

Appendix B
Arborist Report



Preliminary Arborist Report

5200 Patrick Henry Drive
Santa Clara, CA

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HORT SCIENCE

BARTLETT CONSULTING
Divisions of The F.A. Bartlett Tree Expert Company

Preliminary Arborist Report

5200 Patrick Henry Drive
Santa Clara, CA

Table of Contents

	Page
Introduction and Overview	1
Assessment Methods	1
Description of Trees	4
Suitability for Preservation	7
Preliminary Evaluation of Impacts and Recommendations	9

List of Tables

Table 1. Condition ratings and frequency of occurrence of trees	2
Table 2. Tree suitability for preservation	8

Exhibits

Tree Assessment Form

Tree Assessment Plan

Preliminary Tree Disposition Form

Preliminary Arborist Report

5200 Patrick Henry Drive
Santa Clara, CA

Introduction and Overview

Arista Networks, Inc. is redeveloping 5200 Patrick Henry Drive in Santa Clara, CA. The site is currently a commercial building surrounded by parking on all sides. HortScience | Bartlett Consulting (Divisions of The F. A. Bartlett Tree Expert Co.) was asked to prepare a **Preliminary Arborist Report** for the project site for submission to the City of Santa Clara.

This report provides the following information:

1. An assessment of tree health, structure, and suitability for preservation.
2. An estimate of the value of each tree.
3. A preliminary assessment of the impacts of constructing the proposed project and recommendations for action.
4. Preliminary tree preservation guidelines.

Assessment Methods

Trees were assessed on April 18, 2022. As required by the City of Santa Clara, trees 4 inches and greater in diameter were included in the assessment. The assessment procedure consisted of the following steps:

1. Identifying the tree species;
2. Tagging each tree with an identifying number and recording its location on a map;
3. Measuring the trunk diameter at a point 54 inches above grade;
4. Evaluating the health and structural condition using a scale of 1 – 5:
 - 5** - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
 - 4** - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
 - 3** - Tree with moderate vigor, moderate twig, and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
 - 2** - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
 - 1** - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.
5. Rating the suitability for preservation as “high”, “moderate” or “low”. Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.
 - High:** Trees with good health and structural stability that have the potential for longevity at the site.
 - Moderate:** Trees with somewhat declining health and/or structural defects than can be abated with treatment. The tree will require more intense management and monitoring, and may have shorter life span than those in ‘good’ category.
 - Low:** Trees in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual may have characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

Description of Trees

One hundred and forty-three (143) trees were assessed, representing 10 species (Table 1). London planes accounted for approximately 25% of the population with 38 trees. River she-oak and evergreen pear each accounted for approximately 16% of the total population. River she-oaks were commonly planted along the site periphery including the public right-of-way along Patrick Henry Drive. London plane and evergreen pear were generally located throughout the interior. Descriptions of each tree are found in the **Tree Assessment Form** and approximate locations are shown on the **Tree Assessment Map** (see Exhibits). Overall, 17 trees were in good condition, 74 were in fair condition, and 52 were in poor condition (Table 1).

**Table 1: Condition ratings and frequency of occurrence of trees
 5200 Patrick Henry Drive, Santa Clara CA.**

Common Name	Scientific Name	Condition			Total
		Poor (1-2)	Fair (3)	Good (4-5)	
River she-oak	<i>Allocasuarina cunninghamiana</i>	1	17	5	23
European white birch	<i>Betula pendula</i>	1	-	-	1
Chinese hackberry	<i>Celtis sinensis</i>	3	-	1	4
Raywood ash	<i>Fraxinus angustifolia</i> 'Raywood'	1	-	-	1
Aleppo pine	<i>Pinus halepensis</i>	1	8	3	12
London plane	<i>Platanus x hispanica</i>	27	11	-	38
Callery pear	<i>Pyrus calleryana</i>	2	5	-	7
Evergreen pear	<i>Pyrus kawakamii</i>	7	11	5	23
Holly oak	<i>Quercus ilex</i>	5	10	3	18
Coast redwood	<i>Sequoia sempervirens</i>	4	12	-	16
Total		52	74	17	143

Of the 38 London planes assessed, 27 were in poor condition and 11 were in fair condition. These trees were generally young to semi-mature, ranging from 5 to 15 inches with an average of 9 inches. London planes in poor condition often had pervasive twig and branch dieback with narrow, suppressed crowns (Photo 1).

Photo 1: London plane #89 had pervasive twig and branch dieback and a narrow, suppressed crown.



Photo 2: River she-oak #59 was growing along Patrick Henry Drive. The tree had multiple stems arising from 11 feet.

Of the 23 river she-oaks, five were in good condition, 17 were in fair condition, and one was in poor condition. These trees varied widely in size, ranging from 7 to 33 inches in trunk diameter, averaging 16 inches. Larger trees tended to have more than one main stem, particularly those located along the right-of-way at Patrick Henry Drive (Photo 2). Younger, smaller river she-oaks were planted around the remaining 3 sides of the site.

The 23 evergreen pears varied in condition with five in good, 11 in fair, and seven in poor. Pears in good condition had vigorous, full crowns, while pears in poor condition had thin, sparse crowns and often had pronounced trunk leans. Trunk diameters of these trees ranged from 7 to 22 inches, averaging 14 inches. Codominant or multiple stems often arose from single points on their trunks (Photo 3).

Photo 3: Evergreen pear #42 was in good condition with a vigorous crown and multiple attachments at approximately 6 feet.



Of the 16 coast redwoods, 12 were in fair condition and four were in poor condition. They ranged from 16 to 37 inches in diameter, averaging 25 inches. Trees tended to be in dense groups, causing asymmetric crowns (Photo 4 & 5). Drought stress initially presents as a thin crown in coast redwoods (Photo 4): eventually leading to twig, branch, and whole-tree death. Coast redwoods have high-water use requirements and do not perform well without supplemental irrigation. Redwoods appeared to be irrigated with recycled water which generally causes decline in the species due to the elevated salt content.



