

APPENDIX C2
ARBORIST REPORT

ARBORIST REPORT
FOR THE
ALLEN AND CATARACT WAREHOUSE PROJECT
CITY OF SAN DIMAS, LOS ANGELES COUNTY, CALIFORNIA



In Support of the CEQA Analysis
Prepared for:

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AUGUST 4, 2022

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- Attachment 1** Arborist Tree Inventory Sheet
- Attachment 2** Arborist Tree Inventory Photo Appendix

1.0 PROJECT DESCRIPTION

The project proposes a two-unit warehouse building with an area of 64,422 square-feet. Unit 1 will have a footprint of 36,007 square feet with a mezzanine of 2,000 square feet. Unit 2 will have footprint of 24,415 square feet with a mezzanine of 2,000 square feet and a height of 41 feet. The project site is approximately 2.58 acres.

To accommodate the construction and project operations, the existing trees onsite will be removed during project construction. This Arborist Report (report) was prepared to survey all oak trees on the property following the scope of work presented in the proposal dated April, 2021.

1.1 Tree Survey

In line with the scope of work and with the tree preservation ordinance, a tree survey was conducted and the results of that survey are reported in this report. The purpose of this survey is to present the physical characteristics, mapped locations, impact and preservation totals, and appropriate mitigation for impacts to native and other protected trees. The tree quantities and related project impacts have been analyzed and are reported in the following sections.

2.0 REGULATORY CONTEXT

Chapter 18.162 Tree Preservation

The requirements for tree removal are detailed in The San Dimas Municipal Code Chapter 18.162, *Tree Preservation* (hereafter, tree preservation ordinance) establishes regulations for the protection and preservation of trees on developed and undeveloped property (City of San Dimas, 2006). The project site's property falls under the tree preservation ordinance's definition of undeveloped property because the property is under development plan review and because a zone change is being applied for; the tree preservation ordinance's definition defines an undeveloped property as follows:

“Undeveloped property,” for the purposes of this chapter, refers to any parcel or parcels of land which does not contain physical man-made improvements, and may be improved in conformance with the applicable development standards of the zoning classification where the property is located. Undeveloped property shall also refer to any parcel or parcels of land which may or may not contain improvements and on which development applications including, but not limited to, development plan review board, variance, zone change and subdivision, have been submitted.

Ordinance No. 913 § 1 (Exh. A), 1990 (City of San Dimas, 1990) in Chapter 18.162.010, *Purpose* of the tree preservation ordinance states the goal of protecting and preserving mature trees, as well as *“other trees which are determined to be desirable”*. The tree preservation ordinance defines a mature significant tree as follows:

“any tree within the city of an oak genus which measures eight inches or more in trunk diameter, and/or any other species of tree that measures ten inches or more in trunk diameter, and/or any multi-trunk tree(s) having a total circumference of thirty-eight inches or more; the multi-trunk tree shall include at least one trunk with a diameter of a minimum of four inches”.

The tree preservation ordinance requires that the trunk diameter must be measured at a point 36 inches above the ground at the base of the tree. The ordinance also requires that no significant trees

shall be removed or relocated on an undeveloped property without first submitting an arborist report and obtaining a tree removal permit from the city's Development Services, Planning Division.

Removal or relocation of mature significant trees must be approved by the director of development services or the development plan review board. This approval is subject to conditions as deemed necessary to implement this chapter's provisions. Section 18.162.060 *Conditions Imposed* of the tree preservation ordinance establishes the following as conditions of approval for tree relocation or removal:

1. *Tree relocation and/or two for one replacement with minimum fifteen-gallon box tree(s), or other replacement of equivalent value and size, within the subject property. The two for one replacement ratio may be reduced as determined by the final decision making body, if a minimum of one of the following additional findings are made: (1) The reduced replacement requirement is consistent with the purposes of this chapter, (2) the tree(s) in question are located where the impact of the tree removal on the community is limited (such as trees in a generally flat portion of the rear yard of a single-family house that are deemed to have less public benefit).*
2. *When on-site features, project constraints, and/or other considerations exist which prevent reasonable on-site relocation, relocation to an approved off-site location shall be permitted.*
3. *If said conditions are imposed, the owner will be responsible for all replacement and relocated trees for a minimum period of two years. If during this time the tree(s) is (are) declared unhealthy by a certified arborist as set forth in Section 18.162.090, the diseased trees shall be removed and replaced at the cost of the applicant, as set forth in Section 18.162.100*
4. *A maintenance agreement shall be submitted by the applicant and established for each replaced and relocated tree. The maintenance agreement and maintenance responsibility shall be transferred with the sale of the property if title to the property is transferred within the specified maintenance period. (Ord. 1165 § 4, 2006)*

In addition, the tree preservation ordinance states in Section 18.162.070 *Required Findings*, that mature significant trees can be removed if the preservation of those trees would constrain development of the project.

3.0 METHODOLOGY

A tree survey was conducted at the project site on January 7, 2022 by UltraSystems Environmental, Inc. (UltraSystems) International Society of Arboriculture (ISA) certified arborist Matthew Sutton (WE-12790-A). During the survey visit, Mr. Sutton performed various tasks associated with surveying, mapping, photographing, inventorying, and evaluating the condition of the property's trees, as described in the following sections.

