

PROTECTED PLANT PRESERVATION PLAN FLAMINGO HEIGHTS CAMPGROUND

2107 Old Woman Springs Road in the Unincorporated Community of Flamingo Heights,
Homestead Valley, San Bernardino County (APN 0269-181-01)



Prepared For:

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Section 1 Introduction

RoBott Land Company (Project Applicant) is requesting approval of a Conditional Use Permit from the County of San Bernardino to develop approximately 225 acres of a 640-acre parcel (project site or site) located at 2107 Old Woman Springs Road (Assessor's Parcel No. 0629- 181-01) with a campground and related uses. The site is located in an unincorporated area of San Bernardino County in Flamingo Heights, north of the Town of Yucca Valley (see Figure 1- Regional Location).

1.1 PROJECT LOCATION

Flamingo Heights is located in Homestead Valley, in the Mojave Desert of San Bernardino County. The site is approximately 20 miles west of the Town of Yucca Valley and the entrance to Joshua Tree National Park. The site is further located in Section 35, Township 2 North, Range 5 East, SBBM; on the *Yucca Valley North* U.S. Geological Survey (USGS) 7.5-minute topographical map.

The Yucca Valley area of San Bernardino County is located in the Mojave Desert, approximately 70 miles east of the City of San Bernardino. Access to the site is via State Route 247 (SR-247). The property is vacant land bounded on the west by Old Woman Springs Road (SR-247), on the north by Luna Vista Road, on the East by Sage Avenue, and on the south by La Brisa Drive (see Figure 2-Project Vicinity). A major drainage, Pipes Canyon Wash, bisects the property from north to south. Land uses adjacent to the property include a mix of vacant and rural residential land on the north; vacant lands with some unpaved roads on the east; and a mix of vacant and rural residential on the south.

Section 2 Environmental Setting

2.1 WATERSHED

The site lies within the Pipes Wash Watershed (HUC 181001000905) which encompasses an area of roughly 191,664 acres that includes Pioneertown, Rimrock, and northern Yucca Valley and borders Rattlesnake Canyon Watershed to the north, Arrastre Creek-Mellville Lake Watershed and Headwaters Santa Ana River Watershed to the west, Headwaters Whitewater River Watershed and Little Morongo Creek-Morongo Wash Watershed to the south, and the Coyote Lake Watershed to the east. As shown on Figure 2, Pipes Canyon Wash bisects the 640-acre parcel in a northeast to southwest direction.

2.2 ECOREGION

This area is within the geographically based ecological classification known as the Central and Southern Mojave Basins and low ranges and footslopes ecoregions. The goal of regional ecological classifications is to reduce variability based on spatial covariance in climate, geology, topography, climax vegetation, hydrology, and soils. This ecoregion includes broad basins and scattered mountains that generally are low, warm, and dry. This area is a creosote bush-dominated shrub community, comprised mainly of creosote bush, white bursage, Joshua tree and other yuccas, and black brush. Regional alkali flats support saltbush, saltgrass, alkali sacaton, and iodine bush, while the higher mountain areas will have sagebrush, juniper, and singleleaf pinyon.

2.3 CLIMATE

The climate in the region is that of an upland desert with annual precipitation averaging 8.47 inches. Temperatures vary from 0°F in winter to above 110°F in summer. Mean daily maximum temperature in July (the hottest month) is 104°F and mean daily minimum temperatures in winter is 37°F. The project area is located within the Mojave Desert Air Basin (MDAB) and the Mojave Desert Air Quality Management District (MDAQMD) manages air quality for this basin. Air quality in the region is good, but during the summer, transported pollutants from the South Coast Air Basin (SCAB) can cause ozone concentrations to violate federal and state standards on some occasions. Soot and other particulate matter from wildfires can also contribute to poor air quality at this time. The problem has become more acute in recent years.

2.4 SPECIAL-STATUS PLANTS

Western Joshua Tree

The California Department of Fish and Wildlife (CDFW), administers the California Endangered Species Act (CESA). The State of California considers an endangered species one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A third category, species considered “rare” under the California

Native Plant Act, are present in such small numbers throughout its range that it may become endangered if its present environment worsens.

On September 22, 2020, the California Fish and Game Commission voted to grant western Joshua trees (*Yucca brevifolia*) candidate status under the California Endangered Species Act, giving them legal protection during a yearlong review to determine whether the species should be formally protected. The listing became effective October 9, 2020. At the time this document was prepared, CDFW had requested a six-month extension in the preparation of their status recommendation to the Commission. A final decision on the state listing is expected in the late spring or early summer of 2022.

As a Candidate species, western Joshua trees are afforded the same protections as a state-listed endangered or threatened species. As a Candidate species, the Joshua tree has full protection under CESA, and any activity that results in the removal of a Joshua tree, or any part thereof, or impacts the seedbank surrounding one or more Joshua trees is subject to an Incidental Take Permit (ITP), issued by CDFW.