Photo 4: Coast redwoods #80 and #81 were planted too close together. Each had a thin crown, evidencing drought stress.



Photo 5: Coast redwoods #139 - #143 were planted too close together and had suppressed, asymmetric crowns. Redwood #142 (second from right) was stunted, heavily suppressed, and in poor condition as a result.

Eighteen holly oak trees were growing on the north and south sides of the site. Three trees were in good condition, 10 were in fair condition, and five were in poor condition. Trees ranged in size from 10 – 27 inches in trunk diameter, averaging 16 inches. Most holly oaks had codominant or multiple branch attachments at single points throughout their crowns.

Twelve Aleppo pines were growing along the north and east perimeters. These trees were mature, averaging 30 inches in diameter. Three were in good condition, eight were in fair condition, and one was in poor condition. Pines were generally planted in groups, forming a single, continuous crown between trees. Most had codominant stems.

Four species were represented by fewer than 10 trees:

- Seven Callery pears ranged from poor (#100 and 101) to fair (five trees) condition. These trees were generally growing in landscape areas on the interior of the site.
- Four Chinese hackberries were assessed in good (#45) and poor (#36, 38, and 40) condition. The trees in poor condition had been planted too close to large stature trees, like Aleppo pine, and were heavily suppressed.
- One European white birch (#126) and one Raywood ash (#21) were each in poor condition.

Suitability for Preservation

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape.

Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. For trees growing in open fields, away from areas where people and property are present, structural defects and/or poor health present a low risk of damage or injury if they fail.

We must be concerned, however, about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider their structural stability as well as their potential to grow and thrive in a new environment. Where development will not occur, the normal life cycles of decline, structural failure, and death should be allowed to continue.

Evaluation of suitability for preservation considers several factors:

- **Tree health**
Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than non-vigorous trees are. For example, London plane #89 was in poor condition with severe twig and branch dieback. This tree would not tolerate construction impacts.
- **Structural integrity**
Trees with significant amounts of wood decay and other structural defects that cannot be corrected are more likely to fail. Such trees should not be preserved in areas where damage to people or property is likely. For example, evergreen pear #99 had a large, long overextending branch encroaching upon a walkway.

- **Species response**
There is a wide variation in the response of individual species to construction impacts and changes in the environment. For example, coast redwood, London plane, and river she-oak are tolerant of root loss and general construction impacts, while holly oak is intolerant of root severance and moderately tolerant of general construction impacts.
- **Tree age and longevity**
Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change. River she-oaks #62 and 64 were young and able to respond well to change. Aleppo pines on-site were mature, and likely less tolerant to change.
- **Invasiveness**
Species which spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. The California Invasive Plant Inventory Database (<https://www.cal-ipc.org/paf/>) lists species identified as being invasive. Santa Clara is part of the Central West Floristic Province. Callery pear is on the invasive watch list.

Each tree was rated for suitability for preservation based upon its age, health, structural condition, and ability to safely coexist within a development environment (Table 2).

**Table 2: Tree suitability for preservation.
5200 Patrick Henry Drive, Santa Clara**

High	Trees in good health and with structural stability that have the potential for longevity at the site. Eighteen (18) trees had high suitability for preservation: eight river she-oaks, Aleppo pines #25, 25, and 47, evergreen pears #6, 41, and 11, holly oaks #3, 87, and 96, and Chinese hackberry #45.
Moderate	Trees in fair health and/or with structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life-spans than those in the “high” category. Fifty-eight (58) trees had moderate suitability for preservation: six Aleppo pines, 10 coast redwoods, 12 evergreen pears, 8 holly oaks, 8 London planes, and 14 river she-oaks.
Low	Trees in poor health or with significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. Sixty-eight trees had low suitability for preservation: Aleppo pines #23 - 24, seven Callery pears, Chinese hackberries #36, 38, and 40, six coast redwoods, European white birch #126, seven holly oaks, 30 London planes, Raywood ash #21, and river she-oak #63.

We consider trees with high suitability for preservation to be the best candidates for preservation. We do not normally recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

The City of Santa Clara General Plan 5.10.1-P4 defines protected trees as. "healthy cedars, redwoods, oaks, olives, bay laurel and pepper trees of any size, and all other trees over 36 inches in circumference measured from 48 inches above-grade on private and public property as well as in the public right-of-way". By this definition, there were 85 protected trees at the site. Heritage trees are specific trees adopted by the City of Santa Clara and listed in the General Plan Appendix 8.10. There were no *heritage trees* identified at this site. Individual trees' *Protected* status are described in the ***Tree Assessment Form*** (see Exhibits).

Preliminary Evaluation of Impacts and Recommendations

Appropriate tree retention develops a practical match between the location and intensity of construction activities with the quality and health of trees. The ***Tree Assessment*** was the reference point for tree condition and quality. Impacts from construction were estimated given the project information available to date. To evaluate impacts from the project, I considered the provided topographic survey (Kier + Wright, 11/2021), a proposed site plan provided by LPA Design Studios, and communications with Michael Michalek, LPA Design Studios.

Plans were preliminary in nature. As such, the assessment of impacts to trees is preliminary. The development proposes to demolish the existing buildings in the center of the lot and to add several hundred additional parking spaces around a new building. I relied on communications with Michael Michalek, LPA Design Studios, regarding plans for trees located away from the demolition and construction at the center of the site. He indicated that all trees are planned for removal.

Based on the proposed plans and planning discussions, I recommend the removal of 143 trees. Of the trees recommended for removal, 85 are *Protected*. Of the 85 protected trees identified for removal, 11 appeared to be trees in the public right-of-way along Patrick Henry Drive. Individual recommendations are described for each tree in the ***Preliminary Tree Disposition Form*** (see Exhibits).