In addition to mapping onsite trees, the UltraSystems arborist gathered tree characteristics data, which included identification to species (or genus in some instances), number of trunks per tree, trunk diameter, height, canopy diameter (i.e., tree spread), canopy circumference (i.e., drip line), and general health and vigor of trees that had trunk diameters that met the tree preservation ordinance's standard of a mature significant tree; whereas, smaller non-significant trees that did not meet that standard were mapped but not surveyed for all of the abovementioned characteristics. Trunk diameter measurements were collected at thirty-six inches above the ground at the base of the tree using a tree diameter tape as per the tree preservation ordinance's requirements. Tree height measurements were performed using a rangefinder hypsometer with clinometer feature. Tree

canopy circumference was determined using a Trimble Geo 7x unit and collecting data while walking the perimeter of the canopy.

The tree canopy radius was determined in post-processing by deriving the diameter based on the circumference using the formula $Circumference = 2 * \pi * (Radius)$. Once the radius was determined, then that value was multiplied by two to determine the canopy diameter. Only living tree parts were measured. The Trimble unit was also used to collect point data of each tree's location by placing the unit at the north side of the trunk and collecting satellite data for at least 20 seconds. All tree attribute data is recorded in **Attachment 1, Arborist Tree Inventory Sheet**.

Assessments of aesthetic and health factors for each tree, as well as an overall vigor rating, were documented (see **Attachment 1, Arborist Tree Inventory Sheet**). Surveyed trees were evaluated for overall health. Health was rated as excellent, very good, average, poor, very poor or dead, with ratings defined below. Photographs of both the surveyed trees and the non-surveyed trees are included in the photo appendix (**Attachment 2, Arborist Tree Inventory Photo Appendix**).

The following rating system and respective criteria were used to establish each overall health grade:

1. **Dead:** The tree is either dead or shows little sign of survival.
2. **Poor:** Greater than 75% of this tree shows evidence of stress, disease and/or pest infestation and appears to be in a state of rapid decline. The degree of decline may vary greatly.
3. **Average:** Semi-healthy in overall appearance, with 25% - 75% of the tree showing evidence of stress, disease and/or pest infestation.
4. **Good:** A healthy and vigorous tree with less than 25% of the tree affected by visible signs of stress, disease and/or pest infestation.
5. **Excellent:** A healthy and vigorous tree characteristic of its species and reasonably free of any visible signs of stress, disease or pest infestation.

Pursuant to the ISA's *Guide for Plant Appraisal* (CTLA & ISA, 2000), tree health and structure were evaluated with respect to five distinct tree components; roots, trunk(s), scaffold branches, small branches, and foliage. Each component of the tree was assessed with regard to health factors such as insect, fungal, or pathogen damage; fire damage; mechanical damage; presence of decay; presence of wilted or dead leaves; and wound closure. Components were graded as excellent, good, average, poor, and dead. This method of tree condition rating is comprehensive and results in ratings that are useful for determining the status of trees based on common standards. Trees in natural settings have important habitat value, as evidenced by numerous cavity nesters and insects that thrive on and within oak trees, even when they are considered in poor structural or health condition. However, this assessment focuses on tree condition with regard to health and structure for purposes of analyzing potential project impacts and where necessary, providing recommendations for mitigating potential tree hazards, such as trees with weak limb attachments, cavities and rot, or excessive lean.

Upon completion of field data collection and mapping, raw GPS data was post-processed using GPS Pathfinder Office (version 3.10), and individual tree location data were compiled and updated in a geographic information system (GIS). The digital tree locations were linked to individual tree identification numbers and associated tree attribute data. This dataset was then evaluated using

ArcGIS (version 10.1) software to determine the position of individual trees related to the proposed project development areas. Data resulting from this analysis was used to evaluate the individual tree impact totals presented in this report.

4.0 RESULTS

UltraSystems arborist Mr. Sutton surveyed 24 onsite trees and several saplings (i.e., trunk diameter of less than 3 inches), none of which is of the oak genus, and all of which are proposed for removal by the project proponent (see **Exhibit 1, Tree Inventory Map, Attachment 1, Arborist Tree Inventory Sheet, Attachment 2, Arborist Tree Inventory Photo Appendix, and Table 4.0-1**). Of the 24 onsite trees, 19 meet the criteria for mature significant trees according to the Tree Protection Ordinance, as defined in **Section 2.0, Regulatory Context** (see also **Exhibit 1, Tree Inventory Map**). The 19 surveyed mature significant trees consist of the following species and number per species: two native bishop pine (*Pinus muricata*), three white ash (*Fraxinus americana*), twelve pepper tree (*Schinus molle*), one carrotwood (*Cupaniopsis anacardioides*), and one Mexican fan palm (*Washingtonia robusta*) [SelecTree, 2022]. The fan palm and pepper tree species are classified as invasive species with limited ratings by the California Invasive Plant Council (Cal-IPC, 2006). Two mature significant trees, Tree MST1, a bishop pine, and Tree MST11, a pepper tree, will be protected in place, and the other 17 will be removed (see **Exhibit 1, Tree Inventory Map**).

