
APPENDIX H
ARBORIST STUDY

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asca AMERICAN SOCIETY *of*
CONSULTING ARBORISTS

**Inventory and Tree Condition Report Sierra Gate Center as per
Fontana Tree Preservation Ord 1126, § 1, 8-16-94**

Prepared for

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Summary

Sierra Gate Center is a construction project in Fontana, California. As per Fontana building code, a tree preservation ordinance requires an inventory of existing trees on the site to be performed by an Arborist. Certified by the International Society of Arboriculture.

I was asked to visit the site, inspect the trees, collect the required information to analyze and produce a condition and inventory report. The city of Fontana preservation ordinance defines the appropriate number of replacement trees to mitigate the loss taken in this development project. My report summarizes the required replacement trees.

There are 49 trees on this parcel. Of the 49 trees, there are eight different genera and 11 different species. This report details the trees' size and condition on-site and provides a mitigation plan as per the preservation requirements in the city preservation ordinance.

There is a total of 156 replacement trees required. Of the 156 replacement trees required, one tree required will be a 48- inch box. Twenty-eight (28) trees of 36-inch box size, 120 trees 24- inch box size, and seven (7) #15-gallon size also are required.

Background

North Gate Real Estate is planning a construction project called Sierra Gate Center at the old Rock Honda Site in Fontana, California. The site is north of San Bernardino Ave and east of Sierra Ave. Under Article III -the city of Fontana Preservation of Heritage, Significant, and Specimen Trees Ordinance No. 1126 § 1, 8-16-94 requires an inventory of all existing trees on the proposed construction site. The Purpose within the city building regulations is to preserve any trees defined as Heritage, Significant, and Specimen trees.

It is my understanding within the new construction plans for Northgate Market and surrounding shops, the builder's agent will provide a brand-new landscape plan. The existing trees are not desired for retention or relocation, and the existing trees will be mitigated as required by the said city building code.

Assignment

Northgate Real Estate asked that I provide a tree Inventory and condition report for The Sierra Gate Center proposed construction project. My scope of work is to:

- Review the City of Fontan tree preservation ordinance
- Visit the site to clarify boundaries and trees in question
- create a site map showing the location of all existing trees in inventory.
- tag each tree with an identification number tag.
- measure and record the diameter of all trees.
- photograph each tree.
- assess and record the condition of all trees.

Once the inventory is complete, all the information from species, size, and condition will be analyzed and used to mitigate the environmental impact by providing other replacement trees as per Ordinance No. 1126.

Observations

There are no **Heritage, Specimen, or Windrow**¹ Significant or protected trees on this parcel. Also, no state, federal or other protected trees. Appendix E A Photo Inventory of Tree #s 1-49 contains observations and conditions. Appendix D summarizes the conditions and tree replacement requirements.

Under Ordinance No. 1126 § 1, 8-16-94 Section 28-67 Tables III and IV are used to replace what is called Other Trees. Trees under and over 7 inches in diameter have different replacement requirements. Section III and IV are included and defined in this report.

Sections of this report are used to organize the data required and are found in the following appendices.

- Appendix A - Site Map
A site map of the parcel that shows the location of all trees.
- Appendix B - Master Species List
provides a count of all the different species.
- Appendix C - Fontana Protected Tree List
- Appendix D - Mitigation Requirements
a separate list of all 49 species and a list of the required replacement trees.
- Appendix E - Photo Inventory of Tree #s 1-49
a photo record of all the trees on-site with detailed photos of the current conditions.

Each tree in the inventory has a numbered identification tag attached to the trunk at approximately five to six feet from ground level.

Discussion

It is my understanding that the site has been vacant for at least five years. Soil conditions are dry, compacted, and lack fresh organic amendments. The trees show signs of water stress as well as structural defects, and pests. Many of the issues are a result of neglect and pruning practices that do not follow industry standards or best management practices. Some of the trees are better suited for our climate, drought conditions, free of pests, and are reflected in the condition rating. The lack of irrigation and soil conditions have contributed to surface roots and infrastructure damage to sidewalk, pavement, and planter island curbs.

¹ Words in bold (other than section headings) may be unfamiliar to the reader. Refer to the Glossary.

Only the best quality trees that receive proper regular care, adequate irrigation, managed soil, and free pests and structural flaws should be selected for retention, relocation, or transplanting. I understand that the development team wishes to mitigate tree loss and start fresh with healthy specimens.

The photographic inventory describes the standard industry size of trees by diameter at breast height (DBH) and each tree's condition in detail on the site. The Mitigation Requirements identifies the trees by name and number, showing the trees' condition in percent rating and the required replacement size and number of replacements.

Conclusion

There are 49 trees on this parcel. Of the 49 trees, there are eight different genera and 11 different species. Most trees are poor to fair condition due to neglect, water stress, poor soil conditions, structural defects, and improper maintenance. The prior maintenance did not address early training for structural. As a result, there are many defects.

Tree topping common on this site and is a destructive and harmful pruning practice. Topping creates weak structure and hazardous conditions, but it also shortens the useful lifespan of amenity, landscape, shade, and ornamental trees. Furthermore, poor pruning practices (topping) or failing to follow ISA Best Management Practices create more frequent maintenance, lowers tree values, and reduces environmental benefits that benefit the community.

As per the city preservation requirements, there are a total of 156 replacement trees required. Of the 156 replacement trees required, one tree required will be a 48- inch box. Twenty-eight (28) trees of 36-inch box size, 120 trees 24- inch box size, and seven (7) #15-gallon size are required.

Glossary

bulk density – is an indicator of soil compaction. It is calculated as the dry weight of soil divided by its volume. Bulk density is dependent on soil texture and the densities of soil minerals salt, salt, and Clay and organic matter particles, as well as their packing arrangement.

Codominant branches/codominant stems: forked branches nearly the same diameter, arising from a common union and lacking a branch collar; may have included bark

DBH- trunk diameter measured at 4.5 feet (1.4 m) above soil line in the United States and some other countries; at 1.3m in the United Kingdom (in forestry applications), Canada, and other countries; and 1.5 m in UK arboriculture.

Heritage Tree: (1) a tree associated with a place, building, natural feature or event of local, regional or national historic significance as identified by city council resolution. (2) Is representative of a significant period of the city's growth or development (windrow tree, European Olive tree; or (3)Is a protected or endangered species as specified by federal or state statute; or (4) is deemed historically or culturally significant by the city manager or his or her designee because of size, condition, location or aesthetic qualities.

Included bark: bark that becomes embedded in the union between branches and trunks or between codominant stems. Lacks wood connections, resulting in a weak structure.

Inventory Report: a report where the inventory data is separated into categories such as species, size classes, and data or assessments are made of the quantity and quality.

Significant tree-protected trees as defined by the city of Fontana Southern California Black Walnut, Coast Live Oak, Deodar Cedar, California Sycamore, and London Plane

Soil compaction: compression of soil, often as a result of vehicle or heavy equipment traffic, that breaks down soil aggregates and reduces soil volume and total pore space, especially macropore space

Specimen Tree: is defined as a mature tree (which is not a heritage or significant tree) which is an excellent example of its species in structure and aesthetics and warrants preservation, relocation or replacement...

Standards: established or widely recognized authority of acceptable performance.

Stem Girdling Root: root that grows tangentially across the stem, causing vascular constriction.

Tree inventory: a record of the attributes, location and characteristics of individual trees within a defined geographic area.

Windrow Trees: a Series of trees (minimum of four), usually a variety of eucalyptus, planted in a closely spaced line or no more than 10 feet apart to provide a windbreak for the protection of property and or agricultural crops.

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Assumptions and Limiting Conditions

Any legal description provided to the consultant/appraiser is assumed correct. Any titles and ownership to any property are assumed good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.

It is assumed that any property is not in violation of any applicable codes, ordinances, statutes, or other governmental regulations.

Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.

The consultant shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.

Loss or alteration of any part of this part of this report invalidates the entire report.

Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior express written or verbal consent of the consultant/appraiser.

Neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media, without my prior expressed written or verbal consent.

This report and any values expressed herein represent my objective and independent opinion. My fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

Sketches, diagrams, graphs, or photographs in this report, are intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.

Unless expressed otherwise, information contained in this report covers only those items that were examined and reflects the condition of those items at the time of detailed inspection.

Certificate of Performance

I certify that the statements made in this report are true and correct to the best of my knowledge. The opinions expressed are my personal, unbiased professional opinions and conclusions, and I have no present or prospective interest in the vegetation that is the subject of this report. I have no personal interest or biases with respect to the parties involved and have based my assessment on the situation as I have seen it. My compensation is not contingent on the reporting or a predetermined outcome or direction that favors the cause of the client, the attainment of a stipulated result, or the occurrence of a subsequent event.

My opinions and conclusions were developed, and this report prepared in conformity with standard arboricultural practices, my expertise, and experience. If further documentation or evidence is reviewed, these opinions could be changed, altered, or maybe strengthened.

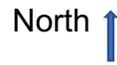
I further certify that I made a personal inspection of the property, and no one provided any significant professional assistance to this report.



Mark Porter, Consulting Arborist

Appendix A - Site Map

Northgate Market Project Fontana, CA



Appendix B - Master Species List (49 trees, 8 genera, 11 species)

Species	Count	Protected	DBH range	Conditions affecting health, structure or form
Silver Dollar Gum (<i>Eucalyptus polyanthemos</i>)	10	Not protected	11-21"	Tortuous beetle, lerp psyllid, poor branch structure, drought stress, soil conditions contributing to chlorotic leaves, improper tree topping, moderate risk of branch failure
Flaxleaf Paperbark (<i>Melaleuca linariifolia</i>)	9	Not protected	9-15"	Poor pruning practices and structural defect (codominant stems with bark inclusion), as tree mature structure failure are probable without crown reduction pruning
Mondell Pine (<i>Pinus eldarica</i>)	8	Not protected	13-15"	Soil conditions and water stress have influenced surface rooting, pests and plant stress contributing to low vigor.
Australian Willow (<i>Geijera parvifolia</i>)	6	Not protected	10-12"	Root damage potential low, drought tolerant, fire resistant, adaptable to a wide range of soil pH and soil texture (sand, clay, loam), structural issues can be managed
Nichol's Willowleaf Peppermint (<i>Eucalyptus nicholii</i>)	4	Not protected	4-8"	Water stress x 5 years contributing to low vigor, poor woundwood growth and die back of bark and canopy parts.
Indian Laurel Fig (<i>Ficus microcarpa</i>)	4	Not protected	12-14"	Water stress, surface root growth, hardscape damage, poor scaffold branches training

Species	Count	Protected	DBH range	Conditions affecting health, structure or form
Evergreen Ash (<i>Fraxinus uhdei</i>)	2	Not protected	5-7"	Crown die back, scorched leaves, Paul structural development
Flooded Gum (<i>Eucalyptus rudis</i>) DBH 13"	2	Not protected	8-13"	Kinked roots, infrastructure damage to walk and asphalt, water stress, lerp psyllid, codominant stem (weak attachment)
Red Iron Bark (<i>Eucalyptus sideroxylon</i>)	1	Not protected	8"	Tortoise beetle, large scaffold branch aspect ratio near 70% (weak attachment), water stress, chlorotic foliage, trunk lean, epicormic shoots
Fruitless mulberry (<i>Morus alba</i>) "Fruitless"	1	Not protected	8"	Crown dieback, leaves stunted, codominant stem (weak attachment), overall poor condition

Appendix C- Fontana Protected Tree List (none on this parcel)

As per Fontana ordinance No. 1126 § 1, 8-16-94 there are **no heritage, significant or specimen trees** on this property (see Definition sections 28-63).

Significant means any tree that is one of the following species:

Genus/species	Common name
Juglans californica	Southern California Black Walnut
Quercus agrifolia	Cost Live Oak
Cedrus deodara	Deodar Cedar
Platanus racemosa	California Sycamore
Platanus acerfolia	London Plane

There are no **Heritage** trees on this parcel (1) associated with a place, building, natural feature or event of local, regional or national historic significance as identified by city council resolution. (2) Is representative of a significant period of the city's growth or development (windrow tree, European Olive tree; or (3) Is a protected or endangered species as specified by federal or state statute; or (4) is deemed historically or culturally significant by the city manager or his or her designee because of size, condition, location or aesthetic qualities.

There is no **Windrow** (closely spaced Eucalyptus planted together to protect agriculture crop)s.

There are no **Specimen** trees (an excellent example of the species) on this parcel.

Appendix D - Mitigation Requirements as per Fontana ordinance No. 1126 § 1, 8-16-94
Section 28-67 Tree Replacement Relocation

For **Heritage and Significant tree replacement** use table number I for trees **under 7 inches in diameter.- Not applicable on this project.**

For **Heritage and Significant tree replacement** use table number II for trees **under 7 inches in diameter.- Not applicable on this project.**

Other Tree Replacement Table No. III for Trees Under 7 inches in Diameter

Trunk Diameter (Approximate) Replace With

Scale Rating 10%-100%		0.75"/	2"/	3.25"/	4.5"/	6"/
Very poor	Below 45%	1/15 gal.				
Poor	45% - 55%	1/15 gal.				
Average	60% - 70%	1/15 gal.	1/15 gal.	1/24" box	1/36" box	1/48" box
Very good	75% - 85%	1/15 gal.	1/24" box	1/36" box	1/48" box	2/48" box
Excellent	95%-100%	1/15 gal.	1/24" box	1/36" box	2/48" box	3/48" box

Other Tree Replacement Table # IV for Trees Seven Inches in Diameter or Greater

Scale Rating (10%-100%)		Number Removed	Replace With	Minimum size
Very poor	Below 45%	1	1	15 gallon
Poor	45% - 55%	1	1	15 gallon
Average	60%	1	4	24" box
	65%	1	4	24" box
Good	70%	1	4	36" box
Very good	75%	1	4	36" box
	80%	1	4	48" box
	85%	1	4	48" box

Inventory, Rating and Mitigation as per Fontana ordinance No. 1126 § 1, 8-16-94

Tree #	Name	DBH ²	Scale Rating 10%-100%	Number Removed	Replace with	Minimum size
1	Flooded Gum	13	60%	1	4	24" box
2	Mondell Pine	13	70%	1	4	36" box
3	Flooded Gum	8	60%	1	4	24" box
4	Mondell Pine	15	60%	1	4	24" box
5	Mondell Pine	14	70	1	4	36" box
6	Mondell Pine	15	70	1	4	36" box
7	Mondell Pine	15	65%	1	4	24" box
8	Mondell Pine	16	65%	1	4	24" box
9	Mondell Pine	13	70%	1	4	36" box
10	Mondell Pine	14	65%	1	4	24" box
11	Red Iron Bark	8	60%	1	4	24" box
12	Nichol's Willowleaf Peppermint	5	55%	1	1	15 gallon (Table no. III)
13	Evergreen Ash	5	50%	1	1	15 gallon (Table no. III)
14	Silver Dollar Gum	14	65%	1	4	24" box

