply to both CWA and Porter-Cologne, RWQCB may consolidate permitting requirements to one permit.

1.2.2 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, the California Department of Fish and Wildlife (CDFW) regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation” (California Code of Regulations, Title 14, Section 1.72). The jurisdiction of CDFW may include areas in or near intermittent streams, ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams that are indicated on USGS maps, watercourses that may contain subsurface flows, or within the flood plain of a water body. CDFW’s definition of “lake” includes “natural lakes or man-made reservoirs.” CDFW limits of jurisdiction typically include the maximum extents of the uppermost bank-to-bank distance and/or the outermost extent of riparian vegetation dripline, whichever measurement is greater.

In a CDFW guidance of stream processes and forms in dryland watersheds (Vyverberg 2010), streams are identified as having one or more channels that may all be active or receive water only during some high flow event. Subordinate features, such as low flow channels, active channels, banks associated with secondary channels, floodplains, and stream-associated vegetation, may occur within the bounds of a single, larger channel. The water course is defined by the topography or elevations of land that confine a stream to a definite course when its waters rise to their highest level. A watercourse is defined as a stream with boundaries defined by the maximal extent or expression on the landscape even though flow may otherwise be intermittent or ephemeral.

Artificial waterways such as ditches (including roadside ditches), canals, aqueducts, irrigation ditches, and other artificially created water conveyance systems also may be under the jurisdiction of CDFW. CDFW may claim jurisdiction over these features based on the presence of habitat characteristics suitable to support aquatic life, riparian vegetation, and/or stream-dependent terrestrial wildlife. As with natural waterways, the limit of CDFW jurisdiction of artificial waterways includes the uppermost bank-to-bank distance and/or the outermost extent of riparian vegetation dripline, whichever measurement is greater.

CDFW does not have jurisdiction over wetlands but has jurisdiction to protect against a net loss of wetlands. CDFW supports the wetland criteria recognized by USFWS; one or more indicators of wetland conditions must exist for wetlands conditions to be considered present. The following is the USFWS accepted definition of a wetland:

> Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the lands supports hydrophytes, (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated withwater or covered by shallow water at some time during the growing season of each year (Cowardin et al. 1979).

In A Clarification of the U.S. Fish and Wildlife Service's Wetland Definition (Tiner 1989), the USFWS definition was further clarified "that in order for any area to be classified as wetland by the Service, the area must be periodically saturated or covered by shallow water, whether wetland vegetation and/or hydric soils are present or not; this hydrologic requirement is addressed in the first sentence of the definition." When considering whether an action would result in a net loss of wetlands, CDFW will extend jurisdiction to USFWS-defined wetland conditions where such conditions exist within the riparian vegetation that is associated with a stream or lake and does not depend on whether those features meet the three-parameter USACE methodology of wetland determination. If impacts to wetlands under the jurisdiction of CDFW are unavoidable, a mitigation plan will be implemented in coordination with CDFW to support the CDFW policy of "no net loss" of wetland habitat.

Appendix D – Tables

Table 1. Species Observed On-Site

Common Name	Scientific Name
Plants	
Catclaw acacia	*Senegalia greggii*
Western Joshua tree	*Yucca brevifolia*
Mojave yucca	*Yucca schidigera*
Pencil cholla	*Cylindropuntia ramosissima*
Schismus grass	*Shicsmus spp.*
Common burrobush	*Ambrosia dumosa*
Four-wing saltbush	*Atriplex canescens*
Desert hackberry	*Celtis pallida*
Flat spine burr-ragweed	*Ambrosia acanthicarpa*
Pepper weed	*Lepidium latifolium*
Mediterranean mustard	*Hirschfeldia incana*
Birds	
White-crown sparrow	*Zonotrichia leucophrys*
Cactus wren	*Campylorhynchus brunneicapillus*
House finch	*Haemorhous mexicanus*
Mammals	
Desert cottontail	*Sylvilagus audubonii*
Black-tailed jackrabbit	*Lepus californicus*

Table 2 – CNDDB Potential to Occur for the *Yucca Valley South, Yucca Valley North, Rimrock, and Morongo Valley* Quadrangles