HortScience | Bartlett Consulting



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ISA Board Certified Master Arborist, Utility Specialist No. WE-12647BU
ISA Tree Risk Assessment Qualified



Exhibits

Tree Assessment Form

Tree Assessment Plan

Preliminary Tree Disposition Form



Tree Assessment

5200 Patrick Henry Drive
Santa Clara, California
April 2022



Tree No.	Species	Trunk Diameter (in.)	Trunk Circumference (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
1	River she-oak	10	31	No	3	Moderate	Narrow codominant stems arise at 7 and 8 feet; upright form; good vigor.
2	Evergreen pear	13	41	Yes	3	Moderate	Wide codominant stems arise from 6 feet; slightly one-sided E.
3	Holly oak	16	50	Yes	4	High	Multiple attachments arise between 8 and 11 feet; good vigor; some-shaped crown.
4	Evergreen pear	11	35	No	3	Moderate	Wide codominant unions at 5 and 7 feet; one-sided S; from crown suppression.
5	River she-oak	12	38	Yes	3	Moderate	Multiple attachments arise from 6 feet; candelabra form; good
6	Evergreen pear	13	41	Yes	4	High	Multiple attachments arise from 8-10 feet; spreading crown; good vigor.
7	Holly oak	14	44	Yes	3	Moderate	Multiple attachments arise from 6 feet; thin crown; sapsucker damage and small 1 inch girdling roots.
8	Evergreen pear	18	57	Yes	3	Moderate	Multiple narrow attachments arise from 6 feet; one-sided crown N.
9	Holly oak	10	31	No	2	Low	Narrow codominant union at 9 feet; thin, narrow crown with extensive epicormic growth.
10	Holly oak	12	38	Yes	2	Low	Thin crown; extensive twig and small branch dieback; one-sided crown SE.
11	Evergreen pear	14	44	Yes	2	Low	Multiple narrow attachments at 7 feet; one stem previously topped; moderate lean N.
12	Holly oak	11	35	No	3	Moderate	Wide codominant stems at 7 and 10 feet; one-sided crown S.; moderate vigor.
13	Evergreen pear	22	69	Yes	2	Low	Multiple narrow attachments arise from 6 feet; history of large stem removal; one-sided crown N.
14	London plane	7	22	No	2	Low	Wide codominant unions at 6 and 8 feet; sparse, thin crown; slight lean S.
15	Evergreen pear	13	41	Yes	4	Moderate	Multiple wide attachments at 8 feet; good vigor; dome-shaped crown; slight lean S.
16	Holly oak	16	50	Yes	2	Low	Previous trenching cut roots at 2.5 feet on W and E side; multiple attachments arise at 8-9 feet; pervasive twig and small branch dieback.
17	Evergreen pear	16	50	Yes	3	Moderate	Multiple wide attachments at 6 to 10 feet; good vigor; spreading crown.
18	River she-oak	9	28	No	3	Moderate	Narrow codominant unions at 5 and 7 feet; upright structure; good vigor.

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Tree No.	Species	Trunk Diameter (in.)	Trunk Circumference (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
19	Evergreen pear	12	38	Yes	2	Low	Wide codominant union at 6 feet; history of large stem removal; lean SW.
20	Holly oak	6,1,1	19	Yes	3	Moderate	Volunteer; multiple stems arise from base; oval crown.
21	Raywood ash	22	69	Yes	2	Low	Pervasive twig dieback; no tag, camp under drip line.
22	Aleppo pine	28	88	Yes	3	Moderate	Wide codominant union at 5 feet, measured below; good vigor; history of large stem removal; pyramidal crown.
23	Aleppo pine	21	66	Yes	2	Low	Sinuous trunk below codominant union at 5 feet; thin, heavily suppressed crown.
24	Aleppo pine	19,16,15	60	Yes	3	Low	Multiple attachments arise from 3 feet; history of large stem removal; heavy lean S.
25	Aleppo pine	33	104	Yes	4	High	Narrow codominant unions at 6 and 12 feet; slightly one-sided crown S.
26	Evergreen pear	12	38	Yes	2	Low	Multiple narrow attachments at 7 feet; sparse, thin crown; poor
27	River she-oak	7	22	No	3	Moderate	Narrow codominant unions at 5 and 6 feet; upright form with multiple competing leaders; good vigor.
28	Aleppo pine	36	113	Yes	4	High	Wide codominant attachments at 4 and 7 feet; wide, dome-shaped crown; slightly suppressed S.
29	Aleppo pine	35	110	Yes	3	Moderate	Narrow codominant unions at 6 and 8 feet; base pillowing over curb; moderate lean S.; one-sided crown S.
30	Evergreen pear	7	22	No	2	Low	Wide codominant union at 6 feet; overextended, reaching crown; suppressed from large pines.
31	Aleppo pine	15,14	47	Yes	3	Moderate	Two stems arise from base; one-sided crown E.; crowded with neighboring pine; moderate lean E.
32	Aleppo pine	20,13	63	Yes	3	Moderate	Codominant stems arise from base; lean W.; one-sided crown W; Crowded with neighboring pine.
33	Evergreen pear	16	50	Yes	2	Low	Severe trunk lean E, corrected at 4 feet; wide codominant union at 7 feet; spreading crown.
34	River she-oak	10	31	No	3	Moderate	Upright, candelabra form; good vigor.
35	River she-oak	10	31	No	3	Moderate	Wide codominant union at 5 feet; narrow crown; good vigor.
36	Chinese hackberry	8	25	No	2	Low	Heavy phototropic lean E.; crown suppressed.
37	Aleppo pine	35	110	Yes	4	High	Codominant union at 10 feet; full, oval-shaped crown; corrected lean S.
38	Chinese hackberry	6	19	No	2	Low	Heavy phototropic lean W.; crown suppressed.