The Act prohibits anyone from “taking” listed species, including candidates for listing, without authorization. CESA authorizes CDFW to permit the taking of listed species that is incidental to otherwise lawful activities through permits so long as the action is consistent with CESA and existing natural community conservation plans. While CESA prohibits the take of listed and candidate plants, it does so “except as otherwise provided” in California Desert Native Plants Act (DNPA).

Section 3 Methodology

On March 19, 20 and 26, 2020, Jericho biologist Shay Lawrey conducted a Joshua tree census and around the Flamingo Heights Campground site. On April 1, 2020, Jericho botanist C.J.Fotheringham conducted a focused botanical survey of the property. The surveys included the entire 640-acre project site and a 200-foot buffer area, where feasible. *Note: the proposed project affects only the 225 site acres west of the Pipes Canyon Wash and east of Old Woman Springs Road.*

The campground footprint is shown on Figure 3, Site Plan. The footprint was designed after the mapping of all Joshua tree within the 225 acres so that the final project footprint would avoid Joshua trees to the maximum extent possible.

Field surveys consisted of walking transects to gain 100 percent visual coverage of the project site. A handheld, global positioning system unit was used to precisely map individual Joshua trees, and site photographs were taken during the field surveys to catalog representative habitat (See Figure 4, Site Photos). The field botanists marked all Joshua trees on the west side of the project site in the immediate vicinity of the campground. Figure 5 shows the GPS locations of each Joshua tree within the proposed 225-acre project site. Finally, Figure 6 shows the relationship between the proposed campground facilities and existing Joshua trees.

Section 3 Results

Within the project entire 225-acre study area, a total of 2,734 Joshua trees were identified, including several trees in the western portion of Pipes Canyon Wash, an area not included in the development footprint. Using the GPS location of the Joshua trees, the project engineer designed the campground and related uses (e.g. on-site sewage disposal, retentionbasin, parking lot, buildings) to avoid nearly all of these trees.

As shown on Figure 6, 43 trees will be directly affected by the project. This number is expected to be further reduced during final site design. Table 1 below summarizes the height, width, number of branches with and without evidence of flowering, presence of cloning or asexual vegetative grow, and damaged limbs or other factor affecting the health of the tree.

Table 1: Inventory of Western Joshua Tree

Tree No.	GPS No.	Height (m)	Diameter (cm)	No. of Branches	Clones	Transplant	Comments
1	1	6.1	24	17	N	N	broken limbs
2	2	4.2	19	16	N	N	
3	3	4.3	21	18	N	N	
4	4	5	20	10	N	N	
5	5	3.6	15	6	N	N	
6	6	4.6	20	6	N	N	
7	7	4.2	16	3	N	N	
8	8	4.5	17	2	N	N	
9	9	4.6	18	2	N	N	
10	10	3.2	16	3	N	Y	
11	11	4.1	19	6	N	N	
12	12	3.9	15	0	N	N	
13	13	4.5	21	1	N	N	
14	14	4.5	16	2	Y-1 0.6-6-0	N	broken limbs
15	15	2.7	15	0	N	Y	
16	16	6	41	23	Y-1 4.0-16-5	N	
17	17	6.1	34	33	N	N	
18	18	3.3	16	4	N	N	
19	19	2.7	13	4	Y 2.5-14-1	N	
20	20	4.4	27	14	N	N	
21	21	4.1	19	6	N	N	
22	22	2.8	13	1	N	Y	
23	23	1.3	8	0	N	Y	
24	24	1.7	12	0	N	Y	

Tree No.	GPS No.	Height (m)	Diameter (cm)	No. of Branches	Clones	Transplant	Comments
25	25	2.6	16	6	Y-1 0.8-9-0	N	heavy lean
26	27	0.8	9	0	N	Y	
27	34	0.7	6	0	N	Y	
28	44	5.9	24	16	N	N	broken limbs
29	49	4.4	20	6	N	N	
30	50	4.2	16	4	N	N	
31	51	4.3	17	4	N	N	
32	52	4.6	18	4	N	N	
33	53	3.2	16	3	N	Y	
34	54	4.2	20	7	N	N	
35	55	3.9	15	2	N	N	
36	56	4.5	21	12	N	N	
37	57	4.8	19	2	Y-1 0.3-4-0	N	broken limbs
38	58	2.8	16	0	N	Y	
39	59	6	41	23	N	N	
40	60	5.6	34	33	N	N	
41	61	3.3	16	4	N	N	
42	62	2.8	15	4	Y 2.5-14-1	N	
43	63	4.5	28	12	N	N	

Table 2: Breakdown of Western Joshua Tree by Size (Age Class)

