# Town of Yucca Valley PLANNING COMMISSION STAFF REPORT

**To:** Honorable Chair and Planning Commissioners

From: Evan Willoughby, Planning Technician

Jared Jerome, Associate Planner

Date: March 4, 2022 Meeting Date: March 22, 2022

**Subject:** Western Joshua Tree (WJT) Permit 058-22, Palm Avenue and Sunland Drive,

APN: 0595-031-08, Transplant Five (5) Western Joshua Trees

#### **Recommendation:**

That the Planning Commission approves the application for WJT 058-22, transplant of five (5) Western Joshua Trees, based upon Ordinance 291 Section 9.56.090 that the Western Joshua Trees are within 10 feet of ground disturbing activities, Section 9.56.070(A) that all necessary submittal materials have been submitted, Section 9.56.100 that to the maximum extent feasible the project proponent shall relocate all Western Joshua Trees that cannot be avoided, and Section 9.56.120 that all necessary mitigation fees have been paid by the applicant.

#### **Prior Review**

There has been no prior review of this matter.

#### **Executive Summary**

Native plant permit applications are acted upon by the Planning Commission for review and action at this time.

#### **Order of Procedure**

Request Staff Report
Request Public Comment
Council Discussion/Questions of Staff
Motion/Second
Discussion on Motion
Call the Question

#### Discussion

Applicant: Town of Yucca Valley

Address: Palm Avenue and Sunland Drive

APN: 0595-031-08

Zoning: Residential, Single-Family (R-S-5)

Acres: 1.03 acres

#### **Western Joshua Tree Transplant**

An application has been filed with the Town for a public works project to construct a parking lot at Palm Avenue and Sunland Drive. As part of that process, an application for the transplant and destruction of regulated Western Joshua Trees has been submitted. Only the Western Joshua Tree application is before the Commission; not the construction permits for the project.

Section 9.56.070 of Ordinance 291 requires photos, descriptions of the trees, and a letter from the applicant's arborist, which are attached to this report. The arborist has determined the health of the trees being proposed for transplant, WJT #1, #2, #3, #4, and #5 ranges from ok to great. The proposed relocation site is Essig Park, near the intersection of Joshua Lane and Hardesty.

#### Section 9.56.090 states:

The project proponent shall avoid all ground-disturbing activities within 10 feet of any western Joshua tree, unless those activities will be temporary, will not physically impact the western Joshua tree or its root system, and will not disturb the soil to a depth of greater than twelve inches.

Section 9.56.100 requires "...to the maximum extent feasible, the project proponent shall relocate all western Joshua trees that cannot be avoided to another location on the project site," and that all relocations of western Joshua trees which are one meter or greater in height be completed by a desert native plant specialist.

Section 9.56.120 details the mitigation fees required for the transplant or removal of western Joshua trees. The applicant has provided the Town payment of these mitigation fees.

#### **Alternatives**

Staff recommend no alternative actions. The application is consistent with the Town's adopted standards.

#### **Fiscal Impact**

NA

#### **Attachments:**

WJT 058-22 Palm Avenue and Sunland Drive ORD 291 Joshua Trees 9.60 Permit Procedures



### Western Joshua Tree Application

Date Rec	eived	3/2/2022			
Case	WJT 05	8-22			
Ву	Evan				

					-					
General Info	rmation									
APPLICANT Town of Yucca Valley					76	0-369-6579	)			
Mailing Address 58928 Business Center Drive					_ Emailabaldizzone@yucca-valley.org					
CityYucca Valley					CA	CA Zip 92284				
PROPERTY OW	NER			Phone						
Mailing Address 58928 Business Center Drive					Emailabaldizzone@yucca-valley.org					
City Yucca Valley				_State	CA zip 92284			2284		
Address/Location of Plants APN: 0595-031-08 - South-East Property at Sunland Drive and Palm Avenue										
Desert Native	Plant Specialist	Marinna Wa	igner, ISA CE	RTIFIE	O ARBO	RIST WE-1	13354A			
Descri Native	Tant Specialist									
Droiget Infor	mation									
Project Infor							T	1		
TYPE OF PLANT	# OF PLANTS BEING DESTROYED	# OF PLANTS BEING TRANSPLANTED	# OF PLANTS BEING TRIMMED		CATION EE	HEIGHT	DIAMETER	MITIGATION FEE FOR REMOVAL		
WESTERN JOSHUA TREE (Yucca brevifolia)	0	5						\$10325.00		
Reason for removal Parking Lot to be located at APN: 0595-031-08										
Property owner signature							Date			
Staff Use Only										
Issuance Date:		Issued E	Ву:							