The remaining five small, non-significant onsite trees and several saplings are not categorized as mature significant trees and are planned to be removed. They are not considered mature significant trees because their trunk diameters were too small to meet the criteria provided in the tree preservation ordinance. These trees and saplings were recorded to species and mapped. The small trees consisted of the following species and number per species: two pepper tree, pomegranate (*Punica granatum*), weeping fig (*Ficus benjamina*), and tree of heaven (*Ailanthus altissima*). There were approximately 25 tree of heaven saplings, all having a trunk diameter of fewer than three inches. The tree of heaven species is classified as an invasive species with a moderate rating by Cal-IPC (Cal-IPC, 2006). Refer to **Attachment 1, Arborist Tree Inventory Sheet** for a complete record of the characteristics of the surveyed mature significant trees and some of the characteristics of the non-significant trees.

Table 4.0-1 indicates the number and size of replacement trees required for each species of mature significant tree.

**Table 4.0-1
TREE REPLACEMENT REQUIREMENTS FOR REMOVAL TREES**

Common Name	Botanical Name	Number of Mature Significant Trees Proposed for Removal	Number of Replacement Trees (15-gallon box minimum)
Bishop pine	<i>Pinus muricata</i>	1	2
Pepper tree	<i>Schinus molle</i>	11	22
Mexican fan palm	<i>Washingtonia robusta</i>	1	2
Carrotwood	<i>Cupaniopsis anacardioides</i>	1	2

Common Name	Botanical Name	Number of Mature Significant Trees Proposed for Removal	Number of Replacement Trees (15-gallon box minimum)
White ash	<i>Fraxinus americana</i>	3	6
Total		17	34

5.0 MITIGATION AND RECOMMENDATIONS

The project proponent plans to remove 17 mature significant trees and 5 non-significant trees. In accordance with the City's tree preservation ordinance, which specifies that two replacement trees be planted for every removed mature significant tree, 34 replacement trees of at least a 15-gallon size will need to be planted on the project site by the project proponent (see **Table 4.0-1**).

In the project proponent's Preliminary Planting Plan (planting plan), there are plans to plant approximately forty 24-inch box trees of the following four species around the grounds surrounding the proposed warehouse: nine forest pansy redbud (*Cercis canadensis* 'Forest Pansy'), fifteen Brisbane box (*Tristania conferta*), seven Australian willow (*Ceijera parvifolia*), and nine Canary Island pine (*Pinus canariensis*). In addition, the planting plan calls for incorporating several species of shrubs, forbs and grasses into the site's landscaping. The planting plan satisfies the two-to-one replacement plant requirement of the tree preservation ordinance because it provides for more than the required 34 replacement trees of at least 15-gallon box trees.

Although the planting plan will likely satisfy the requirements of the tree preservation ordinance, it is recommended that the project component incorporate more native species into the plant palette. Native plant species can attract and serve as foraging territory for visiting wildlife, in particular, birds. Some recommended alternative native tree species to incorporate into the plant palette include desert willow (*Chilopsis linearis*) and sugarberry (*Celtis laevigata*). Some recommended drought-tolerant species to incorporate include pink Chitalpa (x. *Chitalpa tashkentensis* 'Pink Dawn'), thornless South American mesquite (*Prosopis* x Phoenix) and fringe tree (*Chionanthus virginicus*).

The arborist report was prepared to support the California Environmental Quality Act (CEQA) document which will provide detailed mitigation measure in accordance with the tree preservation ordinance.

Listed below are the recommendations for this project:

1. UltraSystems recommends prohibiting use of any Cal-IPC-rated invasive plant species in the landscape plan. Please consult with the project's Landscape Architect to ensure that invasive plant species are not used for this project.
2. UltraSystems recommends incorporating drought-tolerant and/or native trees and shrubs into the landscape plan for the project. The California Fish & Wildlife Department strongly suggests replacement of invasive and/or low-value ornamentals with native species that can be used for the same purpose. For a list of native species that can be used as "ornamental" landscape plants, please consult with local native plant nurseries such as the Theodore Payne Foundation, California Botanic Garden, and Tree of Life Nursery.

6.0 REFERENCES

Cal-IPC (California Invasive Plant Council), 2006. California Invasive Plant Inventory. Accessed online at: <https://www.cal-ipc.org/plants/inventory/> Accessed on April 9, 2022.