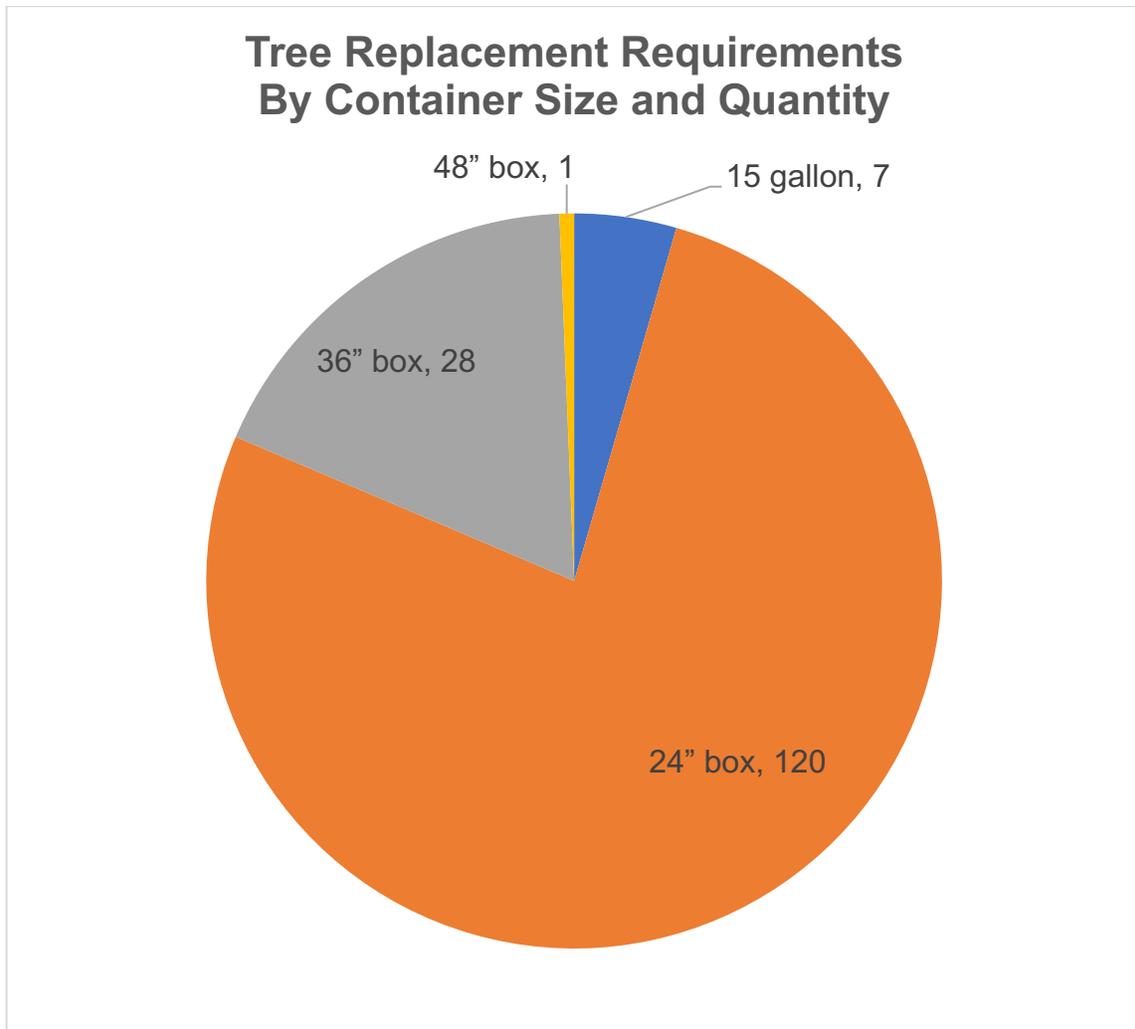
Diameter at Breast Height (DBH). Tree diameter measured at 4.5 feet (1.4 m) above the soil line in the United States and other countries at 1.3 m in the United Kingdom in forestry applications, Canada, and other countries; and 1.5 M in UK arboriculture.

15	Nichol's Willowleaf Peppermint	8	60%	1	4	24" box
16	Nichol's Willowleaf Peppermint	8	55%	1	1	15 gallon (table IV)
17	Silver Dollar Gum	14	65%	1	4	24" box
18	Silver Dollar Gum	13	60%	1	4	24" box
19	Flaxleaf Paperbark	10	65%	1	4	24" box
20	Indian Laurel Fig	12	70%	1	4	36" box
21	Indian Laurel Fig	13	65%	1	4	24" box
22	Indian Laurel Fig	14	65%	1	4	24" box
23	Indian Laurel Fig	12	65%	1	4	24" box
24	Australian Willow	12	70%	1	4	36" box
25	Flaxleaf Paperbark	15	65%	1	4	24" box
26	Flaxleaf Paperbark	10	65%	1	4	24" box
27	Flaxleaf Paperbark	17	65%	1	4	24" box
28	Silver Dollar Gum	19	65%	1	4	24" box
29	Silver Dollar Gum	11	60%	1	4	24" box
30	Australian Willow	10	65%	1	4	24" box
31	Australian Willow	10	65%	1	4	24" box
32	Flaxleaf Paperbark	13	65%	1	4	24" box
33	Flaxleaf Paperbark	9	65%	1	4	24" box
34	Australian Willow	10	70%	1	4	36" box
35	Australian Willow	12	60%	1	4	24" box
36	Silver Dollar Gum	14	55%	1	1	15 gallon

37	Silver Dollar Gum	17	50%	1	1	15 gallon
38	Nichol's Willowleaf Peppermint	4	65%	1	1	15 gallon
39	Evergreen Ash	7	50%	1	1	15 gallon
40	Silver Dollar Gum	14	60%	1	4	24" box
41	Bottlebrush	9	60%	1	4	24" box
42	Bottlebrush	10	65%	1	4	24" box
43	Silver Dollar Gum	18	60%	1	4	24" box
44	Silver Dollar Gum	21	65%	1	4	24" box
45	Flaxleaf Paperbark	14	65%	1	4	24" box
46	Flaxleaf Paperbark	15	65%	1	4	24" box
47	Flaxleaf Paperbark	21	65%	1	4	24" box
48	Australian Willow	10	80%	1	4	48" box
49	Fruitless Mulberry	6	50%	1	1	15 gallon (Table no. III))

Total Replacement Trees

Container Size	Quantity
48-inch box	1
36-inch box	28
24-inch box	120
#15 gallon	7



Analysis using a Rating System

The rating of HEALTH uses typical school grades of A, B, C, D or F.

“A” = excellent HEALTH, not excessive, but having good foliage color, leaf size, canopy density, and twig elongation. **“B”** = good health, not excessive, having good foliage color, average leaf size and density, and twig elongation. **“C”** = fair health, little or no dieback, fair leaf color, size and density, adequate to continued life.

“D” = poor health, some dieback or poor leaf color, size and/or density, presently declining, but recoverable.

“F” = dead or dying, with little or no chance of recovery.

The rating of STRUCTURE also uses typical school grades of A, B, C, D or F.

“A” = excellent STRUCTURE, ideal for the species, little or no risk of failure.

“B” = good structure, not more than minor defects in attachment, limb taper or length and no significant decay. **“C”** = fair structure, adequate branch attachment, taper, no significant decay, but correctible defects.

“D” = poor structure, some defects or decay, but acceptable risk level, with corrective pruning

“F” = hazardous and likely to drop limbs or topple, not correctible.

The trees were measured by their trunk diameter at 4.5 feet above grade (DBH – diameter at breast height). DBH measurements were made using a Forestry Supplies Tree Diameter Tape. Multi trunk trees are converted to diameter using a cross-section area technique as described by the Council of Tree and Landscape Appraisers (CTLA) Guide for Plant Appraisal 9th Edition. The condition percent was reconciled (cross checked) using a random sample and compared using the CTLA 32-point system.

Abbreviations (when used)

1s = one-sided

Cod = codominant

Cr = crowded limbs, roots or canopies

Db = dieback

DBH = trunk diameter at 4.5 feet above grade.