Approved as shown on plot plan \_\_\_\_\_ photos \_\_\_\_\_ Total Fees: \_\_\_\_\_

Denied \_\_\_\_\_ Reason for Denial \_

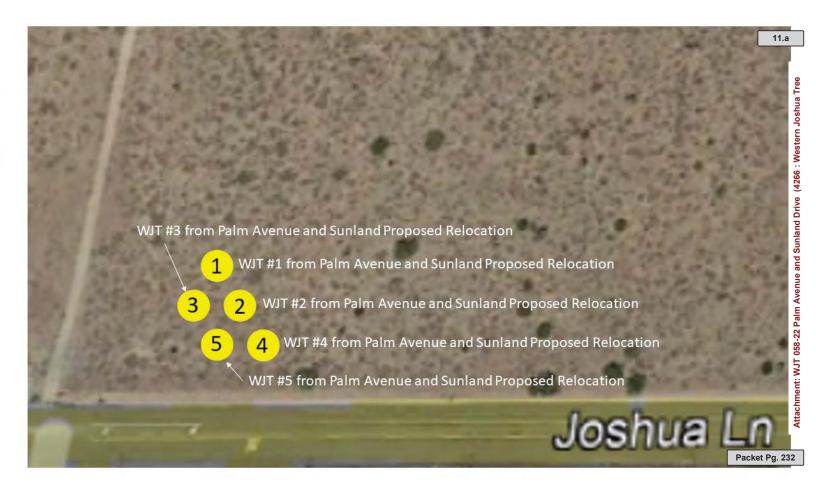


Yucca brevifolia ssp. brevifolia (Joshua Tree)

TOWN OF YUCCA VALLEY - SUNLAND DRIV

Packet Pg. 230





#### Western Joshua Tree Take Permit Submittal Requirements

**Please note** - The census shall tag and count all western Joshua trees on the project site and classify them by size class.

**1.** The name of the desert native plant specialist who conducted the census and the employer of the desert native plant specialist.

Name: Marinna Wagner
Employer Name: Marinna Wagner

**2.** The name of the desert native plant specialist who will relocate Western Joshua trees, if applicable, and the employer of the desert native plant specialist.

Name: To be determined and contracted by the Town of Yucca Valley Employer Name: Unknown; TBD

- **3.** The date of the census. 1/29/22
- **4.** The date or dates of the proposed relocation of western Joshua trees, if applicable.

#### Unknown; TBD

**5.** A map of the project site that depicts the location of the proposed single-family residence, accessory structure, or public works project; the number and location of all Western Joshua trees on the project site; and if applicable, the proposed Western Joshua trees for removal, or the proposed placement of each relocated Western Joshua tree (Note: this can be included on the 24"x36" plans).

#### See notes below

**6.** Photographs of each western Joshua tree on the project site, including a <u>visual</u> <u>representation</u> (e.g., tape measure, yardstick, etc.) of the scale of the height of each tree.

#### See report

**7.** Aerial imagery of the site in sufficient detail to identify the property and the Western Joshua trees that are on the site and are a part of the application submitted.

#### See map

**8.** Narrative written descriptions of each western Joshua tree, its diameter, height, existing health condition and any other information deemed necessary.

