

PROTECTED PLANT PRESERVATION PLAN

CITY OF LANCASTER, LOS ANGELES COUNTY, CALIFORNIA
APN: 3153-018-047, 049, 050 and 051

Prepared for:

Global Investments and Development, LLC

Prepared by:

RCA Associates, Inc.
15555 Main Street, #D4-235
Hesperia, CA 92345
(760) 956-9212

Principal Investigators:

Ryan Hunter, Environmental Scientist, Biologist
Jessica Hensley, Environmental Scientist, Biologist
Brian Bunyi, Environmental Scientist, Biologist



Project No: RCA#2022-19 JT

February 24, 2022



TITLE PAGE

Date Report Prepared: February 24, 2022

Field Work Completed: February 22, 2022

Report Title: Protected Plant Preservation Plan

Project Location: Lancaster, California
APN: 3153-018-047, 049, 050 and 051

Prepared for: Global Investments and Development, LLC

Principal Investigators: Ryan Hunter, Environmental Scientist, Biologist
Jessica Hensley, Environmental Scientist, Biologist
Brian Bunyi, Environmental Scientist, Biologist

Contact Information: Randall C. Arnold, Jr.
RCA Associates, Inc.
15555 Main Street, #D4-235
Hesperia, CA 92345
(760) 956-9212
rarnold@rcaassociatesllc.com
www.rcaassociatesllc.com

Table of Contents

Section	Page
1.0 Summary	1
2.0 Introduction and Project Description	2
3.0 Methodologies	3
4.0 Results	4
5.0 Conclusions	7
6.0 References	9
7.0 Certification	10
Appendix A – Figures	
Appendix B – City of Lancaster Municipal Code: Chapter 17.12.100	

1.0 SUMMARY

At the request of the project proponent, RCA Associates, Inc. surveyed an approximately 10-acre property located on the south-east corner of 35th street and W Ave J-6 in the city of Lancaster, California (Township 7 North, Range 12 West, Section 19, USGS Lancaster West, California Quadrangle, 1956) (Figures 1, 2, and 3).

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 February 22, 2022. 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 Lancaster Municipal Code has a chapter (Chapter 17.12.100) stating the purpose of Joshua Tree preservation and the consequence of removing one to help protect and preserve desert vegetation.

Based on the results of the field investigations there are 20 Joshua trees which occur within the boundaries of the property (Figures 1, 2, and 3). Based on the evaluation and analysis of each tree it was determined that 7 of the 20 Joshua trees (35%) are suitable for transplanting. These trees are marked in red in Table 4-1. The remaining 13 Joshua trees (65%) were determined to be unsuitable for transplanting due to a variety of factors such as size, condition, damage, dying, dead, excessive leaning, possibly disease, clonal, etc.

2.0 INTRODUCTION AND PROJECT LOCATION

The area surveyed is located at the south-east corner of 35th street and W Ave J-6 in Lancaster, California (Figures 1 and 2). Current conditions on the property include a moderately disturbed desert scrub community with moderate signs of human disturbances. The biological resources on the site consist of a desert scrub community typical of the area with creosote bush (*Larrea tridentata*), rubber rabbitbrush (*Ericameria nauseosa*), white-bursage (*Ambrosia dumosa*), flatspine bur ragweed (*Ambrosia acanthicarpa*), Joshua trees (*Yucca brevifolia*), kelch grass (*Schismus barbatus*), and cheatgrass (*Bromus tectorum*) observed on the site. Vacant land borders the property in all directions (Figure 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 inReach Explorer+ GPS unit and a Nikon Forestry Pro II rangefinder was utilized to determine the extent of the property boundaries and accurate tree height. Those Joshua trees which occur on the property site are presented in Table 4-1 and the locations are provided in Figure 2.

In addition, the surrounding area was surveyed visually up to a 186 foot buffer around the projected site to identify Joshua trees in the immediate area within the zone influence. Those Joshua trees which occur outside of the property boundaries within the 186 foot buffer are included in Table 4-2.