Dk = decay DL=dogleg

Epi = epicormic shoots

Hd = headed

Inc = included bark

Inj = injury (Tinj=trunk injury, Binj=basal injury)

2long = excessive limb length Lt = lion tailed OP = over pruned

RF = root flare, aka root crown Sh = shallow rooted.

Sp = sparse

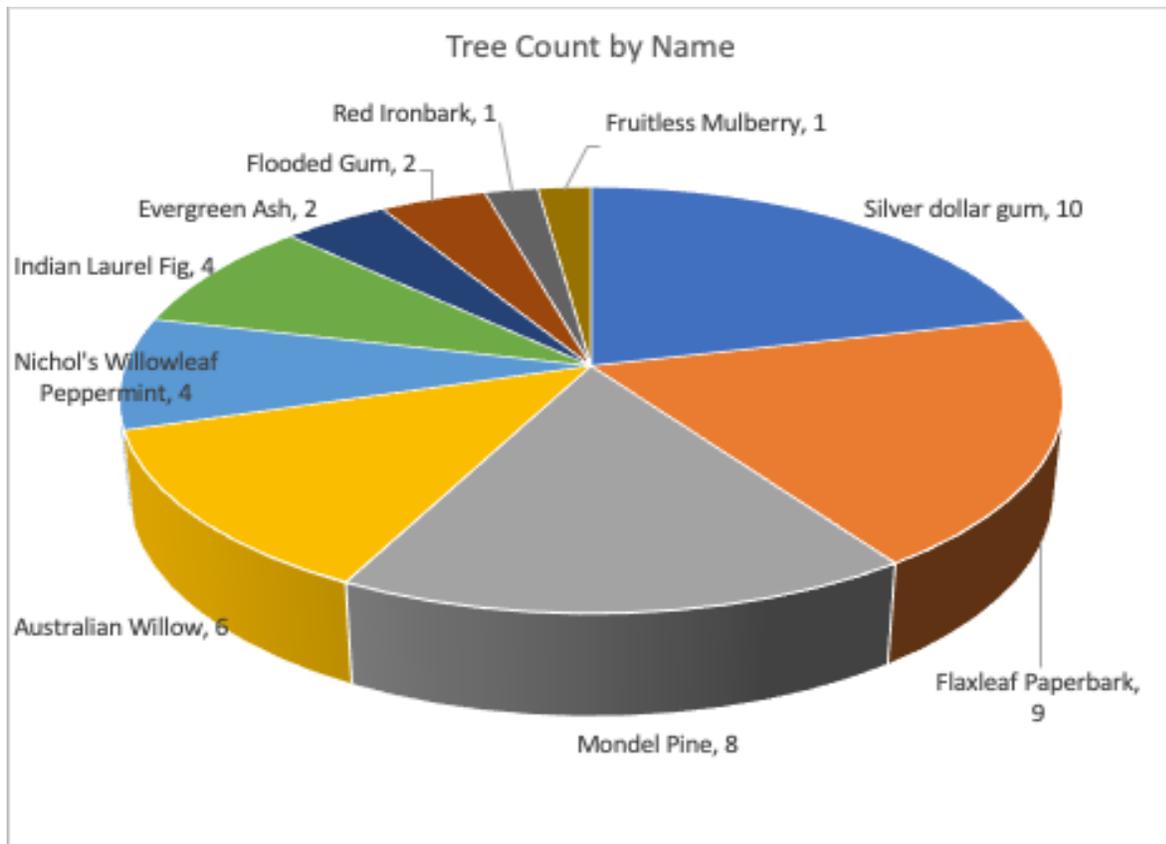
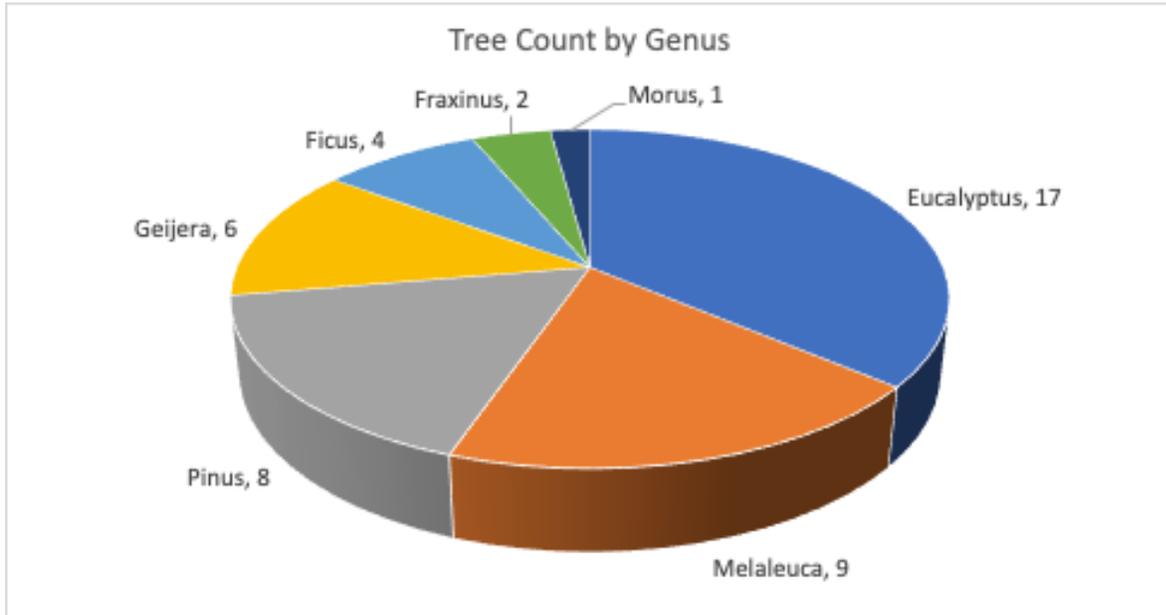
TD = tear down

TO = tear out

Top'd = topped

Xing = crossing branches

Tree Count by Genus and Common Name



Appendix E -Photo Inventory of Trees #s 1-49

Tree 1

Flooded Gum

(*Eucalyptus rudis*)

DBH 13"



Tree 1 -Flooded Gum



Emerging population of lerp psyllid pest. Chlorotic foliage. Water stress x 5 years.
kinked root, restricted soil volume, root buttress injury.
Codes: Cod, Cr, Dk, Inc, Binj, RF Sh, Xing. Condition 60%.

Tree 2

Mondell Pine
(*Pinus eldarica*)
DBH 13"