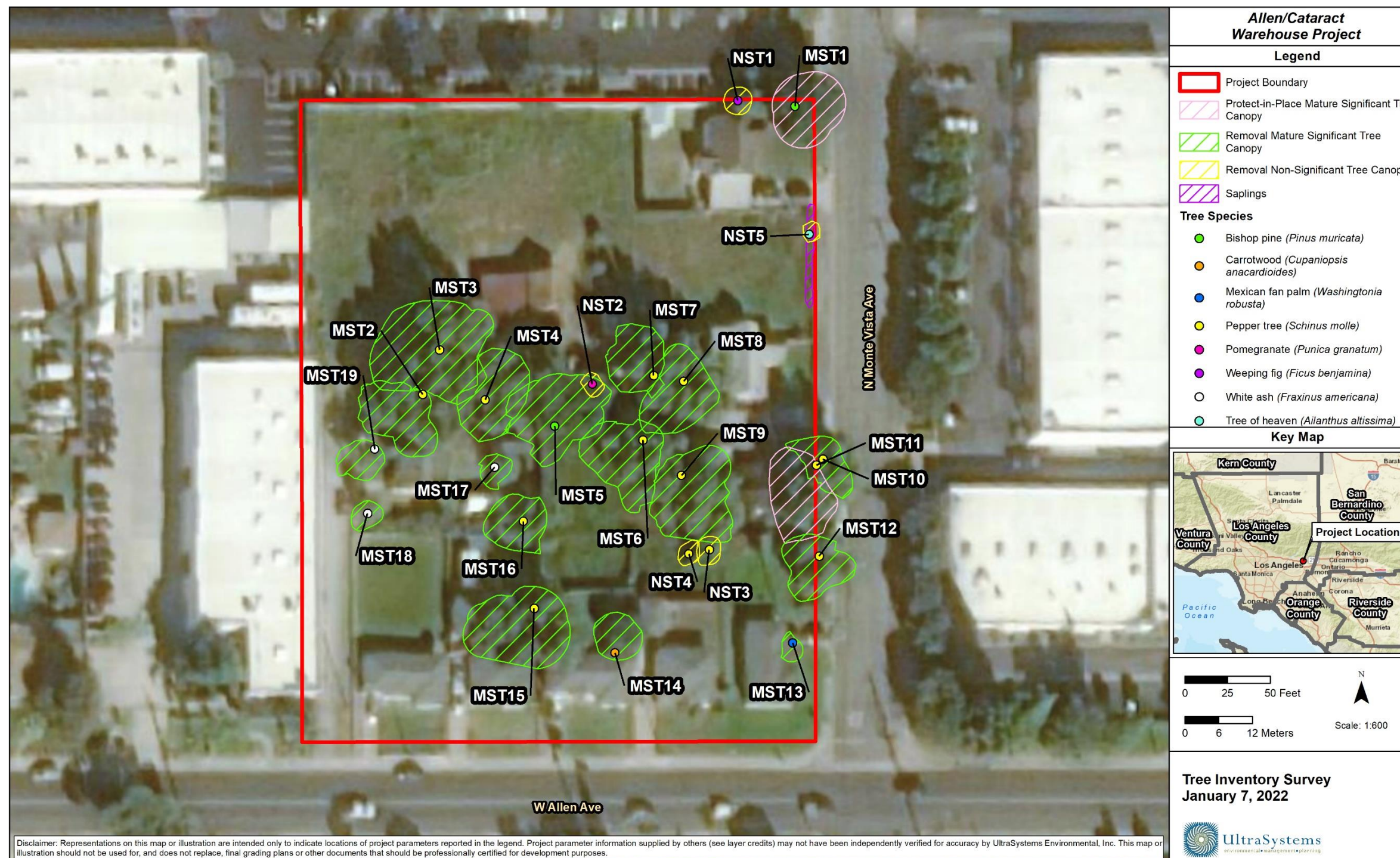
City of San Dimas, 1990. San Dimas, California, Municipal Ordinance No. 913 § 1 (Exh. A), Municipal Code Title 18, Zoning, Chapter 18.162.010 *Purpose*. Available at http://file.lacounty.gov/SDSInter/acwm/216023_SanDimasMC.pdf. Accessed on January 7, 2022.

City of San Dimas, 2006. San Dimas, California, Municipal Code Title 18, Zoning, Chapter 18.162 *Tree Preservation*. Available at http://file.lacounty.gov/SDSInter/acwm/216023_SanDimasMC.pdf. Accessed on January 7, 2022.

CTLA & ISA (Council of Tree and Landscape Appraisers, & International Society of Arboriculture. 2000. *Guide for Plant Appraisal*. Champaign, IL: International Society of Arboriculture.

SelectTree, 2022. California Polytechnic State University, San Luis Obispo. Urban Forest Ecosystem Institute. Available at <http://selecttree.calpoly.edu/>. Accessed on January 12, 2022.