Less than 1 Meter (3 ft).	1 to 4.9 Meters (3 to 16 ft.)	5 Meters or Greater
2	35	6
5%	81%	14%

Table 3: Summary of Impacts to Western Joshua Trees

Land Use	Number of Trees
On-site sewage disposal	8
Sewage disposal expansion area (if required by SBCDHS)*	4
Stormwater Retention Basin	8
Parking lot	16
Helipad	2
Internal roads (per SBCFD*)	0
Pool Area	0
Restaurant	1
Storage Area	4
Total	43

*San Bernardino County Department of Environmental Health and San Bernardino County Fire Department

The site plan is preliminary and subject to modification to reduce impacts to Joshua trees in consultation with CDFW during the pending Incidental Take Permit process. Of the 43 trees inventoried, the majority (35 trees or 81%) were between 1 and 5 meters tall. Only 2 trees were less than a meter tall and 6 trees were 5 meters or greater in height. Using CDFW's criteria for evaluating the potential for relocation (between 2 and 12 feet in height, no visible damage, no more than 3 branches, no excessive leaning, no evidence of cloning and no exposed roots), 9 trees were determined to be relocatable. Six of the identified trees supported clones, asexual growth.

Section 4 Conclusions

On September 22, 2020, the California Fish and Game Commission voted to grant western Joshua trees candidate status under CESA, giving the trees legal protection during an 18-month review period to determine whether the species should be formally protected¹. No final decision has been made at this time. Therefore, any attempt to remove an individual Joshua tree from its current location will require the processing of an Incidental Take Permit (ITP) with the California department of Fish and Wildlife.

The census 2,734 Joshua trees within the 225-acre project site. The proposed project is to develop a campground with related small structures (camp store, small restaurant and bar, small workshops) on the western portion of the site along the west side of Pipes Canyon Wash. No disturbance is proposed within Pipes Canyon Wash or the east side of the wash. Approximately 43 Joshua trees would require relocation and transplantation to provide an area for the parking lot, retention basin, and septic system. The proposed relocation program will be developed as part of the pending Incidental Take Permit process under Section 2081 of the Fish and Game Code.

The remaining 2,691+ Joshua trees will be retained in place. Prior to commencing with the excavation of the trees, suitable locations to transplant them will be identified by a qualified biologist in consultation with CDFW. A watering regimen will be developed and a monitoring program implemented for the transplanted trees.

¹ The California Department of Fish and Wildlife has requested a six-month extension to the existing 12-month review period for listing western Joshua tree.

Section 5 Recommendations

Currently, as a candidate species, the western Joshua tree has full protection under CESA and any take of the species (including removal or translocation) will require authorization under CESA. For projects where “take” is incidental to carrying out an otherwise lawful activity, CDFW will require an Incidental Take Permit (ITP) before development can occur.

Measures to mitigate impacts to Joshua trees.

1. The applicant shall employ a qualified biologist (desert native plant specialist) to tag those trees that will have been and eventually approved by CDFW for relocation.
2. Transplantation will occur in late fall or winter when tree metabolism is at its lowest. As noted, a watering regimen will be developed and a monitoring program implemented for the transplanted trees.
3. For other Joshua trees present on-site but not within an area requiring their removal and transplantation, the applicant shall implement a tree protection plan that would include an assessment of the health of the trees, then determining how to protect them. Protection of trees, where needed, may be accomplished by either creating an earthen berm around each tree or group of trees or by surrounding trees with a fenced enclosure.

During construction activities the following measures shall be employed:

4. All trees that might be indirectly impacted because they are located within the construction zone (adjacent to or near campsites, internal road, or buildings) shall be surrounded by construction fencing (e.g. orange fencing). Other avoidance measures tailored to the project site may be identified during consultation with CDFW via the ITP application process.
5. The project biologist shall conduct a worker education class designed to ensure that all workers on site understand the natural history of Joshua trees and the distance that must be maintained between a construction activity and a tree. The construction contractor shall be responsible for ensuring that each new construction employee that enters the site completes the worker education class. The construction contractor shall maintain a log for inspection by the project biologist to ensure that all workers are trained.
6. During long-term operation of the campground, the property owner shall have a qualified biologist on call for the following tasks:
 - a. Conduct a worker education class for all new employees.
 - b. Provide educational pamphlets to all visitors.