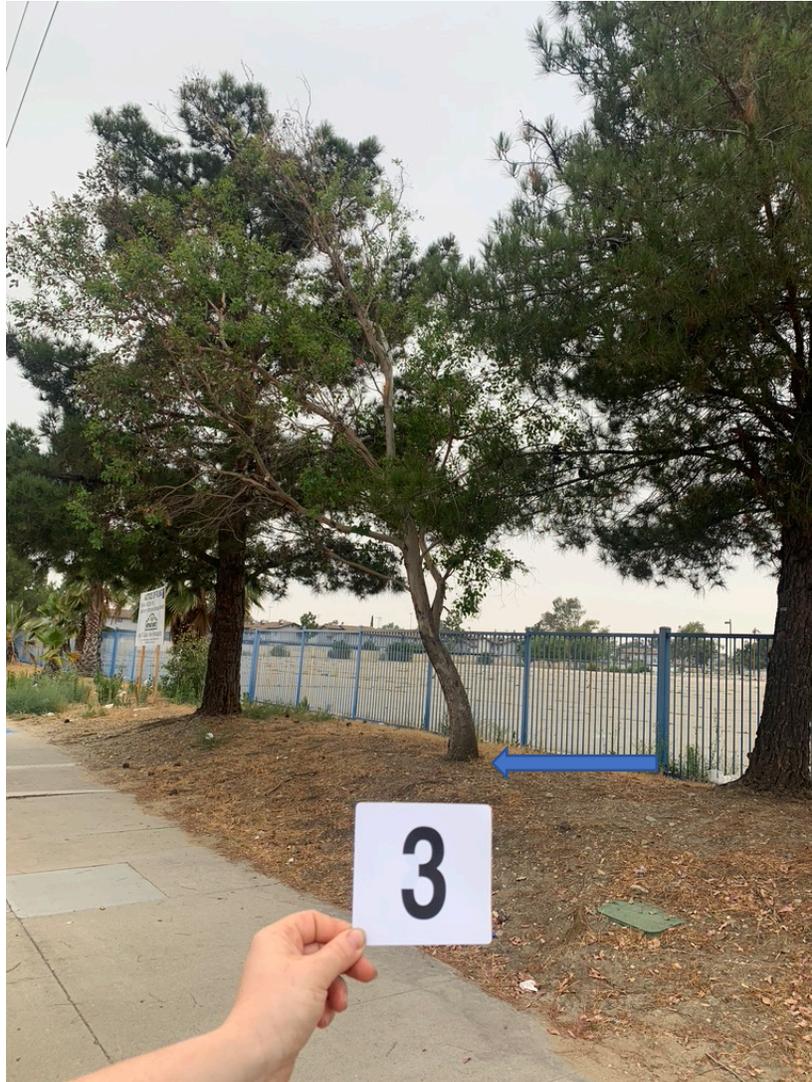
Tree 2 Mondell Pine



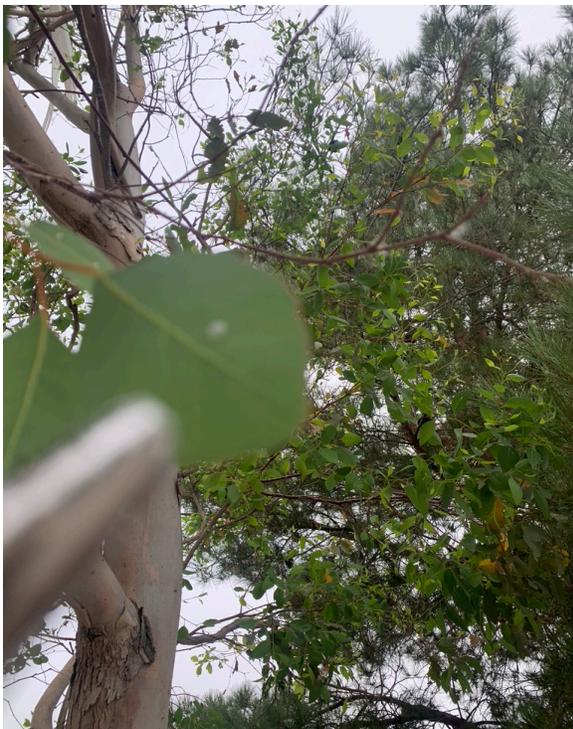
Stem Girdling Root (SGR), water stress x 5 years, soil compaction. 70%

Tree 3

Flooded Gum
(*Eucalyptus rudis*)
DBH 8"



TREE 3 Flooded Gum



Sidewalk damage, surface roots, lerp psyllid, soil compaction, tortoise beetle. poor health, poor structure. Water stress x 5 years. Codes: 1s, Health D, Structure D. Condition 60%.

Tree 4

Mondell Pine
(*Pinus eldarica*)
DBH 15"



Tree 4 Mondell Pine



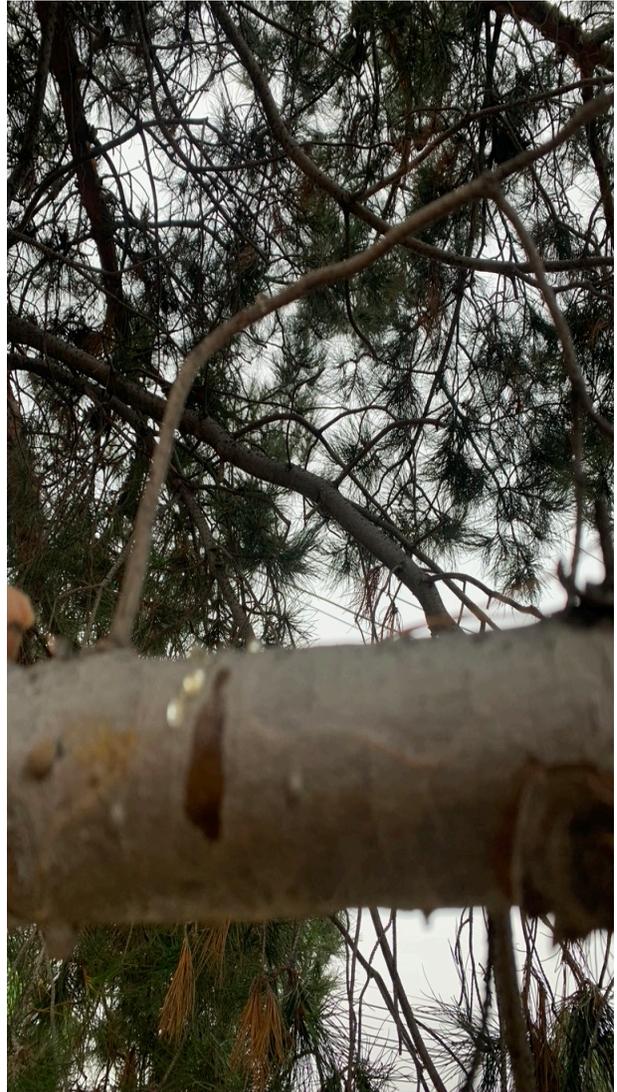
Stem girdling root, sidewalk conflict, poor branch structure (rating codes: cod Cr, Xing) water stress, sap dripping. Health D, structure D. Condition 60%

Tree 5

Mondell Pine
(*Pinus eldarica*)
DBH 14"



Tree 5 Mondell Pine



Multiple surface roots, **soil compaction**, water stress, dripping sap. Health C. Structure C. Condition 70%

Tree 6

Mondell Pine
(*Pinus eldarica*)
DBH 15"



Tree 6 Mondell Pine



Water stress x 5 years, compacted soil, (Sh) sap dripping, wound closure slow. Surface roots and water meter conflict. Condition 70%

Tree 7

Mondell Pine
(*Pinus eldarica*)
DBH 15"



Tree 7 Mondell Pine



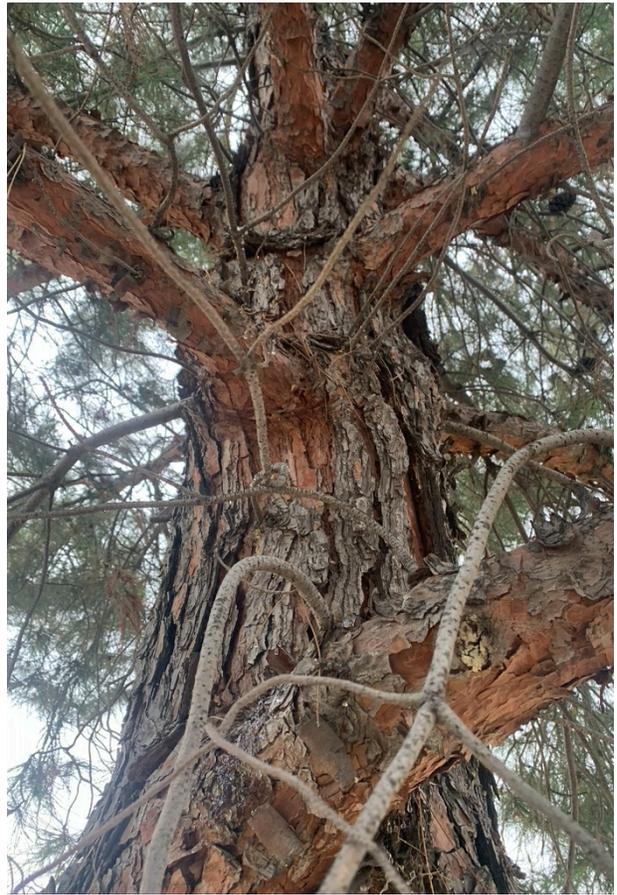
Surface roots, sidewalk conflict, sap dripping, water stressed. Form and structure fair, health poor. Condition 65%.