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39	London plane	9	28	No	2	Low	Narrow codominant union at 8 feet; heavy crown suppression; one-sided crown S.
40	Chinese hackberry	5	16	No	2	Low	Low, umbrella-shaped crown, good vigor; previously topped.
41	Evergreen pear	11	35	No	4	High	Wide codominant unions throughout crown; spreading, umbrella-shaped crown; good vigor.
42	Evergreen pear	11	35	No	3	Moderate	Multiple attachments arise at 6 feet; slight lean E; slight twig dieback.
43	Aleppo pine	31,29	97	Yes	3	Moderate	Codominant stems at base with 3-foot seam; large cut stem S; side; semi-thin crown.
44	Evergreen pear	13	41	Yes	5	High	Wide codominant unions throughout crown; full, dome-shaped crown; good vigor.
45	Chinese hackberry	7	22	No	4	High	Multiple narrow attachments at 5 feet; full dome-shaped crown; good vigor.
46	London plane	8	25	No	2	Low	Trunk sweep E.; multiple attachments at 6 feet; severe twig and branch dieback, possibly anthracnose.
47	Aleppo pine	24	75	Yes	3	Moderate	Wide codominant union at 15 feet; slight lean SW.; crowded on E; side.
48	Aleppo pine	24	75	Yes	3	Moderate	Wide codominant union at 20 feet; one-sided crown NE.; crowded on SW; side.
49	London plane	5	16	No	1	Low	Sinuous trunk; extremely narrow crown; heavily suppressed.
50	London plane	15	47	Yes	3	Moderate	Codominant attachments between 6-10 feet; multiple leaders; spreading crown.
51	London plane	8	25	No	2	Low	Multiple codominant attachments between 5-10 feet; thin crown; twig and small branch dieback.
52	London plane	9	28	No	2	Low	Codominant union at 6 feet with decay from stem removal; one-sided crown W; corrected lean S.
53	London plane	8	25	No	2	Low	Uncorrected lean SE.; pervasive twig and small branch dieback.
54	River she-oak	23	72	Yes	3	Moderate	Possible ROW tree; good structure with upright form.
55	River she-oak	9	28	No	3	Moderate	Narrow codominant union at 9 feet; candelabra structure; good
56	River she-oak	21	66	Yes	4	High	Possible ROW tree; upright form with strong leader.
57	Holly oak	17	53	Yes	3	Moderate	Slightly sinuous trunk; mechanical damage at 5 feet; crown excessively raised.

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58	River she-oak	17,16	53	Yes	3	High	Possible ROW tree; narrow codominant union at 3 feet; good, upright form with strong leaders; slightly thin crown.
59	River she-oak	24	75	Yes	4	High	Possible ROW tree; codominant union at 11 feet; dome-shaped crown.
60	River she-oak	16,15	50	Yes	3	Moderate	Possible ROW tree; wide codominant union at 2 feet; narrow, upright structure; moderate epicormic growth.
61	River she-oak	33	104	Yes	3	Moderate	Possible ROW tree; Codominant unions at 7 and 8 feet; sweeping leader over road E side; full, round crown.
62	River she-oak	9	28	No	3	Moderate	Good young tree; narrow codominant union at 5 feet.
63	River she-oak	18	57	Yes	2	Low	Possible ROW tree; codominant stems at 4 feet, measured below attachment; thin crown with pervasive twig dieback.
64	River she-oak	9	28	No	4	High	Good young tree; strong central leader; slightly one-sided W.
65	River she-oak	9	28	No	4	High	Good young tree; wide codominant union at 5 feet.
66	River she-oak	22,19,18	69	Yes	3	High	Possible ROW tree; Multiple wide attachments at 3 feet; narrow, columnar crown; good vigor; slime flux.
67	River she-oak	7	22	No	4	High	Good young tree; multiple attachments at 5 feet; strong central leader.
68	River she-oak	8	25	No	3	Moderate	Codominant union at 5 feet; narrow crown with competing leaders; good vigor.
69	River she-oak	26	82	Yes	3	High	Possible ROW tree; codominant stems arise from 8,10, and 13 feet; broom-shaped crown.
70	River she-oak	23	72	Yes	3	Moderate	Possible ROW tree; multiple attachments at 10 feet; broom-shaped crown.
71	River she-oak	26	82	Yes	3	Moderate	Possible ROW tree; codominant union at 25 feet with included bark; upright form; past large limb removals.
72	Evergreen pear	14	44	Yes	4	Moderate	Growing in raised planter; ranging form with multiple attachments at 6 feet; good vigor.
73	Evergreen pear	16	50	Yes	3	Moderate	Corrected lean N.; history of branch failure; one-sided crown S.
74	Evergreen pear	12	38	Yes	3	Moderate	Slight lean S.; narrow codominant unions at 6 and 7 feet.
75	London plane	8	25	No	2	Low	Leggy structure; narrow, thin crown with pervasive twig dieback.
76	London plane	12	38	Yes	3	Moderate	Multiple attachments between 8-12 feet; competing leaders throughout vase-shaped crown.