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 2 or 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. Dying or dead

4.0 RESULTS

There are 20 Joshua trees on the property and the GPS locations of the Joshua trees are provided in Table 4-1. A total of 7 Joshua trees (35%) are suitable for relocation/transplanting based on the nine factors listed in Section 3.0 (Table 4-1). The Joshua trees 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 Lancaster. 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	Number of Dead Trees
20	7	10	10	3

Tag #	Life Stage	Height	Location	Panicles	Branches	Condition	Health Assessment	Number of Trunks	Transplantable
7359	Seedling	1	N34.682363° W118.191107°			Good		1	No
7360			N34.682291° W118.190622°			Dead			No
7361	Juvenile	2	N34.682531° W118.190662°			Good		1	Yes
7362	Adult		N34.682693° W118.19053°	1		Good		4	No
7363	Juvenile	2	N34.682878° W118.191107°			Good		1	Yes
7364	Adult	3	N34.682899° W118.191404°			Good		5	No
7365	Adult	7	N34.682895° W118.191421°			Good		1	Yes
7366			N34.682867° W118.191513°			Dead		5	No
7367	Adult	8	N34.682695° W118.191577°	3	10	Fair	Light Damage	7	No
7368	Adult	6	N34.682729° W118.191699°			Fair	Light Damage	5	No
7369	Adult	6	N34.682979° W118.191691°	1	4	Good		4	No
7370	Adult	6	N34.683234° W118.191742°	2	2	Good		7	No

Tag #	Life Stage	Height	Location	Panicles	Branches	Condition	Health Assessment	Number of Trunks	Transplantable
7371	Adult	6	N34.683344° W118.191815°	2	3	Fair	Leaning	7	No
7372	Adult	8	N34.683322° W118.191591°	1	7	Good		4	No
7373	Juvenile	4	N34.683376° W118.191567°			Good		1	Yes
7374	Juvenile	3	N34.6827° W118.192171°			Good		1	Yes
7375	Adult	3	N34.68267° W118.192092°			Good		5	No
7376	Juvenile	3	N34.682495° W118.192099°			Good		1	Yes
7377	Adult	8	N34.682549° W118.191973°		2	Good		1	Yes
7378			N34.682388° W118.191515°			Dead			No

Table 4-2: Joshua trees that occur offsite, but remain within the 186 foot buffer of the properties boundaries. (Note: Visual inspection only.)

Number of Joshua Trees Offsite	Number of Trees Alive	Number of Trees Dead
0	0	0

5.0 CONCLUSIONS

There are 20 Joshua trees located on the property and 7 of the trees are 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), two branches or less; (4) density of trees (i.e., no clonal trees); (5) no exposed roots; (6) and trees that are not leaning over excessively. As indicated in Table 4-1, the majority of the Joshua trees which were not suitable for relocation are dead and lying on the ground.

As of September 22, 2020, the California Department of Fish and Wildlife temporarily listed the western Joshua tree (*Yucca brevifolia*) as an endangered species until a final decision is made in 2022. Therefore, any attempt to remove the Joshua tree from its current position will require an Incidental Take Permit (ITP).

The City of Lancaster's Municipal Code (Chapter 17.12.100) instructs 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. 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

- Brittingham, S. and W. Lawrence.
2000. Facilitation of *Yucca brevifolia* Recruitment by Mojave Desert Shrubs.
Western North American Naturalist 60(4), pp. 374-383.
- Hickman, James C.
The Jepson Manual Higher Plants of California. University of California Press.
Berkeley, CA. 3rd Edition. 1996.
- Holland, Robert F.
1986 Preliminary Description of the Terrestrial Natural Communities of California.
Prepared for the California Natural Diversity Database. California Department of Fish
and Game. Sacramento, California. 160 pp.
- Johnson, H.
1976 vegetation and Plant Communities of Southern California Deserts- a functional
view. In Symposium proceedings: Plant communities of Southern California. June
Latting, editor. California Native Plant Society, Spec. No. 2 Berkeley, CA.
- Munz, Philip A.
1974. A Flora of Southern California. University of California Press, Berkeley,
California. 1086 pp.

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 Ryan Hunter, Jessica Hensley and Brian Bunyi.