- c. Maintain earthen berms or fences and posted notices, and cleanup (if trash or debris are in the vicinity).
 - d. Once each year conduct a (tree census) to assess the health of Joshua trees that have been transplanted and those that are located in proximity to the campgrounds such that they may be indirectly impacted by camping activities.
 - e. Develop and implement a watering plan that provides water to trees twice annually, or as necessary to maintain Joshua trees.
 - f. Develop and maintain a nursery for Joshua trees to be used to replace trees that do not survive transplanting, or to replace dying trees due to climate change.
 - g. Provide mitigation monitoring and reporting to CDFW on the health of the Joshua trees. Frequency of monitoring and reporting shall be established through consultation with CDFG through the ITP application process.
7. The applicant shall contribute to a CDFW Western Joshua Tree Mitigation Fund at such time as it is established by CDFW. The applicant's contribution is expected to be on a per acre basis and will be determined through the Incidental Take Permit process that will be determined in negotiation with CDFW. The submittal of an ITP application for the Robott Flamingo Heights Campground will be submitted on the assumption that the Western Joshua tree will be listed as a threatened or endangered species by the State of California.

Section 5 References

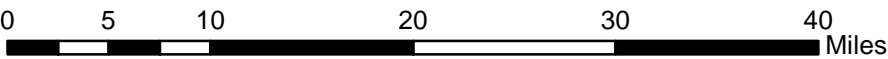
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Appendix A Project Figures



Legend

★ Site Vicinity

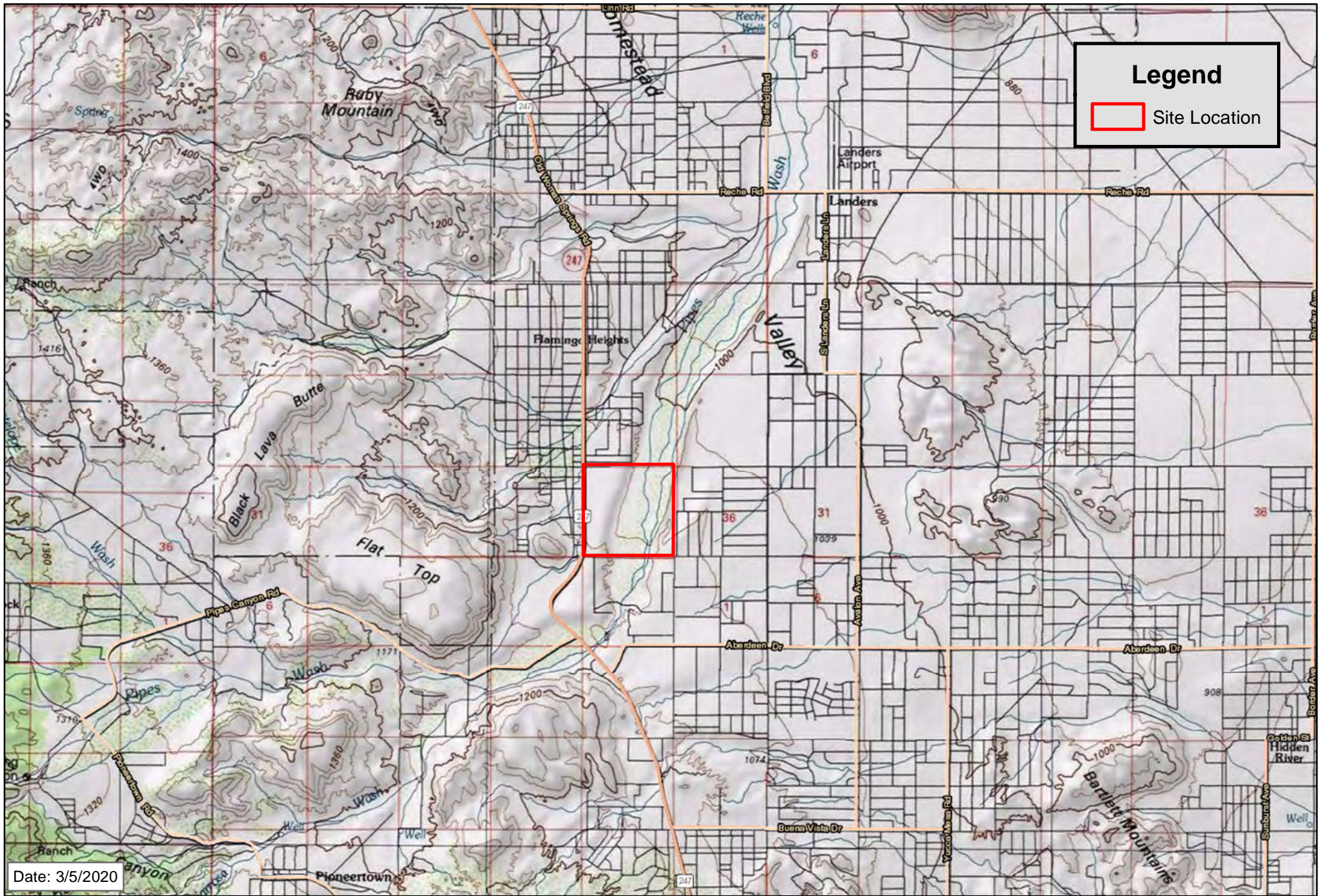


Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
 Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA,



