

Western Joshua Tree Census and Report

Table of Contents

- 1.0 Introduction and Summary
 - 1.1 Investigation Methods
 - 1.2 Western Joshua Trees
 - 1.3 Other Native Plants
- 2.0 Mitigation Recommendations
- 3.0 Site Map
- 4.0 Tree Protection Methods
 - 4.1 Best Practices
 - 4.2 Fuel Modifications
- 5.0 References

Attachments

- Photo Log
- Data Collection Table
- Full size Inventory Map

7/31/24
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1.0 Introduction and Summary

Marinna Wagner was contracted by Heidi Schwegler to conduct a Western Joshua Tree (WJT) Census. This report is for 56885 Sunflower Drive Yucca Valley, CA 92284 and APN 0597-081-21 in the Town of Yucca Valley, in the County of San Bernardino. A field census was performed on July 1 and 4, 2024 of the selected Western Joshua Trees (*Yucca brevifolia* ssp. *brevifolia*), a candidate species under the California Endangered Species Act (CESA), effective October 9, 2020. This census and recommendations are intended for compliance with the County of San Bernardino Information Bulletin IB-0016 and are based on the census instructions provided by the California Department of Fish and Wildlife (CDFW) to the extent practicable.

Soil conditions appear mostly sandy and compacted. The site has several mature non-native trees and a significant amount of non-native mustard weeds primarily in the Brassicaceae family. The property in general slopes to the northeast. The existing mature Western Joshua Trees are large and very healthy. Other native plants include *Yucca schidigera*, *Atriplex canescens*, *Senna armata*, and *Larrea tridentata*.

The 50 Western Joshua trees stems within the property lines and 9 Western Joshua Tree stems outside of the property lines in the western easement are to be protected in place for current planning purposes only. If the Tree Protection Zone (TPZ) distances and best practices are maintained during construction there should be no impact and no take of a WJT will be required. There are several other WJT nearby, but these are outside of the property lines and with standard setbacks it is likely that there is clear avoidance of 40 ft.

1.1 Investigation Methods

A field investigation of Western Joshua Trees has been conducted and a census map has been prepared by Marinna Wagner and Michael Platt (P.L.S 8306). Transects were walked in 20 ft sections moving north and south within the smaller western fence and east and west in the larger fenced in area to the east. Occasionally, when working around existing site improvements, plant numbers do not follow the transect sequence because additional plants may have been found later and are numbered in the order in which they are found. Trees were tagged and numbered with pink flagging tape on site. Trees outside of the property lines are not included due to restricted access limited by neighbors fencing.

1.2 Western Joshua Trees

The Western Joshua Tree Conservation Act (WJTCA) was passed by the State of California in July 2023 to promote conservation of the Western Joshua Tree by prohibiting their import, export, take, possession, purchase or sale, providing for creation of a conservation plan and establishing funding through a streamlined permitting process. The Act allows the CDFW to issue an Incidental Take Permit (ITP) if:

1. The permittee submits a WJT Census showing tree sizes, photographs and other information (See <https://wildlife.ca.gov/Conservation/Environmental-Review/WJT/Permitting/Census-Instructions>).
2. The permittee avoids and minimizes impacts to WJT to the maximum extent practicable by various methods that may result in detrimental but nonlethal impacts to WJT.
3. The permittee mitigates impacts to WJT or pays an in-lieu fee (per the schedule found here: <https://wildlife.ca.gov/Conservation/Environmental-Review/WJT/Permitting/WJTCA-ITP>).
4. The Department may require WJT relocation per Guidelines and Protocols issued July 10, 2024. These Guidelines are generally focused upon larger projects with numerous WJT Takes.

The County of San Bernardino Information Bulletin, (SB County IB-0016) last updated on February 12, 2021, Section 5.1 Field Investigation Findings, states:

Clear Avoidance: If it is determined that no western Joshua trees will be affected by the proposed grading/construction, the project can proceed. For the building inspector to make this determination, there must be a forty (40) foot clearance between the area of disturbance and the trunk of any western Joshua tree.

Expert Determination of Avoidance: If it is found that the proposed grading/construction is within forty (40) feet of a western Joshua tree, the applicant may seek a determination from a Desert Native Plant Specialist to attest to and confirm avoidance of the western Joshua tree. The specialist's report may specify protective measures to ensure that the proposed grading/construction will avoid any impact constituting a take of any western Joshua tree.

State Permit Required for Take: If it is determined that the proposed grading/construction would require a western Joshua tree take as defined above in 3.0, the project may be redesigned to avoid impact to the tree, or the applicant must obtain an Incidental Take Permit from the California Department of Fish and Wildlife before the project can proceed.

The primary goal is to avoid the take of western Joshua Trees on the project site. The project strives to avoid and minimize impacts to, and the taking of, the Western Joshua tree. It is our recommendation that site improvements and construction disturbance limits be designed or work modified to protect the trees or relocation is pursued above removal wherever feasible.

As mitigation measures for working within 50 ft of a WJT, we recommend a Tree Protection Zone (TPZ) as the area in which all work must be restricted in order to prevent any lethal damage or potential Take of an endangered species. The TPZ is intended to set as a radius from the center of the trunk as it exists in the field. The Tree Protection Zones (TPZ) shown on the plans should be adjusted to accommodate potential inaccuracy in measuring or plotting locations. Work outside of the TPZ should cause no lethal impact to the Western Joshua Trees as long as best practices are followed.

These recommendations are based upon our experience with WJT and other desert native plants and upon normal standards of care and best practices within the Certified Arborist profession. Due to continuing research on WJT and the evolving policies and practices of CDFW and other agencies, we cannot guarantee that ITP's may still be required by the agencies in some cases.

The following notes apply for this project:

1. All 57 Western Joshua trees are to be protected on site. If TPZ distances and best practices are maintained during construction there should be no impact to WJT.