Date: February 24, 2022 Signed: *Ryan Hunter*
Jessica Hensley
Brian Bunyi

Field Work Performed by: Ryan Hunter
Environmental Scientist/Biologist

Jessica Hensley
Environmental Scientist/Biologist

Brian Bunyi
Environmental Scientist/Biologist



APPENDIX A

Figures



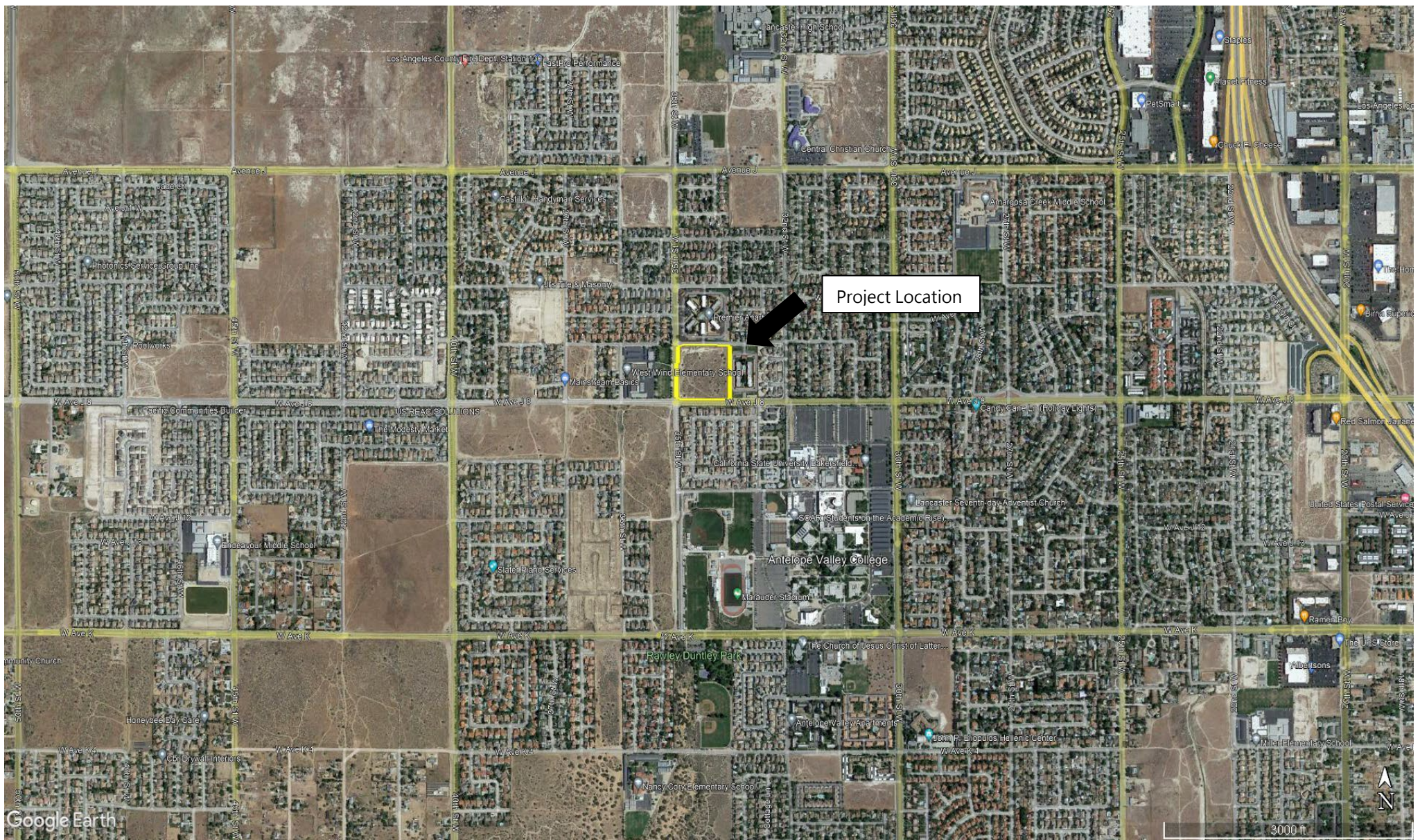


Figure 2: Vicinity Exhibit



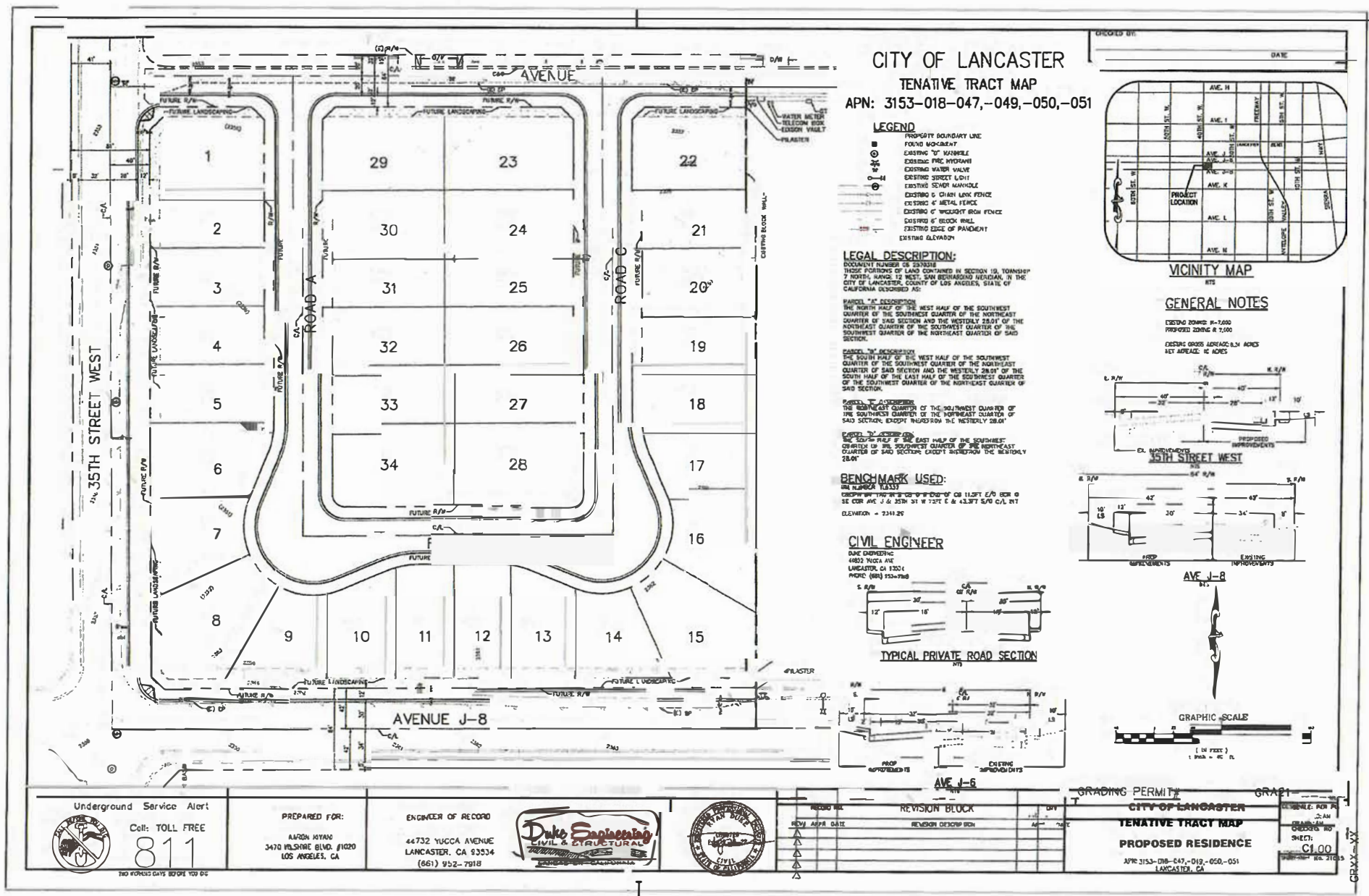


Figure 4:Site Plans

APPENDIX B

**City of Lancaster
Municipal Code: Chapter 17.12.100**

17.12.100 - Adjustments.