Tree 8

Mondell Pine
(*Pinus eldarica*)
DBH 16"



Tree 8 Mondell Pine



Stem girdling root, surface roots, compacted soil, sap dripping, water stress x 5 yrs.
Form fair, health poor. Condition 65%

Tree 9

Mondell Pine
(*Pinus eldarica*)
DBH 13"



Tree 9 Mondell Pine



Surface roots, water stress x 5 years, low vigor, soil compacted.
Condition 70%

Tree 10

Mondell Pine
(*Pinus eldarica*)
DBH 14"



Tree 10 Mondell Pine



Surface roots, water stress x 5 years, low vigor, soil compacted. Stem girdling root formation. Form poor, structure fair, health poor. Condition 65%.

Tree 11

Red Iron Bark
(*Eucalyptus sideroxylon*)
DBH 8 "



Tree 11 Red Iron Bark



Tortoise beetle, scaffold branch aspect ratio near 60% (weak attachment), water stress, chlorotic foliage, trunk lean (DI), epicormic shoots. Condition 60%

Tree 12

Nichol's Willowleaf Peppermint
(*Eucalyptus nicholii*)
DBH 5"



Tree 12 Nichol's Willowleaf Peppermint



Dieback in crown, sections of dead bark, trunk wound at buttress. Condition 55%

Tree 13

Evergreen Ash
(*Fraxinus uhdei*)
DBH 5"



Tree 13 Evergreen Ash



Water stress and soil compaction leading to surface rooting. Upper crown showing leaf scorch, dieback and overall poor vigor. Rating code: Cod, Cl, Db. Condition 50%

Tree 14

Silver Dollar Gum
(*Eucalyptus polyanthemos*)
DBH 14"



Tree14 Silver Dollar Gum



Lerp Psyllid, tortoise beetle, helical growth lower trunk abnormality (torsional loading and twisting). Multiple stems of the same diameter (codominant). Condition 65%

Tree 15

Nichol's Willowleaf Peppermint
(*Eucalyptus nicholii*)
DBH 8"



Tree 15 Nichol's Willowleaf Peppermint



Water stress x 5 years sections of dead bark, structural defects. Condition 60%.

Tree 16

Nichol's Willowleaf Peppermint
(*Eucalyptus nicholii*)
DBH 6"



Tree 16 Nichol's Willowleaf Peppermint



Poor vigor, poor health. Condition 55%.

Tree 17

Silver Dollar Gum
(*Eucalyptus polyanthemos*)
DBH 14"



Tree 17 Silver Dollar Gum



Multiple leaders tightly spaced (poor structural development of branch structure, lerp psyllid, tortoise beetle, water stress. Condition 65%

Tree 18

Silver Dollar Gum
(*Eucalyptus polyanthemos*)
DBH 13"



Tree 18 Silver Dollar Gum



Crown diebank, kinked root, tortoise beetle. Condition 60%

TREE 19

Flaxleaf Paperbark
(*Melaleuca linariifolia*)
DBH 10"



TREE 19 Flaxleaf Paperbark



Surface roots, water stress, branch aspect ratio 1:1. Codominant stems bark inclusion (defective structure. Condition 65%.

Tree 20

Indian Laurel Fig
(*Ficus microcarpa*)
DBH 12"



Tree 20 Indian Laurel Fig



Surface roots, Sidewalk displacement, multiple branches growing from same point (aspect ratio 1:1 = weak structure). Foliage Healthy Structure problems correctable. Condition 70%

Tree 21

Indian Laurel Fig
(*Ficus microcarpa*)
DBH 13"



Tree 21 Indian Laurel Fig



Surface roots may invite sidewalk displacement. Water stress. Multiple scaffold branches growing from one spot. Defective branch structure (branch aspect ratio 1:1), Infrastructure damage expected soon (sidewalk displacement). Leaf health good Structural issues and root issues. Kinked root. Condition 65%.

Tree 22

Indian Laurel Fig
(*Ficus microcarpa*)
DBH 14"



Tree 22 Indian Laurel Fig



Aggressive surface roots, probable sidewalk conflicts, multiple codominant stems arising at one point, scaffold branch aspect ratio 1:1 (weak connections).). Leaf health good Structural issues and root issues. Condition 65%.

Tree 23

Indian Laurel Fig
(*Ficus microcarpa*)
DBH 12"



Tree 23 Indian Laurel Fig



Structural defects, multiple codominant stems, bark inclusion, scaffold branch aspect ratio 1:1 (weak connections). Leaf health good Structural problem (defective) with bark inclusion. Condition 65%.

Tree 24

Australian Willow
(*Geijera parvifolia*)
DBH 12"



Tree 24 Australian Willow



Poor branch structure development, root damage potential low, drought tolerant. Tolerates moist to wet soil Resistant to Armillaria. Good species for area. Branch strength rated as moderate (UFEI). Condition 70%,

Tree 25

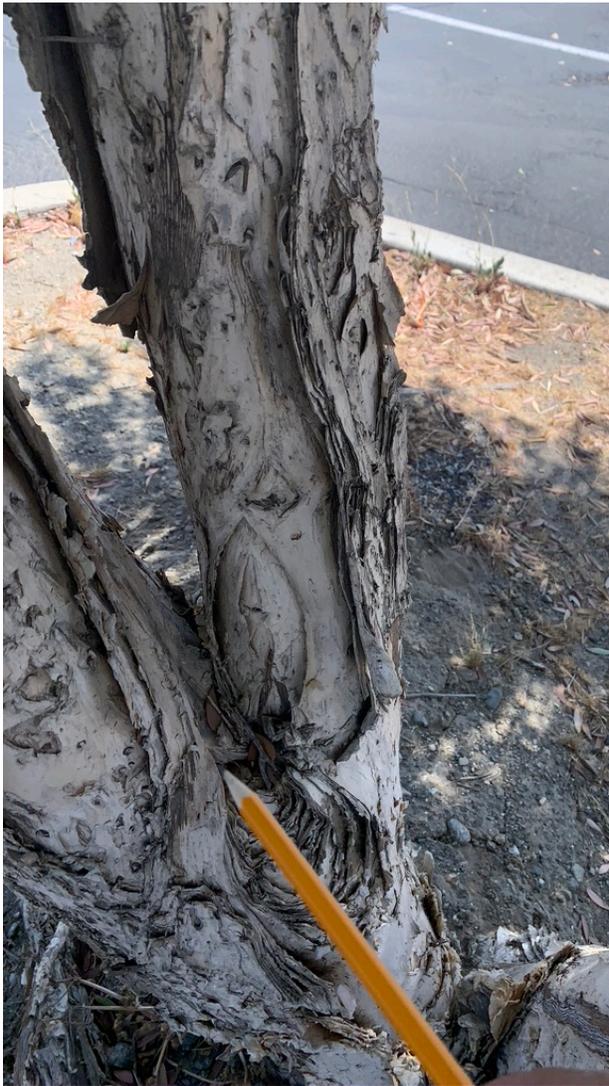
Flaxleaf Paperbark

(*Melaleuca linariifolia*)

DBH 15 (double trunks 11" & 10" = 14.86")



Tree 25 Flaxleaf Paperbark



Structurally defective (*codominant stem with included bark). Improper topping. Structure is substandard. Condition 65%

Tree 26

Flaxleaf Paperbark
(*Melaleuca linariifolia*)
DBH 10"



Tree 26 Flaxleaf Paperbark



Structurally defective (*codominant stem with included bark). Improper topping. Structure is substandard. Condition 65%

Tree 27

Flaxleaf Paperbark
(*Melaleuca linariifolia*)
DBH 17" (multi trunk)



Tree 27 Flaxleaf Paperbark



Structurally defective (*codominant stem with included bark). Aesthetically pleasing, yet the structure is substandard. Branch strength rated as medium; root damage potential rated as low; drought tolerate). Soil conditions poor. Condition 65%.