#### See report

- **9.** New construction of single-family residential units as well as accessory structures shall require the submittal of all information on plans measuring approximately 24" x 36", shall be legibly drawn and shall accurately reflect aerial photography and satellite imagery generally available for the subject property.
  - a. All property lines, dimensions, and existing structures, if any, shall be depicted on plans submitted with the application materials.
  - b. Property owners name, mailing address, phone number, and email address.
  - c. Applicant's name, mailing address, phone number and email address.
  - d. Assessor parcel number(s), address, and general location of the property for which the application is submitted.
  - e. General Plan designation and zoning designation of the subject project site.

#### **Census Table**

	# Height	Diameter	Health (Dead, Poor, Ok, Good, Great)	Transplant,	Size Class (Place an "X" in the corresponding column)			
Tag#				Destroy, or Protect in Place	Class 1/A (Less than 1 Meter)	Class 2/B (Between 1 Meter and 4 Meters)	Class 3/C (4 Meters or Taller)	
1	5 M	8 M	GREAT	TRANSPLANT			Χ	
2	2.5 M	1.3 M	GREAT	TRANSPLANT		Х		
3	5.5 M	4.8 M	GREAT	TRANSPLANT			X	
4	4.5 M	1.5 M	ОК	TRANSPLANT			X	
5	6 M	4.8 M	GREAT	TRANSPLANT			Χ	

If design modifications are not feasible, survivability of larger trees may be better if protected in place with less than 10 ft of clearance than attempting transplant. See notes regarding individual trees in the report.

#### <u>Transplant Relocation Notes (Item #5):</u>

Via correspondence with the Town of Yucca Valley, it is their intent to transplant all Western Joshua Trees (*Yucca brevifolia* ssp. *brevifolia*) from this site to Essig Park, a Town-owned property.

The recommendations for determining potential transplant locations include the following:

- 1. Placed at least 25 ft from any existing or proposed structure or improvement,
- 2. Placed at least 10 ft from any other western Joshua Tree,
- 3. For large trees that must be moved with equipment, equipment accessibility will likely be required, and such activity should not cause any damage to habitat and any other long-lived plants.
- 4. In order to take into account the Town's future plans, potential locations should be determined by the Town and reviewed by the Native Plant Specialist.
- 5. Prior to finalizing locations, simple percolation tests are required to determine if the soil is free-draining, uncompacted enough to dig deep, and suitable for transplant.
- 6. It is recommended that competent and experienced contractors visit the site to confirm transplant feasibility and methods and budgetary estimates. Town will contract with contractors for relocation of individual trees.

ARMANDO BALDIZZONE TOWN OF YUCCA VALLEY PUBLIC WORKS DEPARTMENT 58928 BUSINESS CENTER DRIVE YUCCA VALLEY, CA 92284 P: 760.369.6579 EXT. 307 ABALDIZZONE@YUCCA-VALLEY.ORG

## NATIVE PLANT INVENTORY REPORT SITE MAP WITH PHOTOGRAPHIC CENSUS

This report is for a potential overflow parking lot for the Town of Yucca Valley Recreation Center, Brehm II, and the Boys & Girls Club Hi-Desert in the Town of Yucca Valley at the corner of Sunland Drive and Palm Ave. A field census and native plant inventory was performed on January 29, 2022 the vacant parcel for Joshua Trees (*Yucca brevifolia* ssp. *brevifolia*), a candidate species under the California Endangered Species Act (CESA), effective October 9, 2020.

This project site area is a combination of suburban residential and public works properties. Soil conditions appear mostly sandy, however are heavily compacted around road and disturbed areas. The Joshua Trees in this pocket are not quite as healthy and large as the ones closer and east of the Town Recreation Center.

A significant portion of the site, in the middle and to the north, is mostly cleared of vegetation and has some recent tire tracks in the sand. It appears this site has been used for some dumping as there are a few large piles of vegetation debris that include Joshua Tree plant material on the west side and outside of the parcel that don't appear to have been rooted on this site. However, due to the level of decay the exact root or base location is hard to determine. Based on google earth imagery, it appears that the large tree in the easement to the west fell down sometime between 2013-2015 (see page 3).