2. For the trees in the 33 ft patent easement outside of the property lines to the west, it is recommended that these trees be protected in place and worked around. The current and existing road has been used for many years and appears to have caused no impact to the trees as it is currently positioned. If the unpaved road is continued to be maintained as it is with no further encroachment on the trees there should be no new impact to tree systems 1, 2 and 3. Tree 1 comprises 1 stem Class Size B and Tree 2 comprises 8 stems of varying Class Sizes. Tree 3 exists on both sides of the property line and fence and comprises 7 stems of varying Class Sizes.

3. For the trees in the 33 ft patent easement within the property lines to the west, it is recommended that these trees be protected in place and worked around. There is no lethal impact to the trees as it relates to the existing structure. Tree 4 comprises 2 stems Class Size B and Tree 4 comprises 1 stem Class Size C.

1.3 Other Native Plants

The Town of Yucca Valley protects the following species under the Town's ordinance - *Yucca schidigera*, *Nolina parryi*, *Juniperus californica*, *Yucca whipplei*, and *Pinus monophyla*. The Town's regulated desert native plants are found here: https://codelibrary.amlegal.com/codes/yuccavalleyca/latest/yuccavalley_ca/0-0-0-14261. To remove or relocate these species a permit and associated fees with the Town are required.

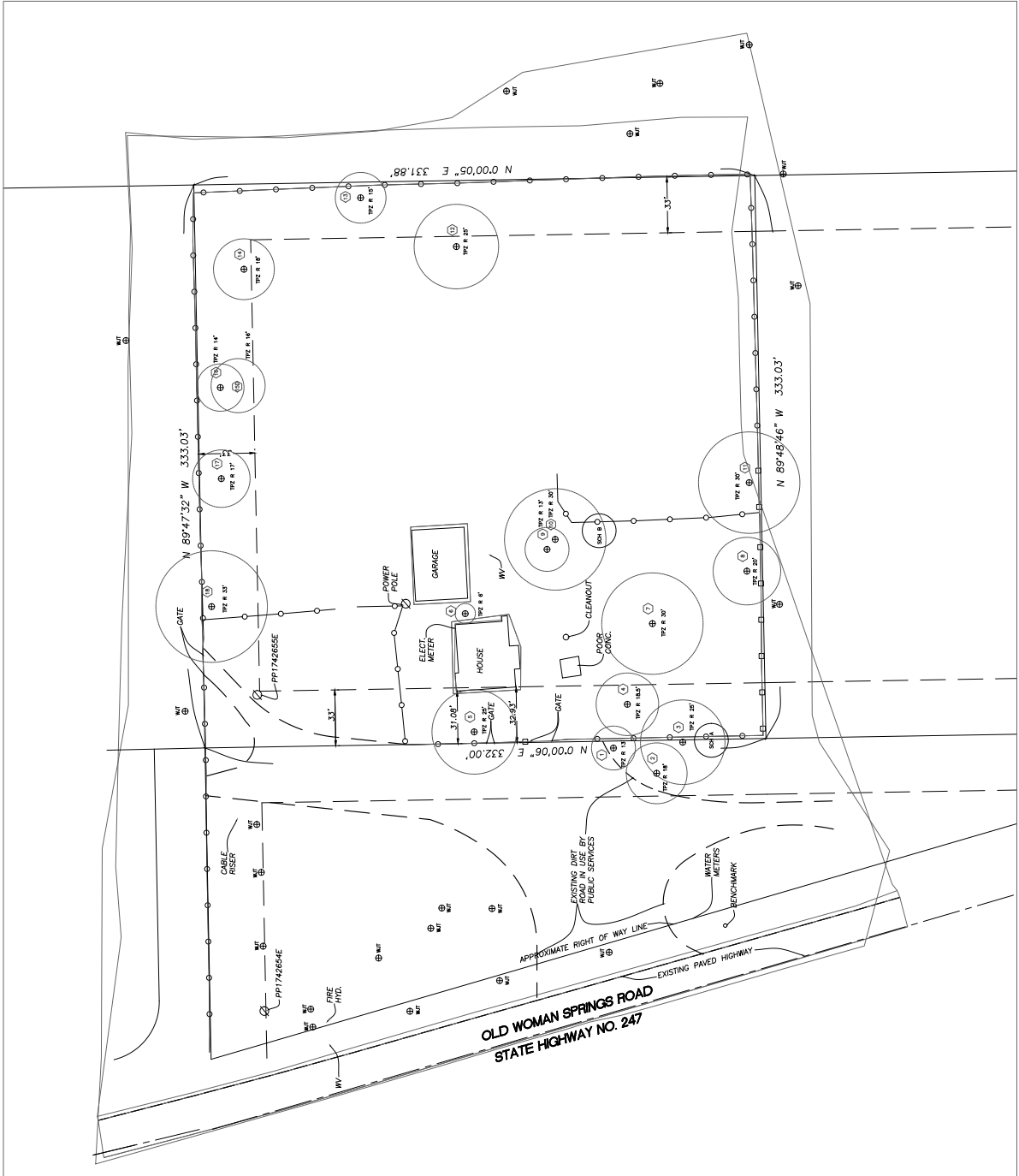
This site has 2 *Yucca schidigera* within the property lines. They are shown on plan with a TPZ that protects the drip line radius.

2.0 Mitigation Recommendations

1. Extra caution will be required around live Trees during construction to ensure that no grading overage encroaches on the TPZ. It is the engineers responsibility to make sure that all grading plans account for any overage in the field. Encroachment between small groups as clustered is not recommended. If there is any question or uncertainty, it is recommended the arborist be hired to oversee any excavation work as it is occurring near the trees.

2. Fencing, caution tape, and/or flagging (i.e. some form of stable visual identification that is not permanent) will be required around the outer radius of all live trees within 15 m or 50 ft of work to ensure that TPZ distances are maintained by all contractors throughout the duration of construction. We recommend chain link or orange construction fabric is recommended for Tree Protection Zones. Staging and worker parking areas must be located away from all TPZ. There should be no concrete waste or construction run off that spreads near trees and measures to avoid this must be taken. For large clusters of trees, fencing should be connected between individual radius lines closest to work to avoid unnecessary trampling between trees.