Tree 28

Silver Dollar Gum
(*Eucalyptus polyanthemos*)
DBH 19"



Tree 28 Silver Dollar Gum



Curb damage, restricted soil volume, vertical trunk wound on the west side of trunk, tree has been improperly topped. Condition 65%.

Tree 29

Silver Dollar Gum
(*Eucalyptus polyanthemos*)
DBH 11"



Tree 29 Silver Dollar Gum



Trunk wound to lower trunk, poor branch connections, codominant branch over hangs parking area. Structure defective. Condition 60%.

Tree 30

Australian Willow
(*Geijera parvifolia*)
DBH 10"



Tree 30
Australian Willow



Poor branch structure development, root damage potential low, drought tolerant. Tolerates moist to wet soil. Resistant to Armillaria. Good species for area. Branch strength rated as moderate (UFEI). Condition 65%,

Tree 31

Australian Willow
(*Geijera parvifolia*)
DBH 10"



Tree 31 Australian Willow



Poor branch structure development, root damage potential low, drought tolerant. Tolerates moist to wet soil. Resistant to Armillaria. Good species for area. Branch strength rated as moderate (UFEI). Condition 65%.

Tree 32

Flaxleaf Paperbark
(*Melaleuca linariifolia*)
DBH 13"



Tree 32 Flaxleaf Paperbark



**Poor form, codominant stems (weak connection). Structurally defective.
Condition 65%**

Tree 33

Flaxleaf Paperbark
(*Melaleuca linariifolia*)
DBH 9"



Codominant stem bark inclusion (weak connection). Structurally problems. Improper topping (multiple epicormic shoots weakly attached). Structurally defective. Condition 65%.

Tree 33 Flaxleaf Paperbark



Tree 34

Australian Willow
(*Geijera parvifolia*)
DBH 10"



Tree 34 Australian Willow



Crowded branch structure, root damage potential low, drought tolerant. Tolerates moist to wet soil. Resistant to Armillaria. Good species for area. Branch strength rated as moderate (UFEI). Condition 70%.

Tree 35

Australian Willow
(*Geijera parvifolia*)
DBH 12"



Tree 35 Australian Willow



Substandard structural development (scaffold branches crowded with poor connection). Restricted soil volume, curb damage. Good species for area, aesthetically OK, but poor-quality tree due to misunderstanding of proper structural development (those responsible for maintenance lack proper training and skills to manage trees correctly). Condition 60%

Tree 36

Silver Dollar Gum
(*Eucalyptus polyanthemos*)
DBH 14"



Tree 36 Silver Dollar Gum



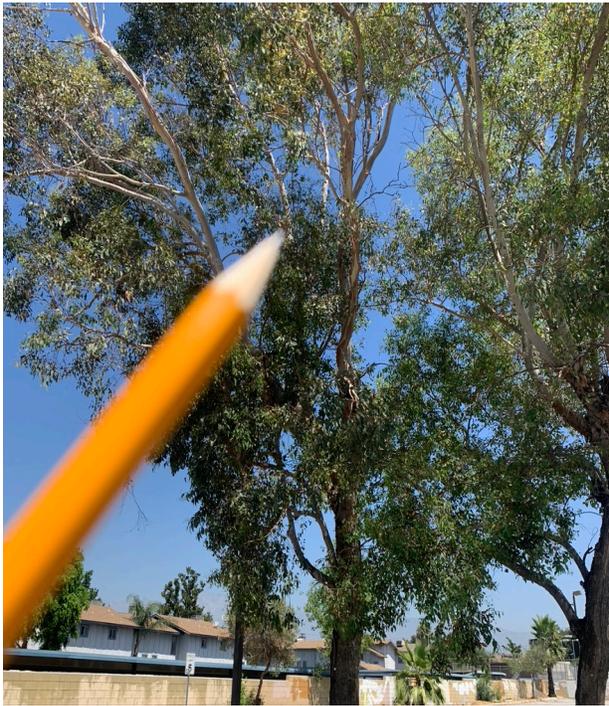
Lerp psyllid, tortoise beetle (pests), improper topping (as seen at the transition of rough bark and smooth bark. Epicormic shoots from improper topping are weakly attached and pose a threat of failure to targets (pedestrians and vehicles). Condition 55%.

Tree 37

Silver Dollar Gum
(*Eucalyptus polyanthemos*)
DBH 17"



Tree 37 Silver Dollar Gum



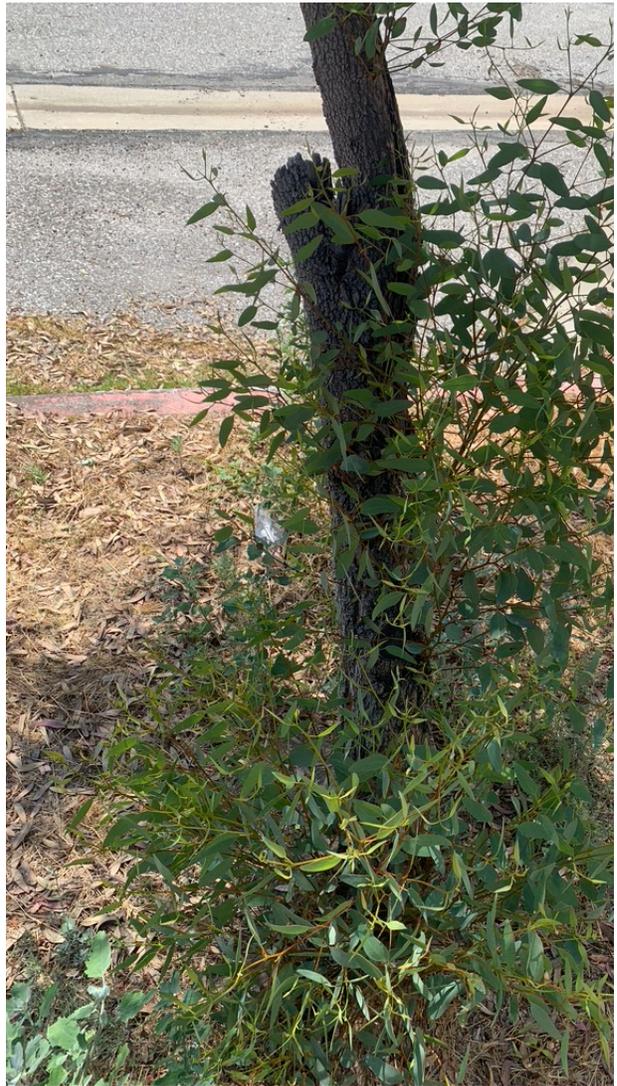
Improper topping, tortoise beetle, lerp psyllid, trunk crack. Condition 50%

Tree 38

Nichol's Willowleaf Peppermint
(*Eucalyptus nicholii*)
DBH 4"



Tree 38 Nichol's Willowleaf Peppermint



Lack of woundwood formation, decay, epicormic growth at base of tree. Condition 65%.