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Accipiter cooperii	Cooper's hawk	None, None	G5 , S4, CDFW-WL	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Anniella stebbinsi	Southern California legless lizard	None, None	G3 , S3, CDFW-SSC	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Antrozous pallidus	pallid bat	None, None	G4 , S3, CDFW-SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Asio otus	long-eared owl	None, None	G5 , S3?, CDFW-SSC	Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Astragalus bernardinus	San Bernardino milk-vetch	None, None	G3 , S3, 1B.2	Joshua tree woodland, pinyon and juniper woodland. Granitic or carbonate substrates. 290-2290 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Astragalus lentiginosus var. coachellae	Coachella Valley milk-vetch	Endangered, None	G5T1 , S1, 1B.2	Sonoran desert scrub, desert dunes. Sandy flats, washes, outwash fans, sometimes on dunes. 35-695 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Astragalus tricarinatus	triple-ribbed milk-vetch	Endangered, None	G2 , S2, 1B.2	Joshua tree woodland, Sonoran desert scrub. Hot, rocky slopes in canyons and along edge of boulder-strewn desert washes, with Larrea and Encelia. 455-1585 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Berberis fremontii	Fremont barberry	None, None	G5 , S3, 2B.3	Pinyon and juniper woodland, Joshua tree woodland. Rocky, sometimes granitic. 1140-1770 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Boechera dispar	pinyon rockcress	None, None	G3 , S3, 2B.3	Joshua tree woodland, pinyon and juniper woodland, Mojavean desert scrub. Granitic, gravelly slopes and mesas. Often under desert shrubs which support it as it grows. 1005-2805 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Boechera lincolnensis	Lincoln rockcress	None, None	G4G5 , S3, 2B.3	Chenopod scrub, Mojavean desert scrub. On limestone. 880-2410 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Boechera shockleyi	Shockley's rockcress	None, None	G3 , S2, 2B.2	Pinyon and juniper woodland. On ridges, rocky outcrops and openings on limestone or quartzite. 875-2515 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Bombus crotchii	Crotch bumble bee	None, Candidate Endangered	G2 , S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Calochortus palmeri var. palmeri	Palmer's mariposa-lily	None, None	G3T2 , S2, 1B.2	Meadows and seeps, chaparral, lower montane coniferous forest. Vernally moist places in yellow-pine forest, chaparral. 195-2530 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	None, None	G5T3T4 , S3S4,	Desert border areas of San Diego, Riverside, San Bernardino, and Los Angeles counties in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Chorizanthe xanti var. leucotheca	white-bracted spineflower	None, None	G4T3 , S3, 1B.2	Mojavean desert scrub, pinyon and juniper woodland, coastal scrub (alluvial fans). Sandy or gravelly places. 365-1830 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Crotalus ruber	red-diamond rattlesnake	None, None	G4 , S3,	Chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Desert Fan Palm Oasis Woodland	Desert Fan Palm Oasis Woodland	None, None	G3 , S3.2	Riparian woodland	This habitat type is **absent** from the Project Site.
Eremarionta morongoana	Morongo (=Colorado) desertsnail	None, None	G1G3 , S1	Found in the eastern San Bernardino Mountains, the Little San Bernardino Mountains, and Mecca Hills along the the edge of the Coachella Valley and southern Mojave Desert. Occur in rockslides with deep talus surrounded by desert scrub, or under beds of fallen palm fronds where tumbled rocks are present at palm oases.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Eriastrum harwoodii	Harwood's eriastrum	None, None	G2 , S2, 1B.2	Desert dunes. Sandy soils. 15-1100m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Erigeron parishii	Parish's daisy	Threatened, None	G2 , S2, 1B.1	Mojavean desert scrub, pinyon and juniper woodland. Often on carbonate; limestone mountain slopes; often associated with drainages. Sometimes on grainite. 1050-2245 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Gopherus agassizii	desert tortoise	Threatened, Threatened	G3 , S2S3	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat. Require friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred.	Minimally suitable habitat for this species does occur on site. As such, **pre-construction** surveys need to be conducted.
Icteria virens	yellow-breasted chat	None, None	G5 , S4, CDFW-SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Lasiurus xanthinus	western yellow bat	None, None	G4G5 , S3, CDFW-SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Linanthus bernardinus	Pioneertown linanthus	None, None	G1 , S1, 1B.2	Joshua tree woodland, pinyon and juniper woodland. 1120-1345 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Linanthus maculatus ssp. maculatus	Little San Bernardino Mtns. linanthus	None, None	G2T2 , S2, 1B.2	Desert dunes, Sonoran desert scrub, Mojavean desert scrub, Joshua tree woodland. Sandy places. Usually in light-colored quartz sand; often in wash or bajada. 135-1220 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Mesquite Bosque	Mesquite Bosque	None, None	G3 , S2.1	Riparian forest	This habitat type is **absent** from the Project Site.