3.0 WESTERN JOSHUA TREE CENSUS SITE MAP WITH PHOTOGRAPHIC CENSUS



WESTERN JOSHUA TREE INVENTORY

LEGAL DESCRIPTION

REAL PROPERTY IN THE TOWN OF YUCCA VALLEY, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:
56885 SUNFLOWER DRIVE YUCCA VALLEY, CA 92284

PREPARED BY:
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ISA CERTIFIED ARBORIST WE-133544

YUCCA VALLEY, CALIFORNIA 92287
1000 W. 10TH STREET
E-MAIL ADDRESS: marinnawagner@gmail.com
DATE: 7/31/24

PURPOSE OF CENSUS

THE PURPOSE OF THIS INVENTORY IS TO IDENTIFY THE LOCATION OF THE LIVE AND DEAD WESTERN JOSHUA TREES WITHIN THE PROPERTY LINES.

1. ALL 3.0 WESTERN JOSHUA TREES SHOWN ON PLANS SHOWN HERE ARE TO BE PROTECTED IN PLACE.
2. TREE PROTECTION ZONES (TPZ) ARE SHOWN AS MITIGATION MEASURES TO AVOID AND MINIMIZE MAXIMUM EXTENT PRACTICABLE (PEP) DISTANCES FROM THE TREE TO ANY CONSTRUCTION. THERE SHOULD BE NO IMPACT TO THE TREE SPECIES PROTECTED BY TOWN OF YUCCA VALLEY W/ THE PLANT ORNAMENT ARE SHOWN ON PLANS.
3. ALL PLANT LOCATIONS ARE BASED ON PLANS.
4. TPZ FOR TREES OUTSIDE OF THE PROPERTY LINES ARE NOT SHOWN, IF AS IT CAN BE MAINTAINED THERE IS CLEAR ACCESS AND NO IMPACT TO TPZ.

LEGEND AND SYMBOLS

- ⊕ - CENTER OF WESTERN JOSHUA TREE
- ⊙ - ARBORIST PLANT NUMBER
- - JOSHUA TREE PROTECTION ZONE (TPZ)
- SCH = YUCCA SCHIDIGERA

GENERAL NOTES

1. PROTECTIVE FENCING (I.E. ORANGE CONSTRUCTION FENCING) SHALL BE INSTALLED WITHIN THE TPZ OF ALL TREES WITHIN 60-90 FT OF WORK.
2. PRIOR TO COMMENCING WORK ON SITE TO ENSURE PROTECTED SPECIES AND THAT THEY UNDERSTAND NOTES AND BEST PRACTICES FOR WORKING AROUND TREES ARE REQUIRED TO BE CAUTIOUS AROUND WORKING TO USE TOOLS OR MATERIALS UNWIKELY TO CAUSE DAMAGE TO THE TREE. CHECK FOR ANY OTHER TREE PROTECTION ZONES AND TOOLS AND TOOLS WASHING AREAS ARE NEEDED TO BE LOCATED NEAR THE TPZ OR A PLACE THAT COULD DRIFT INTO A TPZ.

4.0 Tree Protection Methods

Tree Protection Zones (TPZ) are recommended during construction for this project site. The TPZ is defined as the area in which certain activities are prohibited or restricted to prevent or minimize potential injury to the root system of designated trees. The TPZ should encompass the overall root zone of the tree and where the roots could potentially reach based on the size of the tree. The TPZ is the overall tree system and will include all pups within approximately 3 meters of the main trunk.

Diameter Breast Height (DBH) is typically measured at measured at 4.5 ft (1.37 meters) above ground with diameter tape. The DBH calculation for multi-stemmed tree is used even though the pups may often come up separately from the ground. *Yucca brevifolia* ssp. *brevifolia* can pup vigorously and all we include all pupping stems in the TPZ because it is very likely the root system is connected and separating them is not recommended. The largest stem (likely the main) is added to the sum of half the diameter of each of the remaining stems that are located within 3.3 ft (1 meter) of the main trunk. Pups less than 1.6 ft (0.5 m) are not considered for DBH calculations as they are too small.

TPZ for standard trees is an area equivalent to a circle with a radius that is 12 times the DBH (1" = 1 ft) and this can be used for Class Size A & B Trees. Heritage / Mature trees can be equivalent to up to 15 times the DBH (1" = 1.25 ft) and that is used for all Class Size C trees and some Class Size B trees with many pups or an old dead stem. "For Trees with DBH less than 10 in (25.4 cm) a minimum of 5 ft (1.5 m) radius TPZ should be considered" (Matheny, Simley, Gilpin, and Hauer 2023, 18)

In addition to the TPZ, a Critical Root Zone (CRZ) is defined as the area around the tree where the roots are considered critical to the structural stability or health of the tree. We use 3 times the DBH measurement (all in inches or centimeters) and no excavation is allowed in this zone where the main lateral roots come off of the tree. The TPZ will always encompass the CRZ.

Since the Western Joshua Tree is a *Yucca* species, a monocot, it does not produce annual tree rings like other trees, and is widely and shallowly rooted, radius delineations based on the width of the dripline and height of the tree are also considered. The dripline of the tree is protected for both the stability of the tree as well as the *Yucca* moth pollinator. The root ball, confined typically to the CRZ, is immediately below the tree where the dense concentration of fibrous roots occurs, and must be protected under all circumstances to avoid lethal impact.

The Desert Native Plant Act states that "No grade alterations shall bury any portion of a regulated tree or plant or significantly undercut the root system within the dripline" (per 88.01.050 San Bernardino County). No excavation is allowed within the dripline or critical root zone. As a mitigation measure, we recommend that all trees within 40 ft of work must have a clear and marked TPZ radius measured from the center of the tree.

4.1 Best Practices

It is our recommendation that the full TPZ should be protected with clear markers, flags, tape, cones, and some form of fencing. Chain link can be a great solution as it does not require any posts near the trees. A more affordable option could be the orange safety fence on stakes or even caution tape. Whatever is used must be of a quality that will not blow over regularly in the wind and should be clearly visible to all workers.

If a Joshua Tree root with a diameter of 1.5" is encountered during trenching or grading, it is recommended that the work shift slightly over or go around the root. Avoidance of cutting large roots is highly recommended. For this reason, we recommend that the arborist be present during any significant grading near the CRZ or the dripline and often at the TPZ depending on the severity of excavation.