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77	London plane	7	22	No	2	Low	Leggy structure; narrow, thin crown; one-sided suppressed crown W.
78	Coast redwood	25	79	Yes	3	Low	Crown crowded, one-sided SE.; topped; on recycled water.
79	Coast redwood	20	63	Yes	3	Low	Thin crown; one-side NW.; recycled water.
80	Coast redwood	24	75	Yes	2	Low	Very thin crown; one-sided SE.; crowded with neighboring tree.
81	Coast redwood	23	72	Yes	2	Low	Very thin crown; witches broom at top; one-sided NW.; crowded with neighboring tree.
82	London plane	6	19	No	2	Low	Multiple attachments between 6 and 7 feet, topped; one-sided N.; suppressed crown.
83	London plane	8	25	No	2	Low	Wide codominant union at 7 feet; thin, narrow crown with moderate twig and small branch dieback.
84	London plane	8	25	No	3	Moderate	Codominant stems at 6 and 8 feet; narrow crown; suppressed on E and W.
85	London plane	9	28	No	2	Low	Multiple attachments at 9 feet; one-sided crown W.
86	Holly oak	13	41	Yes	3	Low	Codominant attachments at 5 and 8 feet; narrow crown.
87	Holly oak	18	57	Yes	4	High	Wide codominant stem at 11 feet; spreading dome-shaped crown.
88	Callery pear	4	13	No	3	Low	Typical structure for species with many vertical branches; slightly suppressed; one-sided NW.
89	Callery pear	3	9	No	3	Low	Typical structure for species with many vertical branches; slightly suppressed.
90	Holly oak	27	85	Yes	3	Moderate	Multiple attachments between 6 and 15 feet; many competing leaders; vase-shaped crown.
91	London plane	7	22	No	2	Low	Pervasive twig and small branch dieback; narrow crown.
92	London plane	5	16	No	1	Low	Pervasive twig and small branch dieback; narrow crown.
93	Evergreen pear	12	38	Yes	3	Moderate	Spreading, thin crown; low vigor.
94	Evergreen pear	13	41	Yes	3	Moderate	Growing in 4 foot basin; wide codominant union at 9 feet; umbrella shaped crown.
95	London plane	9	28	No	2	Low	Crossing, codominant stems arise from 5 feet; thin crown; one-sided SW.
96	Holly oak	17	53	Yes	4	High	Wide codominant stems arise at 6 and 8 feet; prominent surface roots; good vigor.
97	Evergreen pear	15	47	Yes	3	Moderate	Wide codominant union at 7 feet; one-sided W.; pruned away from building; enlarged base with diving roots W.

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98	Evergreen pear	16	50	Yes	2	Low	Narrow codominant union at 5 feet with previous stem removals; sinuous trunks; one-sided, thin crown W.
99	Evergreen pear	16	50	Yes	3	Moderate	Overextended ranging branch originating at 6 feet; dense, dome-shaped crown; good vigor.
100	Callery pear	17	53	Yes	1	Low	Multiple attachments arise from 6 feet with included bark; several previously topped; twig extremity dieback throughout.
101	London plane	10	31	No	3	Low	Thin crown; slightly one-sided N; twig and small branch dieback.
102	London plane	10	31	No	1	Low	Pronounced lean SE.; pervasive twig and small branch dieback.
103	Callery pear	3	9	No	2	Low	Young, staked tree; thin crown.
104	London plane	10	31	No	3	Moderate	Codominant stem at 10 feet; spreading crown; slight lean S.
105	London plane	8	25	No	2	Low	Heavily suppressed, one-sided crown SE.; pervasive twig and small branch dieback.
106	Coast redwood	23	72	Yes	3	Moderate	One-sided crown NW; from crowding with neighboring tree; limited drought stress.
107	Coast redwood	15	47	Yes	2	Low	Extremely thin crown; epicormic sprouting throughout trunk
108	London plane	9	28	No	2	Low	Narrow codominant stem at 13 feet; one-sided crown E.; suppressed by neighboring redwoods.
109	Holly oak	19	60	Yes	3	Moderate	Wide codominant union at 12 feet; pronounced lean over parking to S.
110	Holly oak	16	50	Yes	3	Moderate	Wide codominant union at 10 feet; sharp bend stress raiser on N stem; narrow crown.
111	Callery pear	6	19	No	3	Low	Multiple attachments at 6-7 feet; multiple competing leaders; suppressed on S.
112	London plane	13	41	Yes	3	Moderate	Wide codominant attachments at 10 and 11 feet; precious stem removals; vase-shaped crown; moderate vigor.
113	London plane	9	28	No	3	Low	Growing in 2.75 foot planting strip; multiple attachments at 6 feet with previous stem removals; thin crown.
114	London plane	9	28	No	2	Low	Codominant stems at 10 and 12 feet; crossing branches throughout crown; lean SE.; heavily suppressed.
115	London plane	12	38	Yes	2	Low	Heavy corrected lean S.; moderate twig and small branch
116	London plane	12	38	Yes	3	Moderate	Moderate corrected lean S.; multiple attachments at 10 feet.
117	London plane	9	28	No	3	Moderate	Multiple attachments arise between 6 and 9 feet; slight phototropic lean E.; suppressed by neighboring London plane and