Exhibit 1
TREE INVENTORY MAP



ATTACHMENT 1

ARBORIST TREE INVENTORY SHEET

**Attachment 1
Arborist Tree Inventory Sheet**

Tree #	Tree Fate	Common Name	Scientific Name	Latitude	Longitude	Number of Trunks	Trunk Diameter (in)	Height (ft)	Canopy Diameter (ft)	Canopy Circumference (ft)	Health & Vigor Rating 1=Dead; 5=Excellent	Comments
PIP1	Protect-in-Place	Bishop pine	<i>Pinus muricata</i>	34.11865373	-117.8116227	1	37.7	48.2	46.5	136.7	5	Healthy branch structure and crown balance. Lower branches pruned.
MST2	Removal	Peruvian pepper tree	<i>Schinus molle</i>	34.11819204	-117.8123425	1	38.2	57.2	56.4	135.9	4	Primary trunk lean is 20%. Canopy growth limited by canopy of T2. Healthy branch structure.
MST3	Removal	Peruvian pepper tree	<i>Schinus molle</i>	34.11826355	-117.8123097	1	42.8	61.3	77.7	203.2	4	Healthy branch structure and crown balance. Fruiting. Some sap oozing from cankers. Fungus on trunk.
MST4	Removal	Peruvian pepper tree	<i>Schinus molle</i>	34.11818323	-117.8122219	1	28.6	51.7	53.6	140.9	4	Healthy crown structure. Fruiting.
MST5	Removal	Bishop pine	<i>Pinus muricata</i>	34.11814077	-117.8120877	1	33.8	54.4	64.9	166.2	4	Healthy crown structure. Pruned up to 20' height. Rot and stripped bark on main branch.
MST6	Removal	Peruvian pepper tree	<i>Schinus molle</i>	34.11811818	-117.8119175	3	34.7	49.2	55.9	148.2	3	Major branch fallen and is growing parallel to ground. Otherwise healthy. Flowering.
MST7	Removal	Peruvian pepper tree	<i>Schinus molle</i>	34.11822165	-117.8118967	1	42.1	29.1	45.4	118.8	3	Two large branches have fallen. Canopy is unevenly balanced.
MST8	Removal	Peruvian pepper tree	<i>Schinus molle</i>	34.11821223	-117.8118387	1	30.7	65.4	56.1	140.4	5	Healthy branch structure.
MST9	Removal	Peruvian pepper tree	<i>Schinus molle</i>	34.1180613	-117.8118434	1	37.3	65.5	59.9	165.1	5	Healthy branch structure.
MST10	Removal	Peruvian pepper tree	<i>Schinus molle</i>	34.11808695	-117.8115703	1	29.0	41.1	46.4	99.7	4	Several cankers at base of trunk. Large branch has sheared off of tree.
MST11	Protect-in-Place	Peruvian pepper tree	<i>Schinus molle</i>	34.11807756	-117.8115832	1	37.0	47.9	53.7	142.3	4	Several cankers at base of trunk. Orange fungus of approx. 8"X6: on trunk. Healthy branch structure.
MST12	Removal	Peruvian pepper tree	<i>Schinus molle</i>	34.1179312	-117.811578	3	35.9	38.5	45.0	119.8	4	Healthy branch structure.
MST13	Removal	Mexican fan palm	<i>Washingtonia robusta</i>	34.11779221	-117.8116292	1	22.5	66.8	17.9	44.6	5	Rocks have become incorporated into base of tree. Part at root crown exposed.
MST14	Removal	Brazilian pepper tree	<i>Schinus terebinthifolia</i>	34.11777666	-117.8119724	1	11.0	24.2	30.3	88.2	4	Healthy crown structure. Flowering.
MST15	Removal	Peruvian pepper tree	<i>Schinus molle</i>	34.11784813	-117.8121283	1	61.4	38.1	61.9	169.5	4	Some damage to trunk as trunk has grown into property fencing. Healthy crown structure.
MST16	Removal	carrotwood	<i>Cupaniopsis anacardioides</i>	34.11798807	-117.8121487	1	26.0	30.1	38.8	110.5	5	Some central trunks are dead. Most other trunks are healthy with healthy canopies.
MST17	Removal	white ash	<i>Fraxinus americana</i>	34.11807496	-117.8122041	1	11.0	28.1	19.5	58.6	4	Some stress points at base of trunk. Healthy canopy structure.
MST18	Removal	white ash	<i>Fraxinus americana</i>	34.1180013	-117.8124494	1	10.2	25.8	18.8	54.8	5	Healthy canopy structure.

**Attachment 1
Arborist Tree Inventory Sheet**

Tree #	Tree Fate	Common Name	Scientific Name	Latitude	Longitude	Number of Trunks	Trunk Diameter (in)	Height (ft)	Canopy Diameter (ft)	Canopy Circumference (ft)	Health & Vigor Rating 1=Dead; 5=Excellent	Comments
MST19	Removal	white ash	<i>Fraxinus americana</i>	34.11810416	-117.812435	1	15.9	27.9	27.9	79.5	5	Damage to bark as base of tree. Healthy canopy structure.