Contractors are required to be cautious around the TPZ and are never to store tools or materials under, in, or against the trees. All concrete, plaster, or other fine particle clean out and tool washing areas are never

to be located near the TPZ or a place that could run off into a TPZ. To avoid unnecessary compaction resulting from vehicles and heavy equipment, boards or steel plates can be utilized to distribute the load if access or work needs to occur near the drip line or TPZ of the tree. Under no circumstance is it acceptable that the root flare of the trees is buried with soil or any material during or following grading work, this portion of the tree should always remain exposed.

These areas and notes must be defined and agreed upon in advance and in writing between the Client and the General Contractor. It is either the Client or the General Contractor's responsibility, depending on the situation, to communicate these notes to all their workers and subcontractors. We recommend that there be a worker education class to ensure that workers understand all notes and best practices when working around Western Joshua Trees. Training evidence and other requirements are to be evaluated by the County Planning for acceptability.

4.2 Fuel Modifications for Western Joshua Trees

We do not recommend grading or digging up vegetation within the TPZ for both dead and alive trees. It is possible to the depth of 6" (4-6" is the topsoil layer) to scrape, hula hoe, or clear vegetation without significantly disturbing roots of the tree, but any further depth could be damaging. We do not recommend digging within the drip line of the tree and especially against the root flare of the tree. We recommend leaving as much mature shrub and succulent vegetation on site as possible per code as nurse plants are crucial to the survival of WJT seedlings, without nurse plants it may be unlikely that WJT seedlings will survive. Removing existing vegetation will increase dust, erosion, and invasive annual vegetation across the site, which can add to the fire fuel load in the future. In addition, visitors to this region come in part for the vegetation and its cultural value.

5.0 References

IB-0016. (n.d.). <https://www.sbcounty.gov/Uploads/LUS/BandS/Handouts/IB-0016.pdf>

Matheny, N. P., Smiley, E. T., Gilpin, R., & Hauer, R. J. (2023). Managing trees during site development and construction. International Society of Arboriculture.

Plant Protection and Management - San Bernardino County. (n.d.). http://www.sbcounty.gov/uploads/lus/Handouts/Plant_Protection_Management.pdf

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Yucca brevifolia ssp. *brevifolia*
Tree #: 1