**Figure 1 - Regional Overview
Site Vicinity**

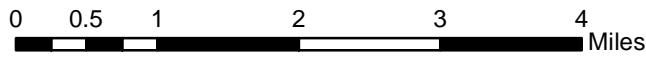
Joshua Tree Protected Plant Preservation Plan
 RoBott Land Company Campground



Legend

Site Location

Date: 3/5/2020



Imagery Date: 8/6/2017

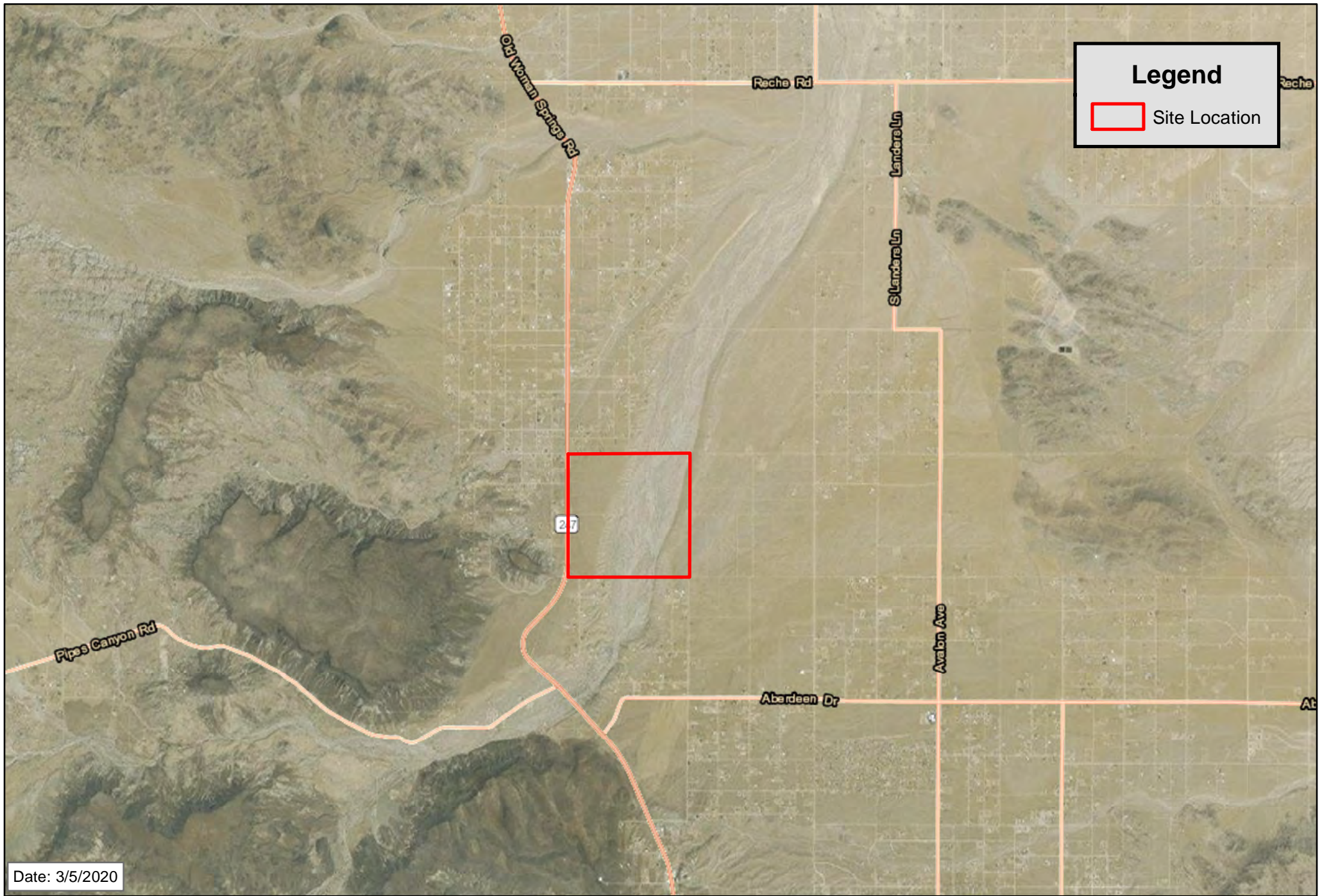
Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
 Copyright: © 2013 National Geographic Society, i-cubed



1 inch = 7,164 feet

**Figure 2a Project Location
USGS Quad**

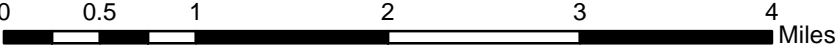
Joshua Tree Protected Plan Preservation Plan
RoBott Land Company Campground