Mojave Riparian Forest	Mojave Riparian Forest	None, None	G1 , S1.1	Riparian forest	This habitat type is **absent** from the Project Site.
Monardella robisonii	Robison's monardella	None, None	G3 , S3, 1B.3	Pinyon and juniper woodland. Rocky desert slopes, often among granitic boulders. 610-1615 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Myiarchus tyrannulus	brown-crested flycatcher	None, None	G5 , S3, CDFW-WL	Inhabits desert riparian areas along the Colorado River, as well as other desert oases and riparian areas NW to Victorville. Requires riparian thickets, trees, snags, and shrubs for foraging perches, nesting cavities, and cover.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Neotoma lepida intermedia	San Diego desert woodrat	None, None	G5T3T4 , S3S4, CDFW-SSC	Coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Ovis canadensis nelsoni	desert bighorn sheep	None, None	G4T4 , S3, CDFW-FP	Widely distributed from the White Mtns in Mono Co. to the Chocolate Mts in Imperial Co. Open, rocky, steep areas with available water and herbaceous forage.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Paranomada californica	California cuckoo bee	None, None	G1 , S1	They live a parasitic lifestyle. They lay eggs in the nests of other bees, relying on food collected by the host bee to feed their young.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Parnopes borregoensis	Borrego parnopes cuckoo wasp	None, None	G1G2 , S1S2	Known from San Diego, San Bernardino, and Inyo counties.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Perognathus longimembris bangsi	Palm Springs pocket mouse	None, None	G5T2 , S1, CDFW-SSC	Desert riparian, desert scrub, desert wash and sagebrush habitats. Most common in creosote-dominated desert scrub. Rarely found on rocky sites. Occurs in all canopy coverage classes.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Phrynosoma blainvillii	coast horned lizard	None, None	G4 , S4, CDFW-SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Piranga rubra	summer tanager	None, None	G5 , S1, CDFW-SSC	Summer resident of desert riparian along lower Colorado River, and locally elsewhere in California deserts. Requires cottonwood-willow riparian for nesting and foraging; prefers older, dense stands along streams.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Pyrocephalus rubinus	vermilion flycatcher	None, None	G5 , S2S3, CDFW-SSC	During nesting, inhabits desert riparian adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas. Nest in cottonwood, willow, mesquite, and other large desert riparian trees.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Saltugilia latimeri	Latimer's woodland-gilia	None, None	G3 , S3, 1B.2	Chaparral, Mojavean desert scrub, pinyon and juniper woodland. Rocky or sandy substrate; sometimes in washes, sometimes limestone. 120-2200 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Setophaga petechia	yellow warbler	None, None	CDFW-SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Streptanthus campestris	southern jewelflower	None, None	G3 , S3, 1B.3	Chaparral, lower montane coniferous forest, pinyon and juniper woodland. Open, rocky areas. 605-2590 m.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Taxidea taxus	American badger	None, None	G5 , S3, CDFW-SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Toxostoma lecontei	Le Conte's thrasher	None, None	G4 , S3, CDFW-SSC	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Uma inornata	Coachella Valley fringe-toed lizard	Threatened, Endangered	G1Q , S1	Limited to sandy areas in the Coachella Valley, Riverside County. Requires fine, loose, windblown sand (for burrowing), interspersed with hardpan and widely-spaced desert shrubs.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.
Vireo bellii pusillus	least Bell's vireo	Endangered, Endangered	G5T2 , S3	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Suitable habitat for this species does not occur on site. As such, this species is considered **absent** from the Project site.

Coding and Terms

E = Endangered T = Threatened C = Candidate FP = Fully Protected SSC = Species of Special Concern R = Rare

State Species of Special Concern: An administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited acreages, and/or continuing threats. Raptor and owls are protected under section 3502.5 of the California Fish and Game code: "It is unlawful to take, possess or destroy any birds in the orders Falconiformes or Strigiformes or to take, possess or destroy the nest or eggs of any such bird."

State Fully Protected: The classification of Fully Protected was the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians and reptiles. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Global Rankings (Species or Natural Community Level):

G1 = Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 = Imperiled – At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 = Vulnerable – At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 = Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 = Secure – Common; widespread and abundant.
? = Uncertainty in the exact status of an element (could move up or down one direction from current rank)

Subspecies Level: Taxa which are subspecies or varieties receive a taxon rank (T-rank**)** attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies. For example: the Point Reyes mountain beaver, *Aplodontia rufa* ssp. *phaea* is ranked G5T2. The G-rank refers to the whole species range i.e., *Aplodontia rufa.* The T-rank refers only to the global condition of ssp. *phaea*.

State Ranking:

S1 = Critically Imperiled – Critically imperiled in the State because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.
S2 = Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the State.
S3 = Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the State.
S4 = Apparently Secure – Uncommon but not rare in the State; some cause for long-term concern due to declines or other factors.
S5 = Secure – Common, widespread, and abundant in the State.

California Rare Plant Rankings (CNPS List):

1A = Plants presumed extirpated in California and either rare or extinct elsewhere.
1B = Plants rare, threatened, or endangered in California and elsewhere.
2A = Plants presumed extirpated in California, but common elsewhere.
2B = Plants rare, threatened, or endangered in California, but more common elsewhere.
3 = Plants about which more information is needed; a review list.
4 = Plants of limited distribution; a watch list.

Threat Ranks:

.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)