Tree 39

Evergreen Ash
(*Fraxinus uhdei*)
DBH 7"



Tree 39 Evergreen Ash



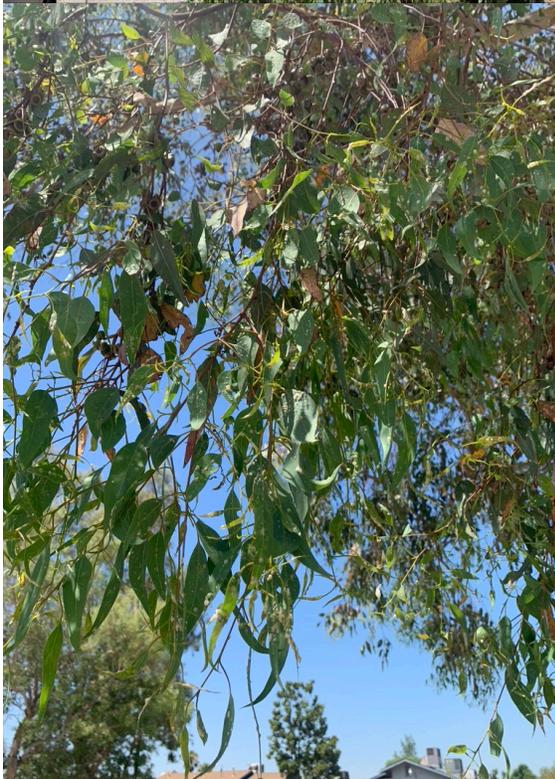
Scaffold branch connections are weakly attached, bark inclusion, , string trimmer damage at root buttress, multiple tight branches congested at one spot. Condition 50%.

Tree 40

Silver Dollar Gum
(*Eucalyptus polyanthemos*)
DBH 14"



Tree 40 Silver Dollar Gum



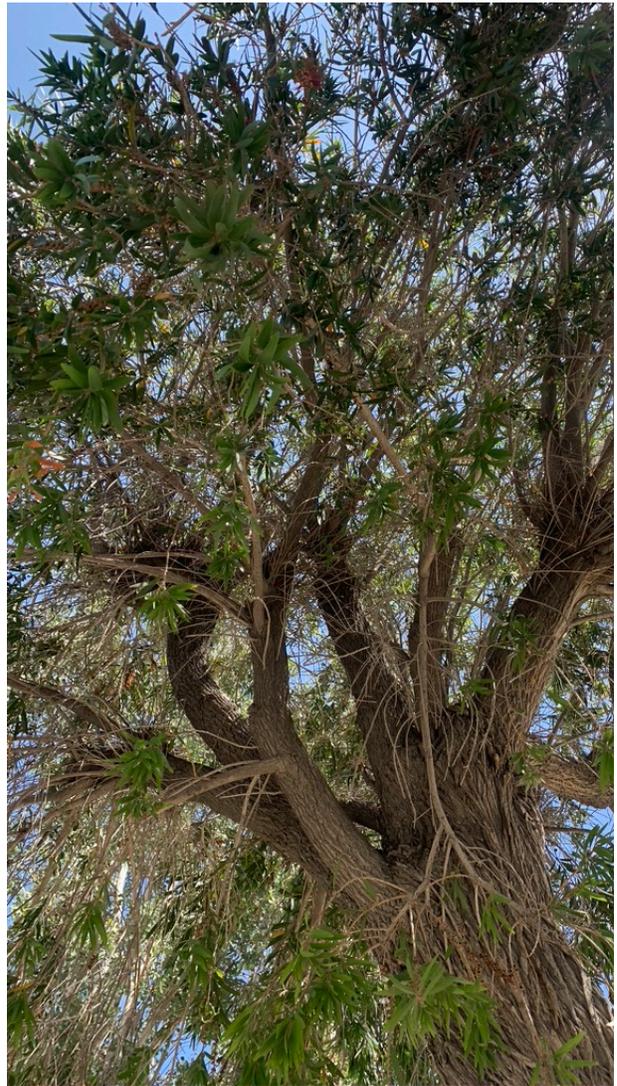
Slime flux bacteria, tortoise beetle, lerp psyllid, improper topping. Condition 60%

Tree 41

Bottlebrush
(*Callistemon viminalis*)
DBH 9"



Tree 41 Bottlebrush



Stem growing root, topping damage, structurally defective. Condition 60%

Tree 42

Bottlebrush
(*Callistemon viminalis*)
DBH 10"



Tree 42 Bottlebrush



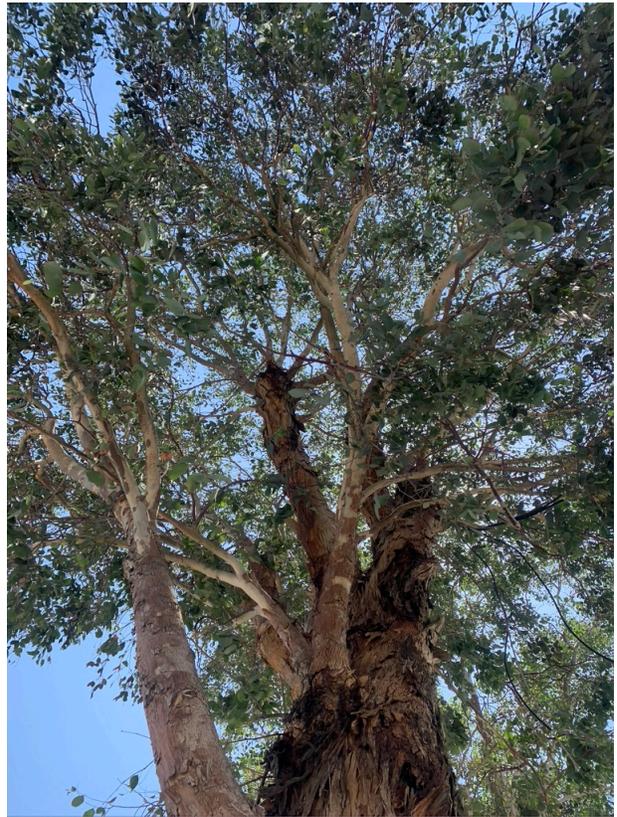
Flat depression on lower trunk. Probable stem girdling root, tree was improperly topped. Structurally defective. Condition 65%.

Tree 43

Silver Dollar Gum
(*Eucalyptus polyanthemos*)
DBH 18"



Tree 43 Silver Dollar Gum



Kino bleeding, topping damage (structure defective), electrical wires and chain linked fence embedded in tree. Condition 60%.

Tree 44

Silver Dollar Gum
(*Eucalyptus polyanthemos*)
DBH 21"



Tree 44 Silver Dollar Gum



Topping damage, poorly attached leaders, bark inclusion. Condition 65.

Tree 45

Flaxleaf Paperbark
(*Melaleuca linariifolia*)
DBH 14"



Tree 45



Codominant trunk, bark included, root compression, surface roots. Condition 65%.

Tree 46

Flaxleaf Paperbark
(*Melaleuca linariifolia*)
DBH 15"



Tree 46 Flaxleaf Paperbark



Five codominant stems with bark inclusion, surface and kinked roots. Aesthetically pleasing, yet structurally defective. Condition 65%.

Tree 47

Flaxleaf Paperbark
(*Melaleuca linariifolia*)
DBH 21" Double trunk 11 & 13 "



Tree 47 Flaxleaf Paperbark



Multiple failure points as tree matures. Defective structure (weal attachments, codominant stems with bark inclusion). Structural condition poor. Condition 65%

Tree 48

Australian Willow
(*Geijera parvifolia*)
DBH 10"



Tree 48 Australian Willow



Scaffold branch development not optimal, yet workable. root damage potential low, drought tolerant. Tolerates moist to wet soil. Resistant to Armillaria. Good species for area. Branch strength rated as moderate (UFEI). Condition 80%,

Tree 49

Fruitless Mulberry
(Morus Alba) "Fruitless"
DBH 6"



Tree 49 Fruitless Mulberry



Poor structure, foliage dwarfed, woundwood development poor, crown dieback.
Condition 50%.