

# PROTECTED PLANT PRESERVATION PLAN

**CITY OF VICTORVILLE, CALIFORNIA**  
**APN: 3096-351-02 & 03**

*Prepared for:*

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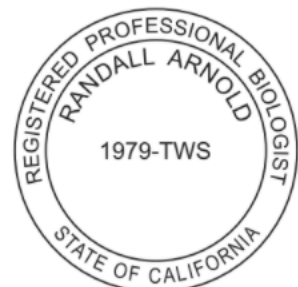
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**Project No: RCA #2021-2015 JT**

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## TITLE PAGE

**Date Report Prepared:** September 9, 2021

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**Report Title:** Protected Plant Preservation Plan

**Project Location:** Victorville, California  
APN: 3096-351-02 & 03

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## 1.0 SUMMARY

At the request of the project proponent, RCA Associates, Inc. surveyed an approximately 40-acre property (APN: 3096-351-02 & 03) located north of La Mesa Road, west of Mesa View Drive, and east of Fremontia Road in the city of Victorville, California (Figures 1 and 2). The property site is specifically located on the SE ¼ of the SW 1/4 of Section 28, Township 5 North, Range 5 West in the USGS Baldy Mesa 7.5-minute California quadrangle.

The purpose of the survey was to evaluate the Joshua trees present on the site and determine which trees were suitable for relocation and which trees could be discarded prior to site clearing activities. This report provides the results of the Joshua tree survey performed on September 9, 2021. Following completion of the survey, RCA Associates, Inc. prepared this Protected Plant Preservation Plan to assist the project proponent with future relocation of the Joshua trees. Information on the Joshua trees which will need to be relocated-transplanted in the future is provided in Section 4.0. The City of Victorville Municipal Code has a chapter (Chapter 13.33) stating the purpose of Joshua Tree preservation and the consequence of removing one, and follows the County of San Bernardino Plant Protection Plan and Management (Chapter 88.01.060) to help protect and preserve desert vegetation, including Joshua trees. The requirements of the Ordinance (Chapter 88.01.060) are provided in Appendix B.

Based on the results of the field investigations there are 33 Joshua trees which occur within the boundaries of the property (Figures 1 and 2). Based on the evaluation and analysis of each tree it was determined that 1 of the 33 Joshua trees (3%) are suitable for transplanting. This tree is marked in red in Table 4-1. The remaining 32 Joshua trees (97%) were determined to be unsuitable for transplanting due to a variety of factors such as size, condition, damage, dying, excessive leaning, possibly disease, clonal, etc.

As of September 22, 2020, the California Department of Fish and Wildlife (CDFW) temporarily listed the western Joshua tree (*Yucca brevifolia*) as an endangered species for one year until a final decision is made in 2021. **Therefore, any attempt to remove the Joshua tree from its current position will require an Incidental Take Permit (ITP).**

## 2.0 INTRODUCTION AND PROJECT LOCATION

The area surveyed is located north of La Mesa Road, west of Mesa View Drive, and east of Fremontia Road in the city of Victorville, California (Figures 1 and 2). Current conditions on the property include a relatively disturbed desert scrub community that has been previously cleared of most vegetation within its boundaries. The vegetation on site consists of creosote bush (*Larrea tridentata*), Joshua tree (*Yucca brevifolia*), white bursage (*Ambrosia dumosa*), Nevada jointfir (*Ephedra nevadensis*), rubber rabbitbrush (*Ericameria nauseosa*), California buckwheat (*Eriogonum fasciculatum*), Asian mustard (*Brassica tournefortii*), and Anderson thornbush (*Lycium andersonii*). Single-family residential developments are located immediately south and north of the project area, and vacant land located to the west and east (Figure 1 & 2).

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). 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 (Rowland, 1978). 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 Joshua trees for nesting such as hawks, common ravens, and cactus wrens. CDFW consider Joshua tree woodlands as areas that support relatively high species diversity and as such are considered to be a sensitive desert community. 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).