All locations are approximate. For exact locations, please consult the Town surveyor.

The primarily goal is to avoid the take of western Joshua Trees on the project site. It is our recommendation that site work be modified to protect the trees wherever feasible. The following notes apply:

- Trees 1-5 are tall, but likely possible to transplant. Please consult with contractors before confirming transplant feasiblilty.
- 2. Planters can be created in the parking lot to allow the design to work around the trees as long as the grade change is insignificant.
- 3. We encourage the project designers to explore permeable pavement options in these parking lots whenever feasible given drainage conditions. In addition, we highly recommend increasing the size and quantity of planting pockets in and around the parking lots to capture runoff, provide shade, and reduce the impacts of the urban heat island effect.
- 4. If trees must be moved to achieve a certain number of parking stalls, consider moving them a very short distance within the parcel.

If design modifications are not feasible, survivability of larger trees may be better if protected in place with less than 10 ft of clearance than attempting transplant. Based on our experience with transplanting trees, we recommend that transplant only be attempted when creative design solutions cannot be found to work around the trees. Generally it is not advised to conduct work within the drip line, however given the size of these trees and that they will unlikely survival transplant, it is likely more sustainable to leave in place and

conduct work carefully within the dripline.

Via correspondence with the Town of Yucca Valley, it is their intent to transplant all Western Joshua Trees (*Yucca brevifolia*) ssp. *brevifolia*) from this site to Essig Park, a Town-owned property. At Essig Park, the Town does not anticipate that there will be additional soil disturbance near the transplanted trees during the construction of future projects. The is also water source at Essig Park that can be more easily utilized for some form of more regular irrigation.

#### **Transplant Notes:**

The best time of year to transplant all *Yucca* species is when temperatures are warm and they are growing. Ideally, transplanting occurs from mid-March through the end of October, while avoiding the heat of the summer whenever possible. Transplants should be given regular water (1-2x a week) during warm and dry periods for up to 3 years depending on the individual plant's growth habit and the overall weather conditions. If this cannot be provided through the installation of a drip irrigation system, trucked-in and hand watering can suffice. Some of these large trees will require extensive wooden framing and equipment to transplant. Following transplant of large trees, staking and guying systems will likely be needed support the tall trees. It may be more suitable to box some of the large trees to transplant them more successfully, however this method is time consuming, often requires a crane, and can be expensive. Alternatively a tree spade or other heavy equipment proposed by knowledgeable and experienced contractors will work if appropriate for the tree. Please consult with competent contractors to determine the best method for each tree.

In general there is limited to no scientific data regarding the transplant survivability of large trees (3-6+ m). There is some research that indicates trees within the 1-2.5 m range and with limited branches have a good survival rate if the soil and irrigation conditions are adequate (Bainbridge 2007, Franson 1995). Some research in Joshua Tree National Park suggests that small transplanted and nursery-grown trees have a relatively high survival rate if given regular irrigation through the establishment period (Wagner 2018).

Based on first hand accounts and available scientific research, it is recommended that large trees be protected in place and work is modified to protect them. We don't have first hand experience with relocating trees larger than 2.5 meters tall (8 ft). It is our understanding that transplanting large trees can be difficult, expensive, and short-term success (1-3 years) is likely low. Long-term success (3-10+ years) is even less well known, in general if the tree is growing and leaves are in good condition by the third year it will likely survive, but accounts of trees dying somewhat suddenly following transplant has occurred. It is not surprising that a reduced lifespan following transplant may occur. With larger trees, it is recommended to avoid overwatering and they should be relocated only a short distance to prevent extensive damage to the root system during transport. The irrigation is crucial and can be tricky as overwatering and underwatering can easily cause death. The trees and weather should be monitored closely. Lastly, it has been recommended to us that the trees should be kept in the same cardinal orientation when relocated whenever feasible.