Legend

Site Location

Date: 3/5/2020



Imagery Date: 8/6/2017

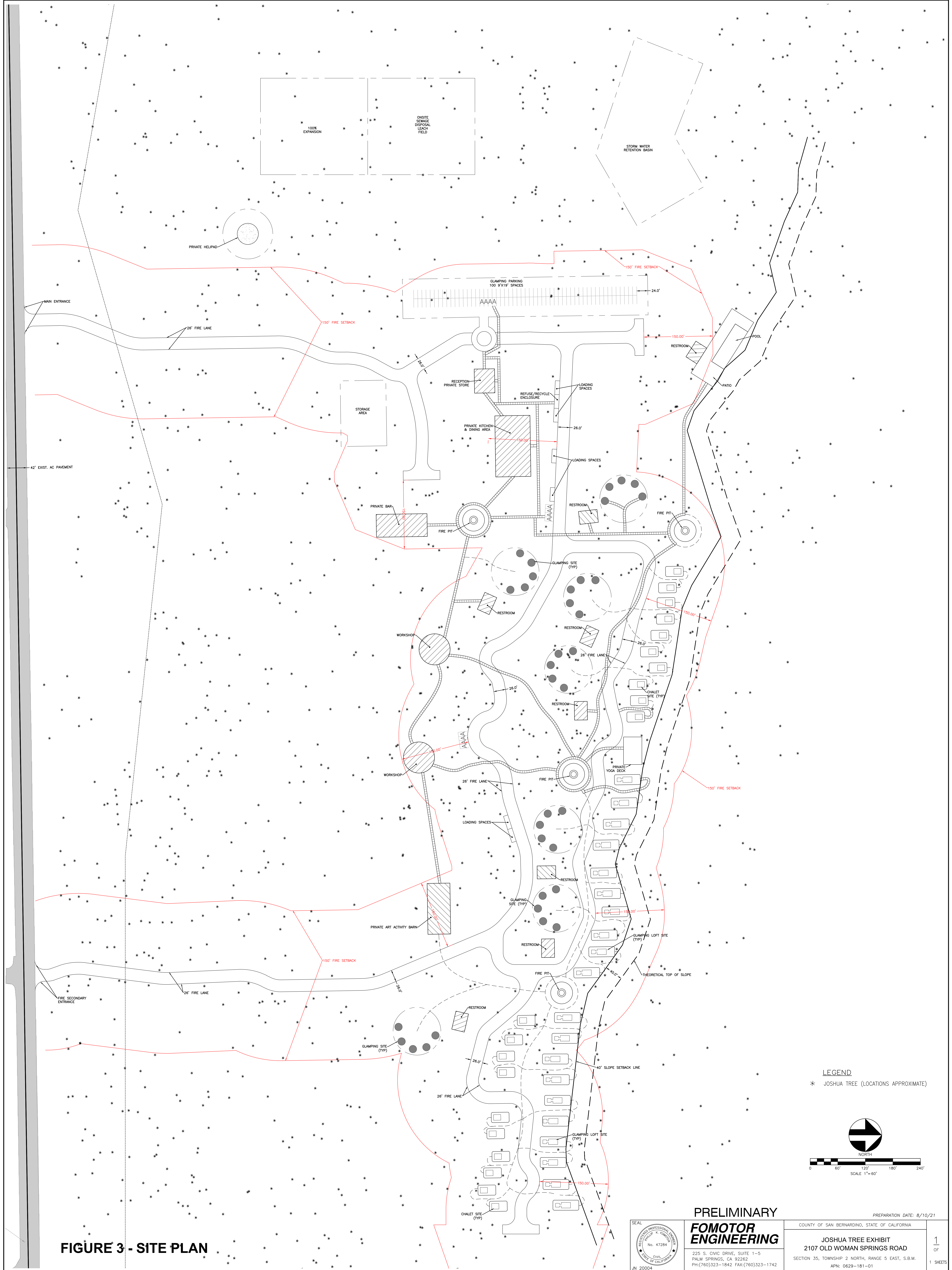
Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,



1 inch = 5,280 feet

**Figure 2b Project Location
 Aerial Photograph**

Joshua Tree Protected Plant Preservation Plan
 RoBott Land Company Campground



LEGEND
 * JOSHUA TREE (LOCATIONS APPROXIMATE)

NORTH
 SCALE 1"=60'

FIGURE 3 - SITE PLAN

PRELIMINARY
 PREPARATION DATE: 8/10/21

	<p>FOMOTOR ENGINEERING</p> <p>225 S. CIVIC DRIVE, SUITE 1-5 PALM SPRINGS, CA 92262 PH:(760)323-1842 FAX:(760)323-1742</p>	<p>COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA</p> <p>JOSHUA TREE EXHIBIT 2107 OLD WOMAN SPRINGS ROAD</p> <p>SECTION 35, TOWNSHIP 2 NORTH, RANGE 5 EAST, S.B.M. APN: 0629-181-01</p>
<p>SEAL K. FUMOROS No. 47284 CIVIL STATE OF CALIFORNIA JUN 20004</p>	<p>1 OF 1 SHEETS</p>	