Yucca brevifolia ssp. *brevifolia*
Tree #: 2a



Yucca brevifolia ssp. *brevifolia*
Tree #: 2b



Yucca brevifolia ssp. *brevifolia*
Tree #: 2c



Yucca brevifolia ssp. *brevifolia*

Tree #: 2d

Detail shows branch on trunk



Yucca brevifolia ssp. *brevifolia*
Tree #: 2e



Yucca brevifolia ssp. *brevifolia*
Tree #: 2f



Yucca brevifolia ssp. *brevifolia*
Tree #: 2g



Yucca brevifolia ssp. *brevifolia*
Tree #: 2h



Yucca brevifolia ssp. *brevifolia*
Tree #: 3a



Yucca brevifolia ssp. *brevifolia*
Tree #: 3b



Yucca brevifolia ssp. *brevifolia*
Tree #: 3c



Yucca brevifolia ssp. *brevifolia*
Tree #: 3d



Yucca brevifolia ssp. *brevifolia*
Tree #: 3e



Yucca brevifolia ssp. *brevifolia*
Tree #: 3f



Yucca brevifolia ssp. *brevifolia*
Tree #: 3g



Yucca schidigera

Tree #: 1

Width 2.5 m



Yucca brevifolia ssp. *brevifolia*
Tree #: 4a



Yucca brevifolia ssp. *brevifolia*
Tree #: 4b



Yucca brevifolia ssp. *brevifolia*
Tree #: 5



Yucca brevifolia ssp. *brevifolia*
Tree #: 6



Yucca brevifolia ssp. *brevifolia*
Tree #: 7



Yucca brevifolia ssp. *brevifolia*
Tree #: 8a



Yucca brevifolia ssp. *brevifolia*
Tree #: 8b



Yucca schidigera
Tree #: B



Yucca brevifolia ssp. *brevifolia*
Tree #: 9a



Yucca brevifolia ssp. *brevifolia*
Tree #: 9b



Yucca brevifolia ssp. *brevifolia*
Tree #: 9c



Yucca brevifolia ssp. *brevifolia*
Tree #: 9d



Yucca brevifolia ssp. *brevifolia*
Tree #: 10a



Yucca brevifolia ssp. *brevifolia*
Tree #: 10b



Yucca brevifolia ssp. *brevifolia*
Tree #: 10c



Yucca brevifolia ssp. *brevifolia*
Tree #: 10d



Yucca brevifolia ssp. *brevifolia*
Tree #: 10e



Yucca brevifolia ssp. *brevifolia*
Tree #: 10f



Yucca brevifolia ssp. *brevifolia*
Tree #: 11a



Yucca brevifolia ssp. *brevifolia*
Tree #: 11b



Yucca brevifolia ssp. *brevifolia*
Tree #: 11c



Yucca brevifolia ssp. *brevifolia*
Tree #: 11d



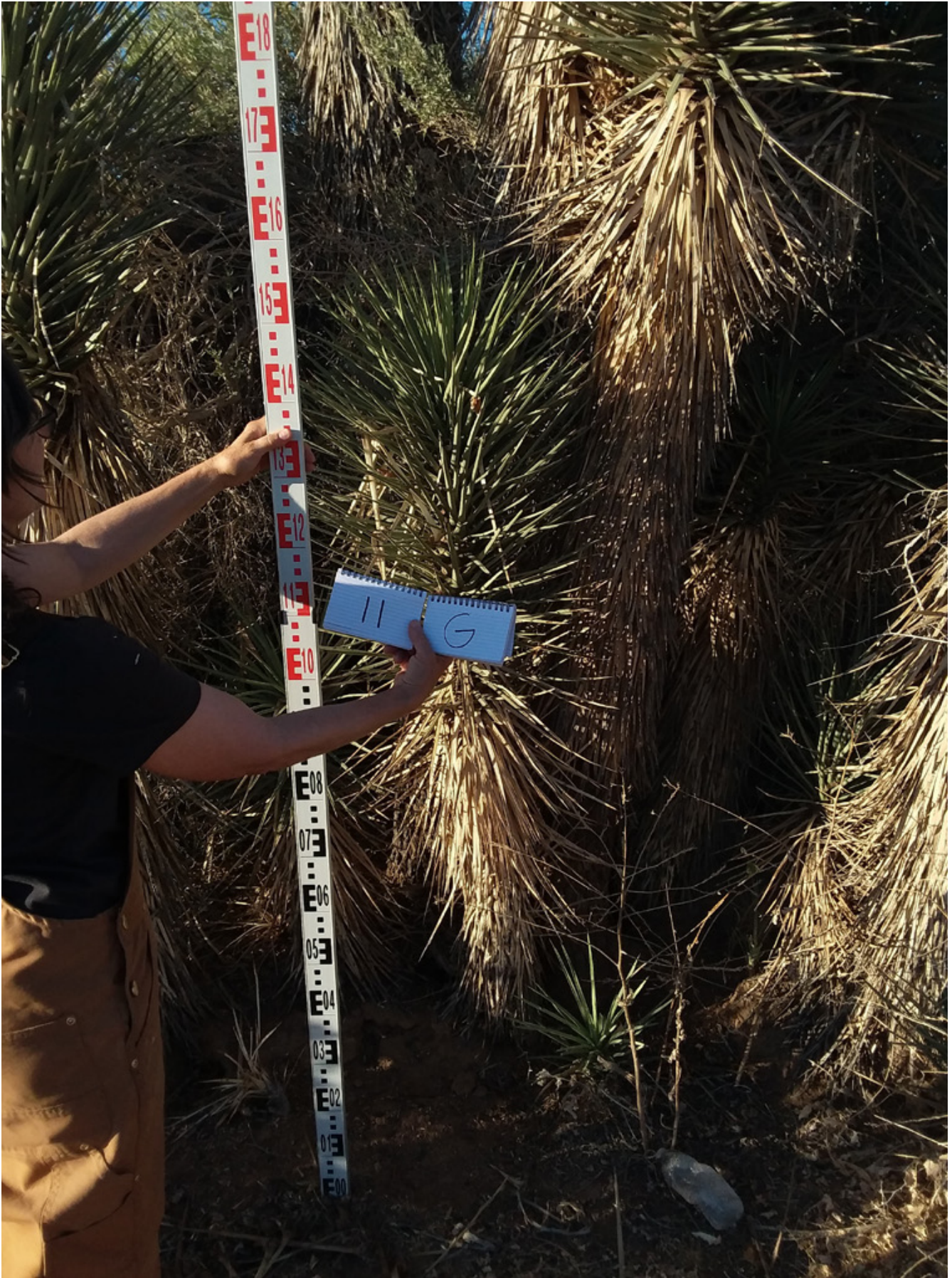
Yucca brevifolia ssp. *brevifolia*
Tree #: 11e



Yucca brevifolia ssp. *brevifolia*
Tree #: 11f



Yucca brevifolia ssp. *brevifolia*
Tree #: 11g



Yucca brevifolia ssp. *brevifolia*
Tree #: 11h



Yucca brevifolia ssp. *brevifolia*
Tree #: 11i



Yucca brevifolia ssp. *brevifolia*
Tree #: 11j



Yucca brevifolia ssp. *brevifolia*
Tree #: 11k



Yucca brevifolia ssp. *brevifolia*
Tree #: 111



Yucca brevifolia ssp. *brevifolia*
Tree #: 11m



Yucca brevifolia ssp. *brevifolia*
Tree #: 11m



Yucca brevifolia ssp. *brevifolia*
Tree #: 11n



Yucca brevifolia ssp. *brevifolia*
Tree #: 110



Yucca brevifolia ssp. *brevifolia*

Tree #: 12

Detail shows old hole at the base of the trunk



Yucca brevifolia ssp. *brevifolia*
Tree #: 13



Yucca brevifolia ssp. *brevifolia*
Tree #: 14



Yucca brevifolia ssp. *brevifolia*
Tree #: 15



Yucca brevifolia ssp. *brevifolia*
Tree #: 16



Yucca brevifolia ssp. *brevifolia*

Tree #: 17a

Detail shows old hole in trunk.