Tree Assessment

5200 Patrick Henry Drive
Santa Clara, California
April 2022



Tree No.	Species	Trunk Diameter (in.)	Trunk Circumference (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
118	Holly oak	17	53	Yes	3	Moderate	Codominant union at 7 and 9 feet with previous stem removals; narrow, vase-shaped crown.
119	Holly oak	12	38	Yes	2	Low	Heavily suppressed crown; candelabra form with competing
120	Holly oak	22	69	Yes	3	Low	Dominant tree in stand; multiple attachments arise from 10 feet with signs of decay at union; thin crown.
121	Holly oak	13	41	Yes	1	Low	Heavy Uncorrected lean over building; codominant stem at 5 feet with signs of decay.
122	London plane	8	25	No	1	Low	Severely topped; poor form and structure.
123	London plane	9	28	No	2	Low	Wide codominant union at 12 feet; severely suppressed, narrow and thin crown.
124	Coast redwood	27	85	Yes	3	Moderate	Slightly thin crown, topped; crowded with neighboring redwood.
125	Coast redwood	29	91	Yes	3	Moderate	Slightly thin crown, topped; crowded with neighboring redwood.
126	European white	3	9	No	2	Low	One-sided crown E.; severe drought stress; thin crown.
127	London plane	8	25	No	2	Low	Codominant unions at 8 and 10 feet; history of large branch removal with signs of decay; one-sided crown E.; thin crown.
128	Coast redwood	30	94	Yes	3	Moderate	Codominant stems at 60 feet; both previously topped; limited drought stress.
129	Coast redwood	27	85	Yes	3	Moderate	Slightly thin crown; previously topped; crowded with neighboring redwood.
130	London plane	15	47	Yes	3	Low	Wide codominant unions between 8 and 10 feet; crowded with redwoods resulting in one-sided crown N.; large girdling root E.
131	London plane	9	28	No	2	Low	Wide codominant union at 5 feet; thin, narrow crown.
132	London plane	12	38	Yes	3	Moderate	Trunk bow S.; dome-shaped crown.
133	Callery pear	6	19	No	3	Low	Multiple attachments at 5 feet; many competing leaders; moderate sapsucker damage.
134	London plane	11	35	No	2	Low	Wide codominant union at 7 feet with previous stem removal and signs of decay; previously topped.
135	London plane	9	28	No	2	Low	Trunk bow SE; previously topped; twig and small branch dieback.
136	London plane	12	38	Yes	2	Low	Codominant union at 8 feet with history of stem removal; pervasive twig and small branch dieback.
137	Callery pear	5	16	No	3	Low	Multiple attachments arise at 4-5 feet; many competing leaders; slightly one-sided SE.

Tree Assessment

5200 Patrick Henry Drive
Santa Clara, California
April 2022



Tree No.	Species	Trunk Diameter (in.)	Trunk Circumference (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
138	Coast redwood	37	116	Yes	3	Moderate	Good vigor; slightly one-sided S; from crowding in densely planted stand.
139	Coast redwood	25	79	Yes	3	Moderate	Suppressed on N and S from neighboring trees in densely planted stand; moderate vigor.
140	Coast redwood	27	85	Yes	3	Moderate	Slightly thin crown; one-sided E; from competition in densely planted stand.
141	Coast redwood	27	85	Yes	3	Moderate	Slightly thin crown; one-sided E; from competition in densely planted stand.
142	Coast redwood	15	47	Yes	1	Low	Planted in interior of dense stand; suppressed on all sides; mainly epicormic growth.
143	Coast redwood	27	85	Yes	3	Moderate	Slightly thin crown; one-sided NW from competition in densely planted stand.

Tree Assessment Map

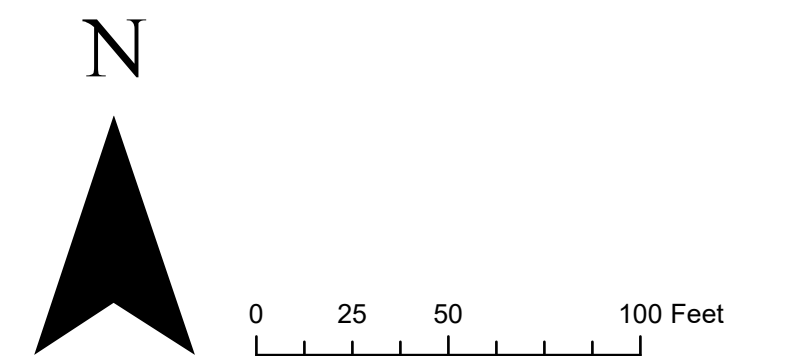
5200 Patrick Henry Dr.
Santa Clara, CA 95054

Prepared For:
Arista Networks
5453 Great America
Parkway,
Santa Clara, CA 95054

April 2022

Legend

- Boundary
- Trees



325 Ray Street
Pleasanton, California 94566
Phone 925.484.0211
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Preliminary Tree Disposition

5200 Patrick Henry Drive
 Santa Clara, California
 April 2022



Tree No.	Species	Trunk Diameter (in.)	Trunk Circumference (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Recommended Action	Comments
1	River she-oak	10	31	No	3	Moderate	Remove	Identified for removal in plan
2	Evergreen pear	13	41	Yes	3	Moderate	Remove	Identified for removal in plan
3	Holly oak	16	50	Yes	4	High	Remove	Identified for removal in plan
4	Evergreen pear	11	35	No	3	Moderate	Remove	Identified for removal in plan
5	River she-oak	12	38	Yes	3	Moderate	Remove	Identified for removal in plan
6	Evergreen pear	13	41	Yes	4	High	Remove	Identified for removal in plan
7	Holly oak	14	44	Yes	3	Moderate	Remove	Identified for removal in plan
8	Evergreen pear	18	57	Yes	3	Moderate	Remove	Identified for removal in plan
9	Holly oak	10	31	No	2	Low	Remove	Identified for removal in plan
10	Holly oak	12	38	Yes	2	Low	Remove	Identified for removal in plan
11	Evergreen pear	14	44	Yes	2	Low	Remove	Identified for removal in plan
12	Holly oak	11	35	No	3	Moderate	Remove	Identified for removal in plan
13	Evergreen pear	22	69	Yes	2	Low	Remove	Identified for removal in plan
14	London plane	7	22	No	2	Low	Remove	Identified for removal in plan
15	Evergreen pear	13	41	Yes	4	Moderate	Remove	Identified for removal in plan
16	Holly oak	16	50	Yes	2	Low	Remove	Identified for removal in plan
17	Evergreen pear	16	50	Yes	3	Moderate	Remove	Identified for removal in plan
18	River she-oak	9	28	No	3	Moderate	Remove	Identified for removal in plan
19	Evergreen pear	12	38	Yes	2	Low	Remove	Identified for removal in plan
20	Holly oak	6,1,1	19	Yes	3	Moderate	Remove	Identified for removal in plan
21	Raywood ash	22	69	Yes	2	Low	Remove	Identified for removal in plan
22	Aleppo pine	28	88	Yes	3	Moderate	Remove	Identified for removal in plan
23	Aleppo pine	21	66	Yes	2	Low	Remove	Identified for removal in plan
24	Aleppo pine	19,16,15	60	Yes	3	Low	Remove	Identified for removal in plan
25	Aleppo pine	33	104	Yes	4	High	Remove	Identified for removal in plan
26	Evergreen pear	12	38	Yes	2	Low	Remove	Identified for removal in plan
27	River she-oak	7	22	No	3	Moderate	Remove	Identified for removal in plan
28	Aleppo pine	36	113	Yes	4	High	Remove	Identified for removal in plan
29	Aleppo pine	35	110	Yes	3	Moderate	Remove	Identified for removal in plan
30	Evergreen pear	7	22	No	2	Low	Remove	Identified for removal in plan
31	Aleppo pine	15,14	47	Yes	3	Moderate	Remove	Identified for removal in plan
32	Aleppo pine	20,13	63	Yes	3	Moderate	Remove	Identified for removal in plan
33	Evergreen pear	16	50	Yes	2	Low	Remove	Identified for removal in plan