RoBott Land Company Campground Site Photographs



Figure 4 Site Photos 1

RoBott Land Company Campground Site Photographs



Figure 4 Site Photos 2

RoBott Land Company Campground Site Photographs

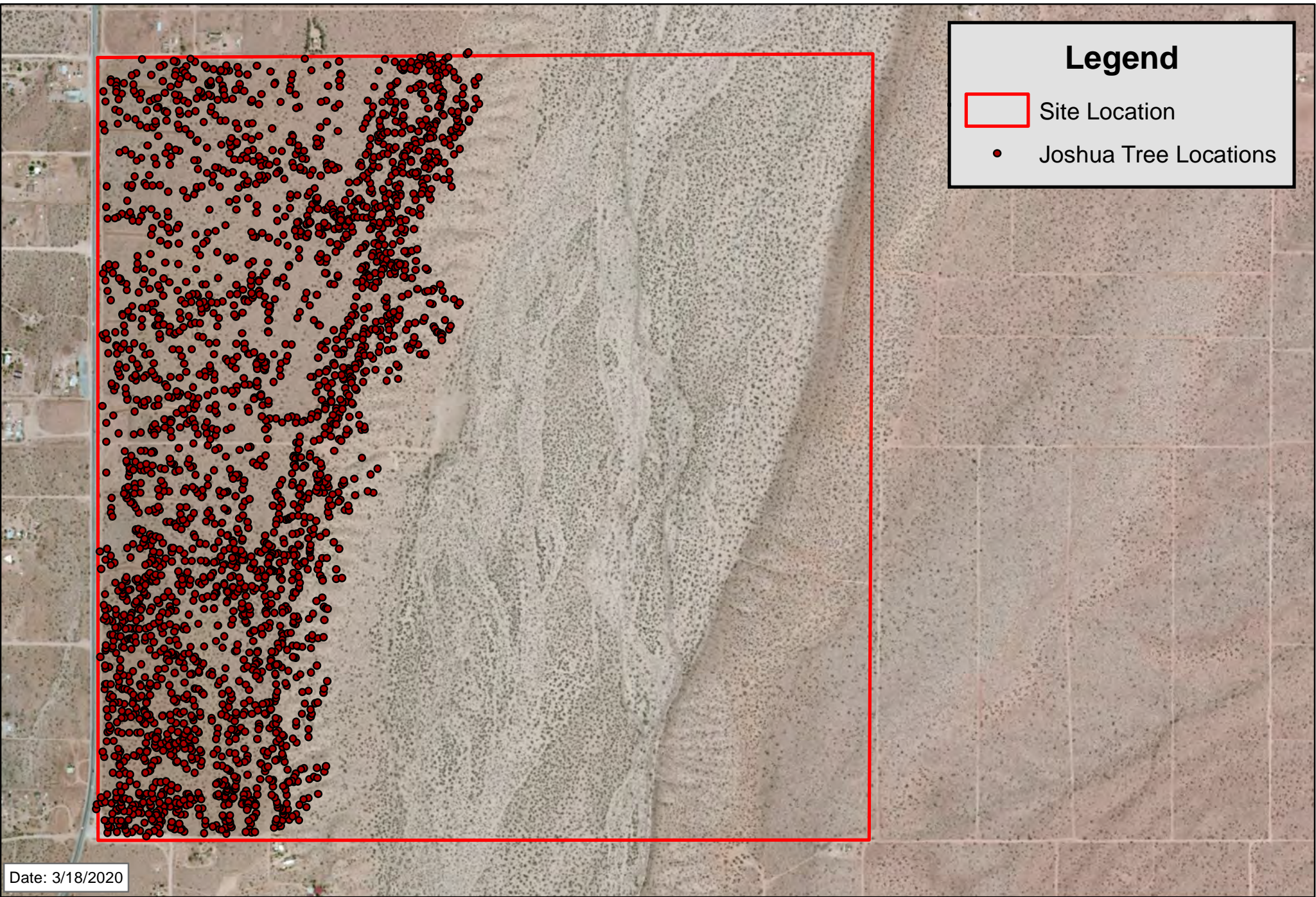


Figure 4 Site Photos 3



RoBott Land Company Campground Site Photographs



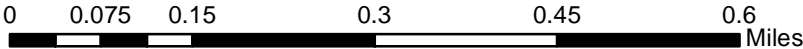
Figure 4 Site Photos 4



Legend