Yucca brevifolia ssp. *brevifolia*
Tree #: 17b



Yucca brevifolia ssp. *brevifolia*
Tree #: 18a



Yucca brevifolia ssp. *brevifolia*
Tree #: 18b



Yucca brevifolia ssp. *brevifolia*
Tree #: 18c



Yucca brevifolia ssp. *brevifolia*
Tree #: 18d



| # TREE ID | CLASS SIZE (A = < 1 M, B = 1-5 M, C = > 5 M) | HEIGHT 1 (M) | H2 (FOR UNUSUAL TREES) | WIDTH 1 | WIDTH 2 | LIVE (L) / DEAD (D) | MATURE (branch?) Yes (Y) or No (N) | REPRODUCTION (FLOWERING, FRUITING, NONE) | ASPECT | LEAN | DBH @ 1.37 M in CM | DRIP LINE RADIUS | DECAY OR DAMAGE | FOLIAGE | LIVING CON 5 =100%, 4 = 75%, 3 = 50%, 2 = 25%, 1 = 0% | ROOT FLARE CONDITION | VIGOR (LOW, NORMAL, HIGH) | CROWN DENSITY (SPARSE, NORMAL, DENSE) | TPZ | NOTES | IMPACT TO TREE (REMOVAL, RELOCATION, OTHER, TRIM, NONE) | ACTIVITY WITHIN 15 M (50 ft) | RELOCATION SITE |
|-----------|--|--------------|------------------------|---------|---------|---------------------|------------------------------------|--|--------|----------|--------------------|------------------|--|---------------|---|----------------------|---------------------------|---------------------------------------|---------|---|---|------------------------------|-----------------|
| 1 | B | 4 m | | 2.2 m | 1.6 m | L | Y | 2022 | NE | SW | 25.4 | 1 m | Weevil damaged branches | ok | 4 | Ok | H | D | 13 ft | outside of property line | Goal to protect in place | TBD | No |
| 2a | C | 6 m | | 2.7 m | 2.4 m | L | Y | 2023 | NE | S | 30.48 | 1.4 m | Weevil damaged branches and various trunk wounds | ok | 5 | Ok | N | N | 18 ft | outside of property line | Goal to protect in place | TBD | No |
| 2b | B | 2.5 m | | 1.1 m | 70 cm | L | Y | none | NE | E | 17.78 | | Weevil damaged branches | twisting leaf | 5 | Ok | N | N | | outside of property line | Goal to protect in place | TBD | No |
| 2c | B | 1.8 m | | 90 cm. | 50 cm | L | N | none | NE | SE | 10.16 | | None | Ok | 5 | Ok | N | N | | outside of property line | Goal to protect in place | TBD | No |
| 2d | A | 80 cm | | 70 cm | 20 cm | L | Y | none | NE | S | na | | None | Ok | 5 | Ok | N | N | | small branch on trunk, outside of property line | Goal to protect in place | TBD | No |
| 2e | B | 1.2 m | | 90 cm | 70 cm | L | N | none | NE | S | na | | None | Ok | 5 | Ok | N | N | | outside of property line | Goal to protect in place | TBD | No |
| 2f | B | 1.1 m | | 70 cm | 55 cm | L | N | none | NE | W | na | | None | Ok | 5 | Ok | N | N | | outside of property line | Goal to protect in place | TBD | No |
| 2g | B | 1.1 m | | 70 cm | 60 cm | L | N | none | NE | W | na | | None | Ok | 5 | Ok | N | N | | outside of property line | Goal to protect in place | TBD | No |
| 2h | A | 70 cm | | 20 cm | 20 cm | D | N | na | NE | W | na | | Weevil damaged branch | na | 0 | na | na | na | | outside of property line | Goal to protect in place | TBD | No |
| 3a | C | 5.5 m | | 3.5 m | 4.5 m | L | Y | 2023 | NE | S | 43.18 | 2 m | Weevil damaged branch | Good | 5 | Ok | H | D | 25 ft | overall system 5.5 wide | Goal to protect in place | TBD | No |
| 3b | B | 4.4 m | | 3.9 m | 4.4 m | L | Y | 2023 | NE | W | 30.48 | 4.4 m | Ok, lean | Good | 5 | Ok | N | N | | | Goal to protect in place | TBD | No |
| 3c | B | 1.2 m | | 50 cm | 45 cm | L | Y | none | NE | SW | na | | None | Good | 5 | Ok | N | N | | | Goal to protect in place | TBD | No |
| 3d | B | 3.5 m | | 65 in | 115 cm | L | Y | none | NE | E | 20.32 | 1 m | Weevil damaged branches | Good | 5 | Ok | N | N | | | Goal to protect in place | TBD | No |
| 3e | B | 2.4 m | | 1.3 m | 1.4 m | L | Y | none | NE | S | 15.24 | | Weevil damaged branches | Good | 5 | Ok | N | N | | | Goal to protect in place | TBD | No |
| 3f | A | 80 cm | | 50 cm | 60 cm | L | N | none | NE | SE | na | | None | Good | 5 | Ok | N | N | | | Goal to protect in place | TBD | No |
| 3g | A | 30 cm | | 30 cm | 30 cm | L | N | none | NE | E | na | | None | Good | 5 | Ok | N | N | | | Goal to protect in place | TBD | No |
| 4a | B | 4.3 m | | 2.3 m | 2.7 m | L | Y | 2022 | NE | S | 33.02 | 1.8 m | Holes in trunk | Ok | 3 | Ok | L | N | | total system is 4 m | Goal to protect in place | TBD | No |
| 4b | B | 2 m | 1.7 m | 3.7 m | 2.9 m | D | N | none | NE | NW | 22.86 | 3.7 m | Recent death | na | 0 | na | na | na | 18.5 ft | | Goal to protect in place | TBD | No |
| 5 | C | 8.4 m | | 6.7 m | 3.8 m | L | Y | 2023 | NE | S | 48.26 | 3.6 m | Hole at joint | Good | 5 | OK | N | N | 25 ft | | Goal to protect in place | TBD | No |
| 6 | A | 50 cm | | 30 cm | 40 cm | L | N | none | NE | E | na | 20 cm | None | Great | 5 | At base of tree | N | N | 6 ft | | Goal to protect in place | TBD | No |
| 7 | C | 5.1 m | | 3.9 m | 3.6 m | L | Y | 2023 | NE | straight | 55.88 | 2.1 m | Hole in trunk, old and headed | Great | 5 | Ok | H | D | 30 ft | | Goal to protect in place | TBD | No |
| 8a | B | 4.2 m | | 1.9 m | 2.5 m | L | Y | 2022 | NE | S | 30.48 | 2.1 m | Weevil damaged branches | Good | 5 | Ok | N | N | 20 ft | | Goal to protect in place | TBD | No |
| 8b | B | 2.2 m | 1.1 m | 1.5 m | 2.5 m | L | Y | 2022 | NE | S | 25.4 | 2.5 m | None | Good | 5 | Ok | N | N | | | Goal to protect in place | TBD | No |
| 9a | C | 5.1 m | | 3.2 m | 2.6 m | L | Y | 2023 | NE | S | 22.86 | 3.2 m | Weevil damaged branches | Ok | 5 | Ok | N | N | 13 ft | 2 pups dbh 8 plus 7 | Goal to protect in place | TBD | No |
| 9b | A | 60 cm | | 40 cm | 30 cm | L | N | none | NE | SE | na | | None | Ok | 5 | Ok | N | N | | | Goal to protect in place | TBD | No |
| 9c | A | 30 cm | | 30 cm | 30 cm | L | N | none | NE | S | na | | None | Ok | 5 | Ok | N | N | | | Goal to protect in place | TBD | No |
| 9d | A | 30 cm | | 30 cm | 20 cm | L | N | none | NE | S | na | | None | Ok | 5 | Ok | N | N | | | Goal to protect in place | TBD | No |
| 10a | B | 2.1 m | 1.6 m | 2.9 m | 1.1 m | L | Y | 2022 | NE | W | 22.86 | 3.1 m | Weevil damaged branches | Ok | 5 | Concrete at base | N | N | 30 ft | base looks like it was cut | Goal to protect in place | TBD | No |
| 10b | B | 2.4 m | 1.7 m | 2.7 m | 1 m | L | Y | 2022 | NE | W | 20.32 | 2.5 m | Weevil damaged branches | Ok | 5 | Concrete at base | N | N | | | Goal to protect in place | TBD | No |
| 10e | B | 4.2 m | | 1.4 m | 1.2 m | L | Y | none | NE | SE | 17.78 | 80 cm | Weevil damaged branches | Ok | 5 | Concrete at base | N | N | | | Goal to protect in place | TBD | No |