Preliminary Tree Disposition

5200 Patrick Henry Drive
 Santa Clara, California
 April 2022



Tree No.	Species	Trunk Diameter (in.)	Trunk Circumference (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Recommended Action	Comments
34	River she-oak	10	31	No	3	Moderate	Remove	Identified for removal in plan
35	River she-oak	10	31	No	3	Moderate	Remove	Identified for removal in plan
36	Chinese hackberry	8	25	No	2	Low	Remove	Identified for removal in plan
37	Aleppo pine	35	110	Yes	4	High	Remove	Identified for removal in plan
38	Chinese hackberry	6	19	No	2	Low	Remove	Identified for removal in plan
39	London plane	9	28	No	2	Low	Remove	Identified for removal in plan
40	Chinese hackberry	5	16	No	2	Low	Remove	Identified for removal in plan
41	Evergreen pear	11	35	No	4	High	Remove	Identified for removal in plan
42	Evergreen pear	11	35	No	3	Moderate	Remove	Identified for removal in plan
43	Aleppo pine	31,29	97	Yes	3	Moderate	Remove	Identified for removal in plan
44	Evergreen pear	13	41	Yes	5	High	Remove	Identified for removal in plan
45	Chinese hackberry	7	22	No	4	High	Remove	Identified for removal in plan
46	London plane	8	25	No	2	Low	Remove	Identified for removal in plan
47	Aleppo pine	24	75	Yes	3	Moderate	Remove	Identified for removal in plan
48	Aleppo pine	24	75	Yes	3	Moderate	Remove	Identified for removal in plan
49	London plane	5	16	No	1	Low	Remove	Identified for removal in plan
50	London plane	15	47	Yes	3	Moderate	Remove	Identified for removal in plan
51	London plane	8	25	No	2	Low	Remove	Identified for removal in plan
52	London plane	9	28	No	2	Low	Remove	Identified for removal in plan
53	London plane	8	25	No	2	Low	Remove	Identified for removal in plan
54	River she-oak	23	72	Yes	3	Moderate	Remove	Identified for removal in plan
55	River she-oak	9	28	No	3	Moderate	Remove	Identified for removal in plan
56	River she-oak	21	66	Yes	4	High	Remove	Identified for removal in plan
57	Holly oak	17	53	Yes	3	Moderate	Remove	Identified for removal in plan
58	River she-oak	17,16	53	Yes	3	High	Remove	Identified for removal in plan
59	River she-oak	24	75	Yes	4	High	Remove	Identified for removal in plan
60	River she-oak	16,15	50	Yes	3	Moderate	Remove	Identified for removal in plan
61	River she-oak	33	104	Yes	3	Moderate	Remove	Identified for removal in plan
62	River she-oak	9	28	No	3	Moderate	Remove	Identified for removal in plan
63	River she-oak	18	57	Yes	2	Low	Remove	Identified for removal in plan
64	River she-oak	9	28	No	4	High	Remove	Identified for removal in plan
65	River she-oak	9	28	No	4	High	Remove	Identified for removal in plan
66	River she-oak	22,19,18	69	Yes	3	High	Remove	Identified for removal in plan