-  Site Location
-  Joshua Tree Locations

Date: 3/18/2020



Imagery Date: 8/6/2017

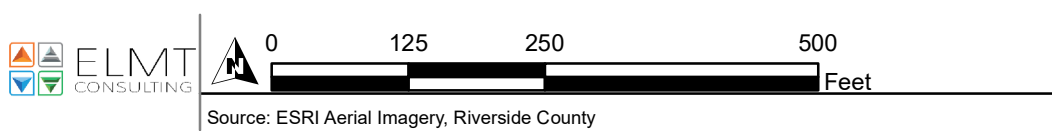
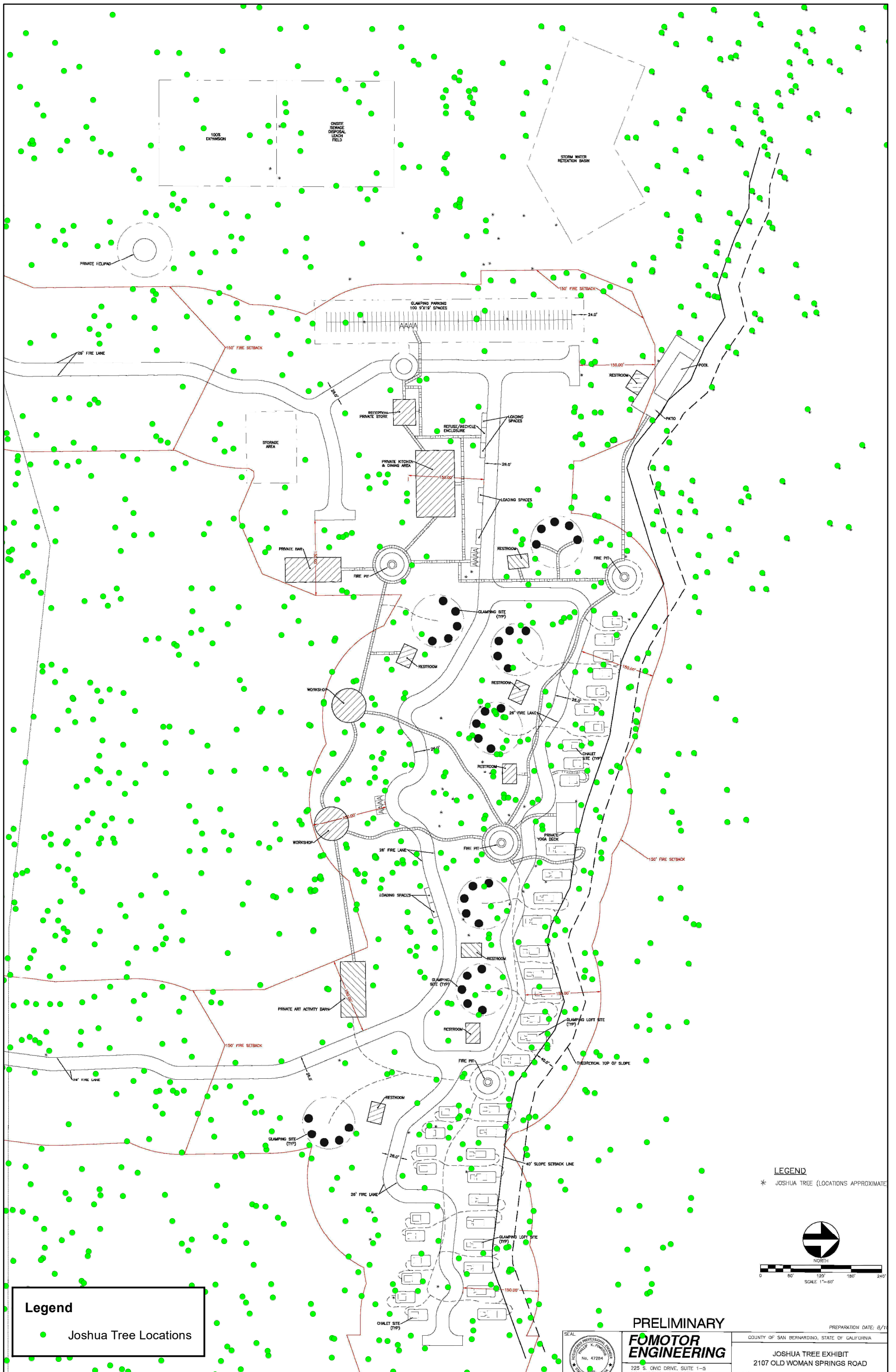
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



1 inch = 833 feet

Figure 5 Joshua Tree Locations

Joshua Tree Protected Plant Preservation Plan
RoBott Land Company Campground



Site Plan with Joshua Tree Overlay

Figure 6