| # TREE ID | CLASS SIZE (A = < 1 M, B = 1-5 M, C = > 5 M) | HEIGHT 1 (M) | H2 (FOR UNUSUAL TREES) | WIDTH 1 | WIDTH 2 | LIVE (L) / DEAD (D) | MATURE (branch?) Yes (Y) or No (N) | REPRODUCTION (FLOWERING, FRUITING, NONE) | ASPECT | LEAN | DBH @ 1.37 M in CM | DRIP LINE RADIUS | DECAY OR DAMAGE | FOLIAGE | LIVING CON 5 =100%, 4 = 75%, 3 = 50%, 2 = 25%, 1 = 0% | ROOT FLARE CONDITION | VIGOR (LOW, NORMAL, HIGH) | CROWN DENSITY (SPARSE, NORMAL, DENSE) | TPZ | NOTES | IMPACT TO TREE (REMOVAL, RELOCATION, OTHER, TRIM, NONE) | ACTIVITY WITHIN 15 M (50 ft) | RELOCATION SITE |
|-----------|--|--------------|------------------------|---------|---------|---------------------|------------------------------------|--|--------|------|--------------------|------------------|--|--------------------|---|----------------------|---------------------------|---------------------------------------|-------|---------------|---|------------------------------|-----------------|
| 10c | B | 1.3 m | 1.2 m | 1.6 m | 1 m | L | N | none | NE | W | 15.24 | 1.2 m | None | Ok | 5 | Concrete at base | N | N | | | Goal to protect in place | TBD | No |
| 10d | A | 70 cm | | 90 cm | 70 cm | L | Y | none | NE | NE | na | 50 cm | Cut branch with heads coming off of the stem | Ok | 5 | Concrete at base | N | N | | | Goal to protect in place | TBD | No |
| 10f | A | 25 cm | | 25 cm | 25 cm | L | N | none | NE | W | na | 15 cm | None | Concrete on leaves | 5 | Concrete at base | N | N | | | Goal to protect in place | TBD | No |
| 11a | B | 4.4 m | | 1.5 m | 1.4 m | L | Y | 2023 | NE | S | 33.02 | 1.5 m | None | Good | 5 | Shrubs | H | D | 30 ft | 2.5 m overall | Goal to protect in place | TBD | No |
| 11b | B | 2.6 m | | 1 m | 1 m | L | Y | none | NE | N | 22.86 | 1 m | Weevil damaged branches | Good | 5 | Shrubs | N | N | | | Goal to protect in place | TBD | No |
| 11c | B | 2.3 m | | 90 cm | 1 m | L | N | none | NE | w | 15.24 | | Weevil damaged branches | Good | 5 | Shrubs | N | N | | | Goal to protect in place | TBD | No |
| 11d | B | 2.3 m | | 90 cm | 80 cm | L | Y | none | NE | S | 20.32 | | None | Good | 5 | Shrubs | N | N | | | Goal to protect in place | TBD | No |
| 11e | B | 2.3 m | | 70 cm | 60 cm | L | Y | none | NE | S | na | | None | Good | 5 | Shrubs | N | N | | | Goal to protect in place | TBD | No |
| 11f | B | 1.8 m | | 60 cm | 60 cm | L | Y | none | NE | N | na | | None | Good | 5 | Shrubs | N | N | | | Goal to protect in place | TBD | No |
| 11g | B | 1.6 m | | 50 cm | 50 cm | L | N | none | NE | N | na | | None | Good | 5 | Shrubs | N | N | | | Goal to protect in place | TBD | No |
| 11h | B | 1.1 m | | 50 cm | 50 cm | L | N | none | NE | N | na | | None | Good | 5 | Shrubs | N | N | | | Goal to protect in place | TBD | No |
| 11i | A | 1 m | | 30 cm | 30 cm | L | N | none | NE | N | na | | None | Good | 5 | Shrubs | N | N | | | Goal to protect in place | TBD | No |
| 11j | A | 40 cm | | 30 cm | 25 cm | L | N | none | NE | E | na | | Herbivory | Good | 5 | Shrubs | N | N | | | Goal to protect in place | TBD | No |
| 11k | A | 30 cm | | 20 cm | 15 cm | D | N | none | NE | E | na | na | None | na | 0 | Shrubs | na | na | | | Goal to protect in place | TBD | No |
| 11L | A | 40 cm | | 35 cm | 30 cm | L | N | none | NE | S | na | | None | Good | 5 | Shrubs | N | N | | | Goal to protect in place | TBD | No |
| 11m | A | 20 cm | | 10 cm | 15 cm | L | N | none | NE | S | na | | None | Good | 5 | Shrubs | N | N | | | Goal to protect in place | TBD | No |
| 11n | A | 50 cm | | 35 cm | 25 cm | L | N | none | NE | S | na | | None | Good | 5 | Shrubs | N | N | | | Goal to protect in place | TBD | No |
| 11o | A | 60 cm | | 40 cm | 30 cm | L | N | none | NE | S | na | | None | Good | 5 | Shrubs | N | N | | | Goal to protect in place | TBD | No |
| 12 | B | 3.8 m | | 3.3 m | 2.5 m | L | Y | 2023 | NE | E | 48.26 | 2.9 m | Weevil damaged, branches and hole at base | Dull, poor c | 3 | Old hole at base | N | N | 25 ft | | Goal to protect in place | TBD | No |
| 13 | B | 3.9 m | | 2.6 m | 2.9 m | L | Y | 2023 | E | S | 25.4 | 2.3 m | Weevil damaged branches | Ok | 4 | Ok | N | N | 15 ft | | Goal to protect in place | TBD | No |
| 14 | B | 3.9 m | | 2.6 m | 2.7 m | L | Y | 2022 | E | SW | 38.1 | 1.8 m | Weevil damaged branches | Good | 5 | Ok | N | N | 18 ft | | Goal to protect in place | TBD | No |
| 15 | B | 4 m | | 4 m | dead | D | Y | none | E | na | na | | Heavily decayed | na | 0 | na | na | na | 16 ft | | Goal to protect in place | TBD | No |
| 16 | B | 4.4 m | | 2.9 m | 2.1 m | L | Y | 2023 | E | E | 22.86 | 2 m | Weevil damaged branches | Good | 5 | Ok | N | N | 14 ft | | Goal to protect in place | TBD | No |
| 17a | C | 5.8 m | | 2.5 m | 2.4 m | L | Y | 2023 | E | S | 25.4 | 1.9 m | Weevil damaged branches | Good | 5 | Ok | N | N | 17 ft | | Goal to protect in place | TBD | No |
| 17b | B | 1.5 m | | 40 cm | 50 cm | L | N | none | E | NW | 12.7 | | none | Good | 5 | Ok | N | N | | | Goal to protect in place | TBD | No |
| 18a | B | 4.4 m | | 3.8 m | 4.2 m | L | Y | 2023 | E | SW | 38.1 | 2.2 m | Weevil damaged branches | Good | 5 | Ok | H | D | 33 ft | | Goal to protect in place | TBD | No |
| 18b | B | 2.7 m | | 1.1 m | 60 cm | L | Y | 2023 | E | N | 17.78 | 1 m | none | Good | 5 | Ok | N | N | | | Goal to protect in place | TBD | No |
| 18c | B | 2.5 m | | 2.1 m | 1 m | L | Y | 2023 | E | W | 17.78 | 1.1 m | none | Good | 5 | Ok | N | N | | | Goal to protect in place | TBD | No |
| 18d | B | 2.7 m | | 1.4 m | 60 cm | L | Y | 2023 | E | W | 17.78 | 1.4 m | none | Good | 5 | Ok | N | N | | | Goal to protect in place | TBD | No |