Small trees (less than 1 meter) may require caging to protect them from herbivore damage (Wagner 2018, Wallace 1980). The survival rate of pups that have been separated from the mother plant is unknown and accounts are inconsistent from field contractors. Given this, it is always best to try to keep the pups intact and adjoined to the main root system whenever feasible. It is our experience that small pups tend to struggle to survive when separated. This can make transplanting quite difficult especially when there is more than one pup because the root system is very fragile and digging and equipment can easily damage this root connection.

For some of the larger trees, where design modifications to achieve 10 ft of distance are not feasible, survivability may be higher if the tree is protected in place with less than 10 ft of clearance. We feel this can be true in situations where more than approximately 65-70% of the root system can remain undisturbed. We recommend avoiding cutting roots larger than 1.5 inch in diameter whenever feasible. Consideration should be taken to how these roots are supporting the overall plant stability and nutrient uptake. Joshua Tree roots

are very fragile especially when environmental conditions have been dry for several months. Sometimes, depending on the type of work, it is possible to dig around large roots by hand and leave the roots in place. Sulfur should be applied on cut roots to prevent the introduction of bacteria or other infections.

In addition, modifications to the flowering and seeding patterns of transplanted trees is unknown and may impact the species seed bank long term. We highly recommend that through yearly reports, data on the survival following the transplant of trees be recorded and further analyzed for future knowledge and better management practices.

The recommendations for determining potential transplant locations include the following:

- Placed at least 25 ft from any existing or proposed structure or improvement, 1.
- 2. Placed at least 10 ft from any other western Joshua Tree,
- For large trees that must be moved with equipment, equipment accessibility will likely be required, and 3. such activity should not cause any damage to habitat and any other long-lived plants.
- In order to take into account the Town's future plans, potential locations should be determined by the 4. Town and reviewed by the Native Plant Specialist.
- Prior to finalizing locations, simple percolation tests are required to determine if the soil is free-draining, 5. uncompacted enough to dig deep, and suitable for transplant.
- 6. It is recommended that the contractors visit the site to confirm transplant feasibility and methods and



GOOGLE EARTH



**GOOGLE EARTH 2015** 

budgetary estimates. Town will contact and contract with contractors for relocation of individual trees. Works Cited:

BAINBRIDGE, D. 2007. A *Guide for Desert and Dryland Restoration: A New Hope for Arid Lands.* Washington D. C.: Island Press.

FRANSON, R. L. 1995. Health of plants salvaged for revegetation at a Mojave Desert gold 4505 mine: year two. p. INT-GTR-315 in B. A. Roundy, E. D. McArthur, J. S. Haley, 4506 and D. K. Mann, editors. *Proceedings: Wildland Shrub and Arid Land Restoration 4507 Symposium.* U.S. Department of Agriculture, Forest Service, Intermountain 4508 Research Station, Ogden, UT. Available at: 4509 https://www.fs.usda.gov/treesearch/pubs/34717 (accessed December 18, 2020).

WAGNER, M. 2018. 'Factors Influencing Revegetation Efforts in the Mojave Desert: Field Studies and Meta-Analysis of the Morongo Basin and Joshua Tree National Park,' MLA Thesis, California Polytechnic University Pomona, CA. Pomona, CA.

WALLACE, A., E. M. ROMNEY, and R. B. HUNTER. 1980. The challenge of a desert: 5143 revegetation of disturbed desert lands. *Great Basin Naturalist Memoirs*. 4:216–5144 225.

CONDUCTED BY: MARINNA WAGNER

WE-13354A

ISA CERTIFIED ARBORIST

Ma Mag

PLANT NUMBER: 1

STATUS (TRANSPLANT, DESTROY, PROTECT): Transplant

CLASS SIZE: C

SIZE (HEIGHT X WIDTH): 5 m x 8 m (POLE 2M)

SITE CONDITIONS & ASPECT: Sandy, mostly flat, and slightly northwest facing

LEAN: S VIGOR: Normal FOLIAGE: Great condition CROWN DENSITY: Normal

NUMBER OF LIVE BRANCHES: 35 MAX BRANCH DIAMETER: 60 cm

NUMBER OF DEAD BRANCHES: 3 MAJOR BRANCH FAILURES: 0

HEALTH CONDITION (0=dormant, 1= dead, 2=25% alive, 3=50% alive, 4=75% alive, 5=100% alive): 5

NUMBER OF PUPS: 5 MAX HEIGHT OF TALLEST PUP: 5 m

DECAY OR DAMAGE: No decay or damage.