ATTACHMENT 2

ARBORIST TREE INVENTORY PHOTO APPENDIX

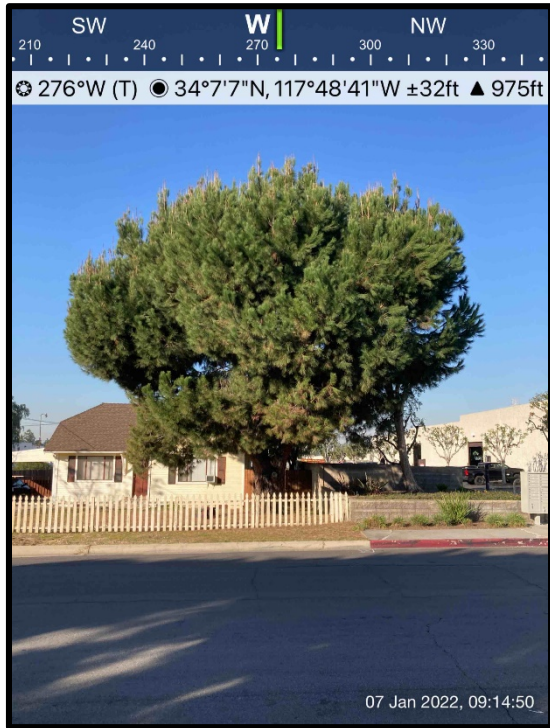


PHOTO 1: West facing view of Tree MST1, a bishop pine tree that will be protected in place. Date: January 7, 2022.



PHOTO 2: East facing view of Tree MST2, a Peruvian pepper tree. Date: January 7, 2022.



PHOTO 3: Fungus observed growing on Tree MST3, a Peruvian pepper tree. Date: January 7 2022.



PHOTO 4: Southwest facing view of Tree MST4, a Peruvian pepper tree. Date: January 7, 2022.

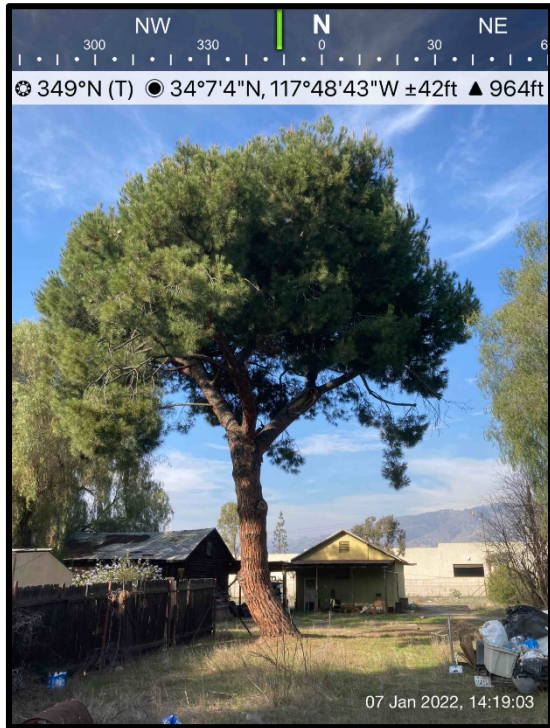


PHOTO 5: North facing view of Tree MST5, a bishop pine. Date: January 7, 2022.

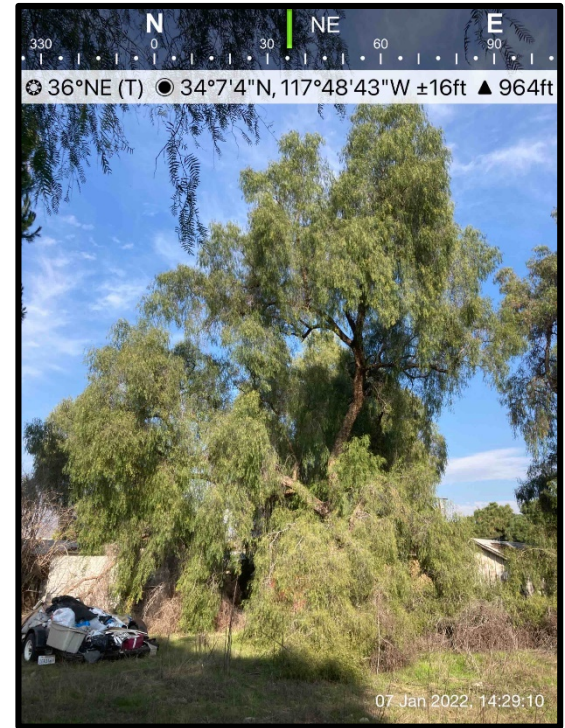


PHOTO 6: Northeast facing view of Tree MST6, a pepper tree. Date: January 7, 2022.

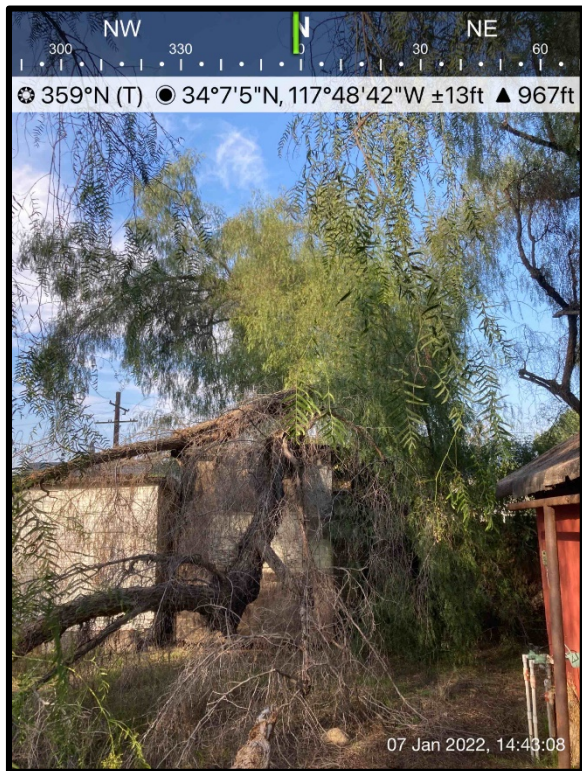


PHOTO 7: North facing view of Tree MST7, a pepper tree. Date: January 7, 2022.