WESTERN JOSHUA TREE INVENTORY

LEGAL DESCRIPTION

REAL PROPERTY IN THE TOWN OF YUCCA VALLEY, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

56885 SUNFLOWER DRIVE YUCCA VALLEY, CA 92204

PREPARED BY:

MARINNA WAGNER ARBORIST SERVICES
ISA CERTIFIED ARBORIST WE-13354A

YUCCA VALLEY, CALIFORNIA 92807
PHONE: (408) 307-2545
E-MAIL ADDRESS: marinnawagner@gmail.com
Date: 7/31/24

PURPOSE OF CENSUS

THE PURPOSE OF THIS INVENTORY IS TO IDENTIFY THE LOCATION OF THE LIVE AND DEAD WESTERN JOSHUA TREES WITHIN THE PROPERTY LINES.

1. ALL 59 WESTERN JOSHUA TREES (VARYING CLASS SIZE) SHOWN HERE ARE TO BE PROTECTED IN PLACE FOR PLANNING PURPOSES ONLY.
2. TREE PROTECTION ZONES (TPZ) ARE SHOWN AS MITIGATION MEASURES TO AVOID AND MINIMIZE IMPACTS TO AND THE TAKING OF WJT TO THE MAXIMUM EXTENT PRACTICABLE. IF TPZ DISTANCES AND BEST PRACTICES ARE MAINTAINED DURING CONSTRUCTION THERE SHOULD BE NO IMPACT TO THE SPECIES.
3. THE OTHER SPECIES PROTECTED BY TOWN OF YUCCA VALLEY NATIVE PLANT ORDINANCE ARE SHOWN ON PLAN.
4. ALL PLANT LOCATIONS ARE BASED ON PLANS PROVIDED BY MICHAEL PLATT.
5. TPZ FOR TREES OUTSIDE OF THE PROPERTY LINES ARE NOT SHOWN, IF 40 FT CAN BE MAINTAINED THERE IS CLEAR AVOIDANCE AND NO IMPACT TO WJT.

LEGEND AND SYMBOLS

- ⊕ - CENTER OF WESTERN JOSHUA TREE
- ⑩ - ARBORIST PLANT NUMBER
- - JOSHUA TREE PROTECTION ZONE (TPZ)
- SCH = YUCCA SCHIDIGERA

GENERAL NOTES

1. PROTECTIVE FENCING (I.E. ORANGE CONSTRUCTION FABRIC OR CAUTION TAPE) IS REQUIRED ALONG THE TPZ OF ALL TREES WITHIN 40-50 FT OF WORK.
2. A WORKER EDUCATION CLASS IS RECOMMENDED PRIOR TO COMMENCING WORK ON SITE TO ENSURE THAT ALL WORKERS ARE FAMILIAR WITH THE PROTECTED SPECIES AND THAT THEY UNDERSTAND NOTES AND BEST PRACTICES FOR WORKING AROUND WESTERN JOSHUA TREES AND OTHER NATIVE PLANTS.
3. WORKERS ARE REQUIRED TO BE CAUTIOUS AROUND THE TPZ OF A WESTERN JOSHUA TREE. THEY ARE NEVER TO STORE TOOLS OR MATERIALS UNDER, IN, OR AGAINST TREES. ALL CONCRETE, PLASTER, OR OTHER FINE PARTICLE CLEAN OUT AND TOOL WASHING AREAS ARE NEVER TO BE LOCATED NEAR THE TPZ OR A PLACE THAT COULD RUN OFF INTO A TPZ.