ROOT FLARE CONDITION: Ok, some rodent holes nearby.

DRIP LINE RADIUS: 4 m or 13 ft

TRANSPLANT FEASIBILITY NOTES: Transplant is likely feasible due to the plant size, however it is recommended to leave the plant in place and modify the design to create a planting area around the tree. The adjacently to tree #2 and the intertwined branches of the tallest pup, may make moving these trees a challenge. It is recommended to keep all pups together and to exercise caution when relocating to keep fragile root system intact.

OTHER NOTES & RECOMMENDATIONS: It is recommended to creatively work the design around the tree. The tree will have a higher survival rate if left in place as it will not require supplemental watering or other care as long as the roots can be protected and work can maintain 10 ft.



PLANT NUMBER: 2

STATUS (TRANSPLANT, DESTROY, PROTECT): Transplant

CLASS SIZE: E

SIZE (HEIGHT X WIDTH): 2.5 m x 1.3 m (POLE 2M)

SITE CONDITIONS & ASPECT: Sandy, mostly flat, and slightly northwest facing

LEAN: S VIGOR: Normal FOLIAGE: Great condition CROWN DENSITY: Normal

NUMBER OF LIVE BRANCHES: 3 MAX BRANCH DIAMETER: 45 cm

NUMBER OF DEAD BRANCHES: 0 MAJOR BRANCH FAILURES: 0

HEALTH CONDITION (0=dormant, 1= dead, 2=25% alive, 3=50% alive, 4=75% alive, 5=100% alive): 5

NUMBER OF PUPS: 2 MAX HEIGHT OF TALLEST PUP: 2 m

DECAY OR DAMAGE: No decay or damage.

ROOT FLARE CONDITION: Ok, some rodent holes nearby.

DRIP LINE RADIUS: 1 m or 3.25 ft

TRANSPLANT FEASIBILITY NOTES: Transplant is feasible due to the plant size, however it is recommended to leave the plant in place and modify the design to create a planting area around the tree. The adjacently to tree #1 may make moving these trees carefully a challenge. See notes for Tree #1.

OTHER NOTES & RECOMMENDATIONS: It is recommended to creatively work the design around the tree. The tree will have a higher survival rate if left in place as it will not require supplemental watering or other care as long as the roots can be protected and work can maintain 10 ft.





The main trunk of this tree is just past 1 meter from the main trunk of tree #1.

PLANT NUMBER: 3

STATUS (TRANSPLANT, DESTROY, PROTECT): Transplant

CLASS SIZE: C

SIZE (HEIGHT X WIDTH): 5.5 m x 4.8 m (POLE 2M)

SITE CONDITIONS & ASPECT: Sandy, mostly flat, and slightly southeast facing

LEAN: S VIGOR: Normal FOLIAGE: Good condition CROWN DENSITY: Normal

NUMBER OF LIVE BRANCHES: 25 +/- MAX BRANCH DIAMETER: 60 cm

NUMBER OF DEAD BRANCHES: 3 MAJOR BRANCH FAILURES: 3

HEALTH CONDITION (0=dormant, 1= dead, 2=25% alive, 3=50% alive, 4=75% alive, 5=100% alive): 5

NUMBER OF PUPS: 0 MAX HEIGHT OF TALLEST PUP: NA

DECAY OR DAMAGE: Old scar at the base of the trunk, doesn't appear to be recent damage.

ROOT FLARE CONDITION: Ok. DRIP LINE RADIUS: 2.5 m or 8 ft

TRANSPLANT FEASIBILITY NOTES: Transplant is likely feasible due to the plant size, however this tree is relatively tall and has experienced several branch failures (one of which was recent). This tree may require framing and bracing to keep branches from breaking during relocation and staking and guying may be necessary following relocation. It is recommended to leave the plant in place and modify the design to create a planting area around the tree.