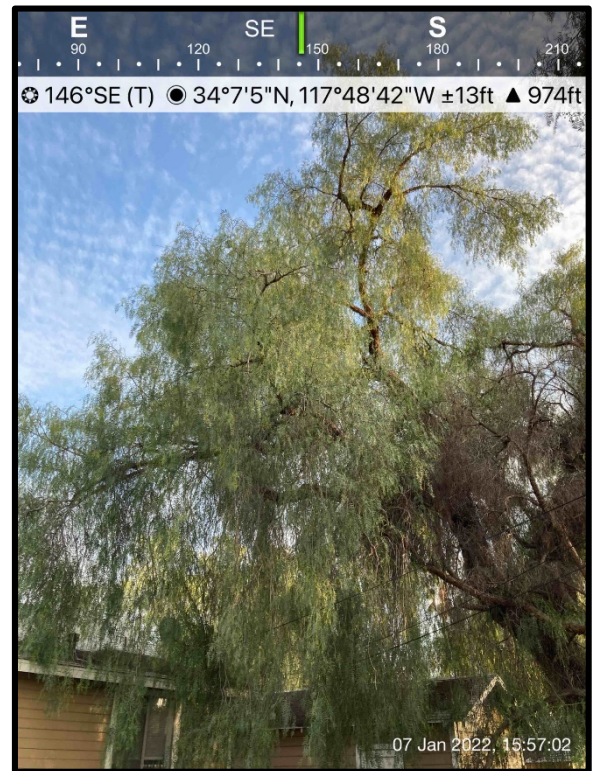


PHOTO 8: Southeast facing view of Tree MST8, a pepper tree.. Date: January 7, 2022.



PHOTO 9: West facing view of Tree MST9, a pepper tree. Date: January 7, 2022.

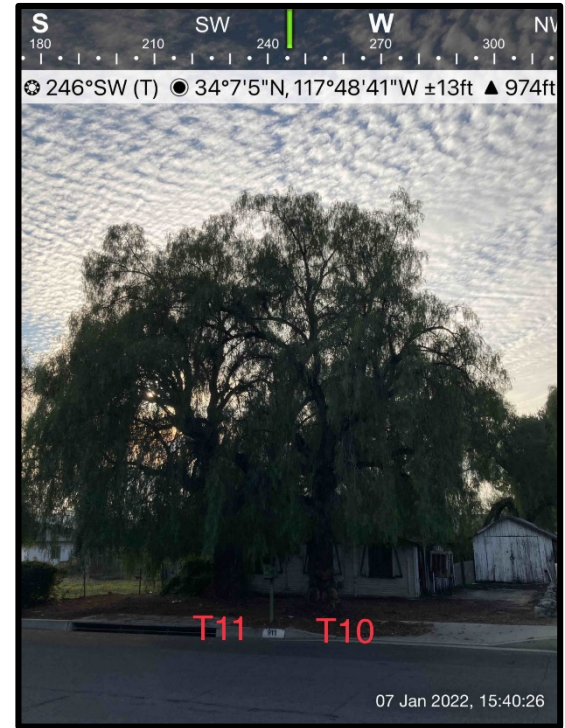


PHOTO 10: Southwest facing view of Tree MST10 and Tree MST11, both pepper trees. Tree MST11 will be protected in place. Date: January 7, 2022.

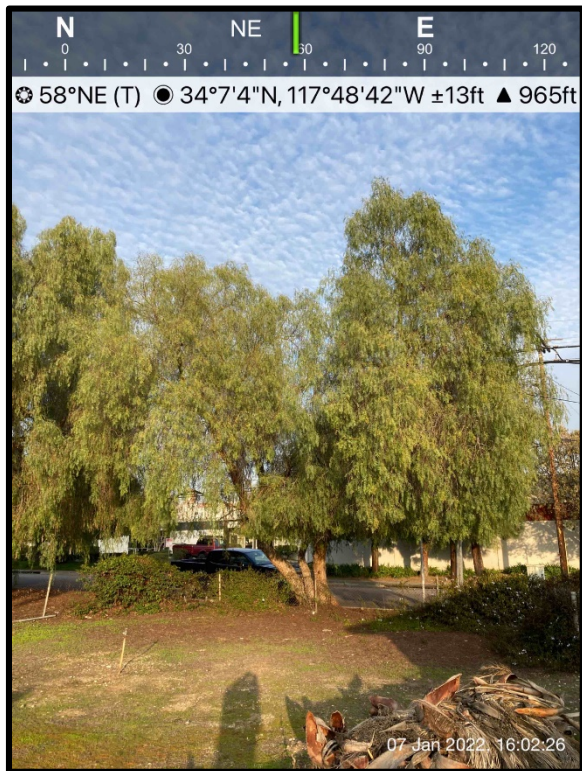


PHOTO 11: Northeast facing view of Tree MST12, a pepper tree. Date: January 7 2022.