### 3.0 METHODOLOGIES

Pedestrian surveys were walked throughout the site and biologists from RCA Associates, Inc. evaluated each Joshua tree to determine which trees were suitable for relocation/transplanting based on a general health assessment. Each Joshua tree received a metal numbered tag which was affixed on the north side of each tree for orientation purposes during future transplanting. Surveyor flagging was also placed around those trees suitable for transplanting to facilitate future identification. The precise location of each tree was recorded using a Garmin GPS unit and a Bushnell Yardage Pro rangefinder was utilized to determine the extent of the property boundaries. Those Joshua trees which occur on the property site are presented in Table 4-1 and the locations are provided in Figure 2.

The factors utilized to determine which Joshua trees were suitable for transplanting include the following factors:

1. Trees from about 1 foot in height up to approximately 12 feet,
2. No visible signs of damage to the tree such as absence of bark due to rodent or other animals,
3. Minimal number of branches (No more than 3 branches),
4. No excessive leaning of the tree,
5. No yellow or brown fronds,
6. Proximity to other Joshua trees (i.e., clonal), and
7. No exposed roots at the base of the tree.
8. Dead

## 4.0 RESULTS

There are 33 Joshua trees on the property and the GPS locations of the Joshua trees are provided in Table 4-1. A total of 1 Joshua tree (3%) is suitable for relocation/transplanting based on the seven factors listed in Section 3.0 (Table 4-1). The Joshua tree suitable for transplanting should be relocated/transplanted on-site, which is the preferable option, or to an off-site area approved by the City of Victorville and CDFW. Those Joshua trees that are not suitable for relocation/transplanting due to size, health of the tree, presence of damage, excessive branches, excessive leaning, clonal, and exposed roots should be disposed of as per City requirements.

**Table 4-1: Joshua tree census. (Note: The GPS locations of the Joshua trees are provided below and those trees which are suitable for transplanting on-site as part of project landscaping are highlighted in red.)**

Total Number of Joshua Trees On Site		Joshua Trees to be Transplanted	Number of Clonal Trees	Number of Non-Clonal Trees
33		1	10	23

Tag	Height (ft)	Location	Condition	Panicles Branches	Clonal	Transplantable
9055	16	N 34.486980° W 117.408757°	Good	19P 15B	X 5 Trunks	No
9056	16	N 34.487181° W 117.408692°	Good	21P 11B		No
9057	15	N 34.487093° W 117.409122°	Good	9P 8B	X 3 Trunks	No
9058	13	N 34.487171° W 117.409171°	Good	2P 1B	X 2 Trunks	No
9059	17	N 34.487367° W 117.409026°	Good	8P 8B	X 2 Trunks	No
9060	16	N 34.487696° W 117.409194°	Fair- Bark damage	14P 10B		No

Tag	Height (ft)	Location	Condition	Panicles Branches	Clonal	Transplantable
9061	13	N 34.487944° W 117.408941°	Good- Leaning	6P 7B		No
9062	15	N 34.488208° W 117.409976°	Good	13P 16B		No
9063	13	N 34.487907° W 117.409974°	Good	11P 8B		No
9064	16	N 34.48185° W 117.409793°	Good	34P 24B	X 2 Trunks	No
9065	14	N 34.487151° W 117.409698°	Good	12P 9B		No
9066	14	N 34.486241° W 117.4010023°	Good	10P 8B	X 2 Trunks	No
9067	5	N 34.486063° W 117.410478°	Dead	0P 0B		No
9068	14	N 34.485433° W 117.411048°	Dead	0P 0B		No
9069	15	N 34.485790° W 117.410931°	Good	22P 12B		No
9070	14	N 34.486193° W 117.410960°	Good	3P 2B		No
9071	13	N 34.486254° W 117.410779°	Good	4P 4B		No
9072	13	N 34.486830° W 117.410845°	Good	13P 22B		No
9073	16	N 34.486880° W 117.410446°	Good	18P 17B		No
9074	15	N 34.487155° W 117.410648°	Good	18P 26B		No
9075	18	N 34.487139° W 117.410977°	Poor - Main Branch Dead	10P 18B		No
9076	17	N 34.487975° W 117.410724°	Good	19P 15B		No
9077	18	N 34.488098° W 117.411164°	Good	14P 11B		No
9078	17	N 34.487516° W 117.411160°	Good	10P 11B		No