OTHER NOTES & RECOMMENDATIONS: It is recommended to creatively work the design around the tree. The tree will have a higher survival rate if left in place as it will not require supplemental watering or other care as long as the roots can be protected and work can maintain 10 ft.





The main trunk of this tree is just past 1 meter from the main trunk of tree #1.

PLANT NUMBER: 4

STATUS (TRANSPLANT, DESTROY, PROTECT): Transplant

CLASS SIZE: C

SIZE (HEIGHT X WIDTH): 4.5 m x 1.5 m (POLE 2M)

SITE CONDITIONS & ASPECT: Sandy, mostly flat, and slightly northwest facing

LEAN: S VIGOR: Low FOLIAGE: Ok, strange horizontal leaf arrangement

**CROWN DENSITY: Sparse** 

NUMBER OF LIVE BRANCHES: 5 MAX BRANCH DIAMETER: 60-80 cm

NUMBER OF DEAD BRANCHES: 3 MAJOR BRANCH FAILURES: 2

HEALTH CONDITION (0=dormant, 1= dead, 2=25% alive, 3=50% alive, 4=75% alive, 5=100% alive): 3

NUMBER OF PUPS: 0 MAX HEIGHT OF TALLEST PUP: NA

DECAY OR DAMAGE: No significant decay or damage.

ROOT FLARE CONDITION: Ok. DRIP LINE RADIUS: 3/4 m or 2.5 ft

TRANSPLANT FEASIBILITY NOTES: Transplant is likely feasible due to the plant size, however it is recommended to leave the plant in place and modify the design to create a planting area around the tree. It is unknown if the strange leaf patterning is of concern, we have observed this in the field and its causes remain unknown. Sometimes abnormal leaf arrangement can be genetic and not harmful and other times it can indicate there is a pest or disease present.

OTHER NOTES & RECOMMENDATIONS: It is recommended to creatively work the design around the tree. The tree will have a higher survival rate if left in place as it will not require supplemental watering or other care as long as the roots can be protected and work can be modified to maintain 10 ft.



PLANT NUMBER: 5

STATUS (TRANSPLANT, DESTROY, PROTECT): Transplant

CLASS SIZE: C

SIZE (HEIGHT X WIDTH): 6 m x 4.8 m (POLE 2M)

SITE CONDITIONS & ASPECT: Sandy, mostly flat, and slightly northeast facing

LEAN: S VIGOR: Normal FOLIAGE: Great condition CROWN DENSITY: Normal

NUMBER OF LIVE BRANCHES: 14-15 MAX BRANCH DIAMETER: 45 cm

NUMBER OF DEAD BRANCHES: 4 MAJOR BRANCH FAILURES: 1

HEALTH CONDITION (0=dormant, 1= dead, 2=25% alive, 3=50% alive, 4=75% alive, 5=100% alive): 5

NUMBER OF PUPS: 2 MAX HEIGHT OF TALLEST PUP: 5 m

DECAY OR DAMAGE: No significant decay or damage, some thatch loss on the trunks.

ROOT FLARE CONDITION: Ok, some rodent holes nearby.

DRIP LINE RADIUS: 2.5 m or 8 ft

TRANSPLANT FEASIBILITY NOTES: Transplant is likely feasible, however the plant is relatively tall and it is recommended to leave the plant in place and modify the design to create a planting area around the tree. The overall size of the two trunks may make transplant as one plant a challenge. It is possible to separate, but not ideal. Given overall height this tree may require framing and bracing to keep the branches from breaking during relocation and staking and guying may be necessary following transplant.

OTHER NOTES & RECOMMENDATIONS: It is recommended to creatively work the design around the tree. The tree will have a higher survival rate if left in place as it will not require supplemental watering or other care as long as the roots can be protected and work can be modified to maintain 10 ft.





Two main trunks are within a meter of each other.