The director may reduce the required minimum lot width, minimum lot depth and yard requirements by an amount not to exceed 10%; may increase the maximum height regulations and maximum sign area by an amount not to exceed 10% of the amount specified by the C zone; where the director makes a finding in writing that the applicant has demonstrated:

- A. That there are special circumstances or exceptional physical characteristics applicable to the property including size, shape, topography, location or surroundings involved which are not generally applicable to other properties in the same vicinity with the same zoning; and
- B. That an adjustment (if authorized) will not constitute a grant of special privilege inconsistent with the limitations on other properties in the same vicinity with the same zoning; and
- C. The strict application of the requirements that are sought to be reduced or increased would result in practical difficulties and unnecessary hardship which is inconsistent with the purpose of the requirements; and
- D. That approval of the application will not diminish the visual appearance of the property or neighborhood; and
- E. Where applicable, that approval of the application will result in the need for less grading and disturbance of soils and natural vegetation. Where applicable, that approval of the application will result in the retention or preservation of native vegetation; particularly Joshua trees, California Juniper, or Creosote shrubs.

Any reduction or increase greater than those specified in this section shall be subject to the granting of a variance.

(Ord. 711 § 15 (part), 1995; prior zoning ord. § 221.027)

(Ord. No. 1016, § 2, 12-13-2016)

17.12.780 - Adjustments.

The director may reduce the required minimum lot width, minimum lot depth, yard requirements, and parking requirements by an amount not to exceed 10, and may increase the maximum height regulations and maximum sign area by an amount not to exceed 10% of the amount specified by the OP zone, where the director finds that the applicant has demonstrated that:

- A. There are special circumstances or exceptional physical characteristics applicable to the property, including size, shape, topography, location or surroundings involved which are not generally applicable to other properties in the same vicinity with the same zoning; and
- B. An adjustment (if authorized) will not constitute a grant of special privilege inconsistent with the limitations on other properties in the same vicinity with the same zoning; and
- C. The strict application of the requirements sought to be reduced or increased would result in practical difficulties and unnecessary hardship which is inconsistent with the purpose of the requirements.
- D. In the case of parking requirements only, a program exists whereby employees utilize, or will utilize, public transit, carpools, vanpools, bicycles, motorcycles, or walk to work, and that sufficient parking has been provided for the modes of travel utilized.
- E. That approval of the application will result in the need for less grading and disturbance of soils and natural vegetation, where applicable.
- F. That approval of the application will result in the retention/preservation of native vegetation; particularly Joshua trees, California Juniper, or Creosote shrubs, where applicable.

- G. That approval of the application will not diminish the visual appearance of the property or neighborhood.
- H. That approval of the application will not increase the overall average of the FAR to more than the maximum specified for the zone on all OP zoned properties within 500 feet of the site.

Any reduction or increase greater than those specified herein shall be subject to the granting of a variance.

(Ord. 651 § 11 (part), 1993; prior zoning ord. § 225.027)

17.16.090 - Adjustments.

The Director may reduce the required minimum lot width, minimum lot depth, yard requirements and parking requirements by an amount not to exceed 10%; may increase the maximum height regulations and maximum sign area by an amount not to exceed 10% of the amount specified by the I zones; and may increase the floor area ratio (FAR) up to an amount not to exceed 0.8; where the Director finds that the applicant has demonstrated that:

- A. There are special circumstances or exceptional physical characteristics applicable to the property including size, shape, topography, location or surroundings involved which are not generally applicable to other properties in the same vicinity with the same zoning; and
- B. An adjustment (if authorized) will not constitute a grant of special privilege inconsistent with the limitations on other properties in the same vicinity with the same zoning; and
- C. The strict application of the requirements sought to be reduced or increased would result in practical difficulties and unnecessary hardship which is inconsistent with the purpose of the requirements.
- D. In the case of parking requirements only, a program exists whereby employees utilize, or will utilize, public transit, carpools, vanpools, bicycles, motorcycles, or walk to work, and that sufficient parking has been provided for the modes of travel utilized.
- E. Approval of the application will result in the need for less grading and disturbance of soils and natural vegetation.
- F. Approval of the application will result in the retention/preservation of native vegetation; particularly Joshua trees, California Juniper or Creosote shrubs.
- G. Approval of the application will not diminish the visual appearance of the property or neighborhood.
- H. Approval of the application will not increase the overall average of the FAR to more than the maximum specified for the zone on all I zoned properties within 500 feet of the site.

Any reduction or increase greater than those specified in this section shall be subject to the granting of a variance.

(Prior zoning ord. § 241.027)

(Ord. No. [1070](#), § 4(Exh. A), 1-14-2020)