<b>Tag</b>	<b>Height (ft)</b>	<b>Location</b>	<b>Condition</b>	<b>Panicles Branches</b>	<b>Clonal</b>	<b>Transplantable</b>
9079	14	N 34.486974° W 117.411425°	Good	16P 12B	X 2 Trunks	No
9080	12	N 34.486394° W 117.411340°	Good	3P 4B	X 2 Trunks - 1 Dead	No
9081	13	N 34.485949° W 117.411692°	Good	6P 9B	X 3 Trunks	No
9082	14	N 34.485551° W 117.411829°	Good	16P 15B		No
9083	9	N 34.48551° W 117.412426°	Good	1P 2B		Yes
9084	6	N 34.485837° W 117.412276°	Dead	0P 0B		No
9085	14	N 34.486064° W 117.412275°	Good	11P 8B		No
9086	18	N 34.486063° W 117.412402°	Good	13P 17B		No
9087	13	N 34.486727° W 117.411977°	Good	11P 10B	X 2 Trunks	No

**(Note: The Tag numbers correspond to the numbers placed on the Joshua trees.)**

## 5.0 CONCLUSIONS

There are 33 Joshua trees located on the property and 1 of the trees is suitable for relocation/transplanting. This conclusion was based on: (1) trees which were one foot or greater in height and less than twelve feet tall (approximate); (2) in good health; (3), three branches or less; (4) trees that are not leaning over excessively; (5) no yellow or brown fronds; (6) density of trees (i.e., no clonal trees); (7) no exposed roots at the root ball; and (8) dead. As indicated in Table 4-1, the majority of the Joshua trees which were not suitable for relocation are relatively large ranging from about 12 to 35 feet in height.

As of September 22, 2020, the California Department of Fish and Wildlife temporarily listed the western Joshua tree (*Yucca brevifolia*) as an endangered species for one year until a final decision is made in 2021. **Therefore, any attempt to remove the Joshua tree from its current position will require an Incidental Take Permit (ITP).**

The City of Victorville's Municipal Code (Chapter 13.33) requires preservation of Joshua trees given their importance in the desert community. A qualified City-approved biologist or arborist should be retained to conduct any future relocation/transplanting activities and should follow the protocol of the County's Municipal Code (Appendix B: Chapter 88.01.060). The following criteria will be utilized by the contractor when conducting any future transplanting activities.

A. The Joshua trees will be retained in place or replanted somewhere on the site where they can remain in perpetuity or will be transplanted to an off-site area approved by the city where they can remain in perpetuity. Joshua trees which are deemed not suitable for transplanting will be cut-up and discarded as per City requirements.

B. Earthen berms will be created around each tree by the biologist prior to excavation and the trees will be watered approximately one week before transplanting. Watering the trees prior to excavation will help make excavation easier, ensure the root ball will hold together, and minimize stress to the tree.

C. Each tree will be moved to a pre-selected location which has already been excavated and will be placed and oriented in the same direction as their original direction. **The hole will be backfilled with native soil, and the transplanted tree will be immediately**

watered. As noted in Section 3.0, a numbered metal tag was placed on the north side of the trees and the trees were also flagged with surveyor's flagging. The biologist will develop a watering regimen to ensure the survival of the transplanted trees. The watering regimen will be based upon the needs of the trees and the local precipitation.

## 6.0 REFERENCES

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## 7.0 CERTIFICATION

I hereby certify the statements furnished above and in the attached exhibits, present the data and information required for this Joshua tree survey and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this survey was performed by Lisa Cardoso, Jessica Hensley, and Ryan Hunter.

Date: September 9, 2021 Signed: *Lisa Cardo*

*Ryan Hunter*

*Jessica Hensley*

Field Work Performed by:     Lisa Cardoso      
Wildlife Biologist

    Ryan Hunter      
Environmental Scientist/Biologist

    Jessica Hensley      
Environmental Scientist



## **APPENDIX A**

### **Figures**

**APPENDIX B**

**City of Victorville  
Municipal Code: Chapter 13.33**

**County of San Bernardino  
Municipal Code: Chapter 88.01.060**