PHOTO 12: North facing view of Tree MST13, a Mexican fan palm. Date: January 7, 2022.



PHOTO 13: Southeast facing view of Tree MST14, a carrotwood tree. Date: January 7, 2022.



PHOTO 14: Southwest facing view of Tree MST15, a pepper tree. Date: January 7, 2022.



PHOTO 15: Southeast facing view of Tree MST16, a pepper tree. Date: January 7 2022.



PHOTO 16: Northeast facing view of Tree MST17, a white ash. Date: January 7, 2022.



PHOTO 17: Southeast facing view of Tree MST18, a white ash.
Date: January 7, 2022.

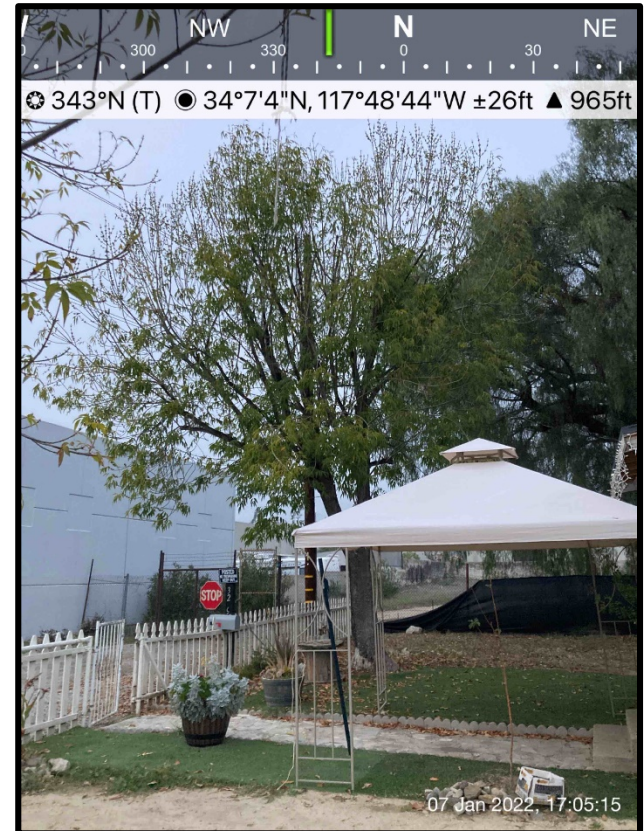


PHOTO 18: Northwest facing view of Tree MST19, a white ash. Date:
January 7, 2022.



PHOTO 19: Northwest facing view of some of Tree NST5, a
heaven tree and saplings on the eastern edge of the project site,
adjacent to North Cataract Avenue. Date: January 7, 2022.



PHOTO 20: Northwest facing view of Tree NST1, a weeping
fig, that is a non-significant tree. Date: January 7 2022..

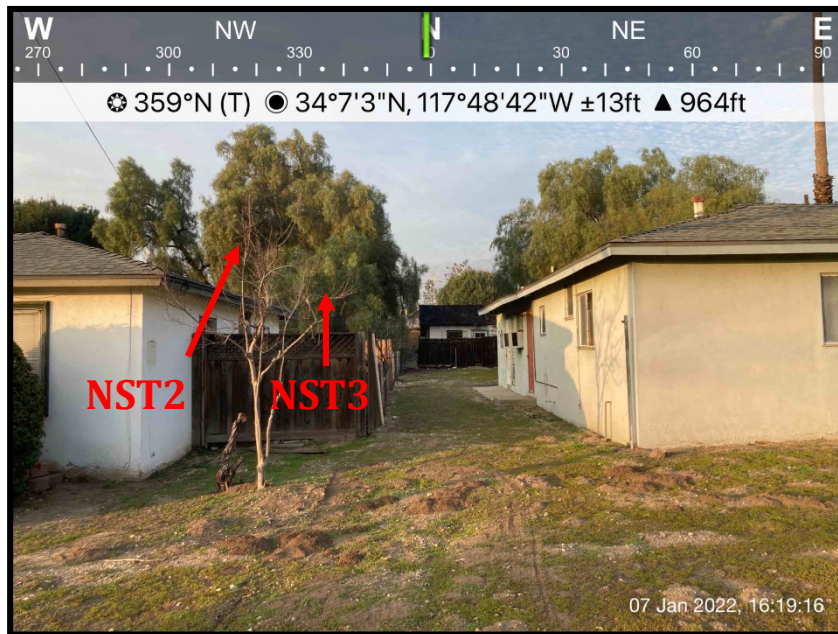


PHOTO 21. North facing view of Tree NST2 and Tree NST3, two pepper trees that are both non-significant trees. Date: January 7 2022..



PHOTO 22. Northeast facing view of Tree NST4, a pomegranate tree that is a non-significant trees. Date: January 7 2022..