Preliminary Tree Disposition

5200 Patrick Henry Drive
 Santa Clara, California
 April 2022



Tree No.	Species	Trunk Diameter (in.)	Trunk Circumference (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Recommended Action	Comments
67	River she-oak	7	22	No	4	High	Remove	Identified for removal in plan
68	River she-oak	8	25	No	3	Moderate	Remove	Identified for removal in plan
69	River she-oak	26	82	Yes	3	High	Remove	Identified for removal in plan
70	River she-oak	23	72	Yes	3	Moderate	Remove	Identified for removal in plan
71	River she-oak	26	82	Yes	3	Moderate	Remove	Identified for removal in plan
72	Evergreen pear	14	44	Yes	4	Moderate	Remove	Identified for removal in plan
73	Evergreen pear	16	50	Yes	3	Moderate	Remove	Identified for removal in plan
74	Evergreen pear	12	38	Yes	3	Moderate	Remove	Identified for removal in plan
75	London plane	8	25	No	2	Low	Remove	Identified for removal in plan
76	London plane	12	38	Yes	3	Moderate	Remove	Identified for removal in plan
77	London plane	7	22	No	2	Low	Remove	Identified for removal in plan
78	Coast redwood	25	79	Yes	3	Low	Remove	Identified for removal in plan
79	Coast redwood	20	63	Yes	3	Low	Remove	Identified for removal in plan
80	Coast redwood	24	75	Yes	2	Low	Remove	Identified for removal in plan
81	Coast redwood	23	72	Yes	2	Low	Remove	Identified for removal in plan
82	London plane	6	19	No	2	Low	Remove	Identified for removal in plan
83	London plane	8	25	No	2	Low	Remove	Identified for removal in plan
84	London plane	8	25	No	3	Moderate	Remove	Identified for removal in plan
85	London plane	9	28	No	2	Low	Remove	Identified for removal in plan
86	Holly oak	13	41	Yes	3	Low	Remove	Identified for removal in plan
87	Holly oak	18	57	Yes	4	High	Remove	Identified for removal in plan
88	Callery pear	4	13	No	3	Low	Remove	Identified for removal in plan
89	Callery pear	3	9	No	3	Low	Remove	Identified for removal in plan
90	Holly oak	27	85	Yes	3	Moderate	Remove	Identified for removal in plan
91	London plane	7	22	No	2	Low	Remove	Identified for removal in plan
92	London plane	5	16	No	1	Low	Remove	Identified for removal in plan
93	Evergreen pear	12	38	Yes	3	Moderate	Remove	Identified for removal in plan
94	Evergreen pear	13	41	Yes	3	Moderate	Remove	Identified for removal in plan
95	London plane	9	28	No	2	Low	Remove	Identified for removal in plan
96	Holly oak	17	53	Yes	4	High	Remove	Identified for removal in plan
97	Evergreen pear	15	47	Yes	3	Moderate	Remove	Identified for removal in plan
98	Evergreen pear	16	50	Yes	2	Low	Remove	Identified for removal in plan
99	Evergreen pear	16	50	Yes	3	Moderate	Remove	Identified for removal in plan

Preliminary Tree Disposition

5200 Patrick Henry Drive
 Santa Clara, California
 April 2022



Tree No.	Species	Trunk Diameter (in.)	Trunk Circumference (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Recommended Action	Comments
100	Callery pear	17	53	Yes	1	Low	Remove	Identified for removal in plan
101	London plane	10	31	No	3	Low	Remove	Identified for removal in plan
102	London plane	10	31	No	1	Low	Remove	Identified for removal in plan
103	Callery pear	3	9	No	2	Low	Remove	Identified for removal in plan
104	London plane	10	31	No	3	Moderate	Remove	Identified for removal in plan
105	London plane	8	25	No	2	Low	Remove	Identified for removal in plan
106	Coast redwood	23	72	Yes	3	Moderate	Remove	Identified for removal in plan
107	Coast redwood	15	47	Yes	2	Low	Remove	Identified for removal in plan
108	London plane	9	28	No	2	Low	Remove	Identified for removal in plan
109	Holly oak	19	60	Yes	3	Moderate	Remove	Identified for removal in plan
110	Holly oak	16	50	Yes	3	Moderate	Remove	Identified for removal in plan
111	Callery pear	6	19	No	3	Low	Remove	Identified for removal in plan
112	London plane	13	41	Yes	3	Moderate	Remove	Identified for removal in plan
113	London plane	9	28	No	3	Low	Remove	Identified for removal in plan
114	London plane	9	28	No	2	Low	Remove	Identified for removal in plan
115	London plane	12	38	Yes	2	Low	Remove	Identified for removal in plan
116	London plane	12	38	Yes	3	Moderate	Remove	Identified for removal in plan
117	London plane	9	28	No	3	Moderate	Remove	Identified for removal in plan
118	Holly oak	17	53	Yes	3	Moderate	Remove	Identified for removal in plan
119	Holly oak	12	38	Yes	2	Low	Remove	Identified for removal in plan
120	Holly oak	22	69	Yes	3	Low	Remove	Identified for removal in plan
121	Holly oak	13	41	Yes	1	Low	Remove	Identified for removal in plan
122	London plane	8	25	No	1	Low	Remove	Identified for removal in plan
123	London plane	9	28	No	2	Low	Remove	Identified for removal in plan
124	Coast redwood	27	85	Yes	3	Moderate	Remove	Identified for removal in plan
125	Coast redwood	29	91	Yes	3	Moderate	Remove	Identified for removal in plan
126	European white	3	9	No	2	Low	Remove	Identified for removal in plan
127	London plane	8	25	No	2	Low	Remove	Identified for removal in plan
128	Coast redwood	30	94	Yes	3	Moderate	Remove	Identified for removal in plan
129	Coast redwood	27	85	Yes	3	Moderate	Remove	Identified for removal in plan
130	London plane	15	47	Yes	3	Low	Remove	Identified for removal in plan
131	London plane	9	28	No	2	Low	Remove	Identified for removal in plan
132	London plane	12	38	Yes	3	Moderate	Remove	Identified for removal in plan

Preliminary Tree Disposition

5200 Patrick Henry Drive
 Santa Clara, California
 April 2022



Tree No.	Species	Trunk Diameter (in.)	Trunk Circumference (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Recommended Action	Comments
133	Callery pear	6	19	No	3	Low	Remove	Identified for removal in plan
134	London plane	11	35	No	2	Low	Remove	Identified for removal in plan
135	London plane	9	28	No	2	Low	Remove	Identified for removal in plan
136	London plane	12	38	Yes	2	Low	Remove	Identified for removal in plan
137	Callery pear	5	16	No	3	Low	Remove	Identified for removal in plan
138	Coast redwood	37	116	Yes	3	Moderate	Remove	Identified for removal in plan
139	Coast redwood	25	79	Yes	3	Moderate	Remove	Identified for removal in plan
140	Coast redwood	27	85	Yes	3	Moderate	Remove	Identified for removal in plan
141	Coast redwood	27	85	Yes	3	Moderate	Remove	Identified for removal in plan
142	Coast redwood	15	47	Yes	1	Low	Remove	Identified for removal in plan
143	Coast redwood	27	85	Yes	3	Moderate	Remove	Identified for removal in plan