ARBORIST REPORT

HYATT HOUSE HOTEL AT VALLCO PARK

WOLFE ROAD & INTERSTATE 280 CUPERTINO, CALIFORNIA (APN 316-20-092)

Submitted to:

Community Development Department
City of Cupertino
10300 Torre Avenue
Cupertino, CA 95014

Prepared by:

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July 24, 2014

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
1.0	INTRODUCTION	1
2.0	TREE COUNT AND COMPOSITION	2
3.0	SUITABILITY FOR TREE PRESERVATION	3
4.0	REVIEW OF POTENTIAL IMPACTS	5
4.1	Proposed Removals	5
4.2	Potential Significant Impacts	6
5.0	GUIDELINES FOR TREE REPLACEMENTS	8
6.0	GENERAL PROTECTION MEASURES	11
6.1	Design Guidelines	11
6.2	Before Demolition, Grading and Construction	13
6.3	During Demolition, Grading and Construction	14
7.0	ASSUMPTIONS AND LIMITING CONDITIONS	16

EXHIBITS

<u>EXHIBIT</u>	TITLE
Α	TREE INVENTORY TABLE (20 sheets)
В	SITE MAP (one sheet)
С	PHOTOGRAPHS (11 sheets)

1.0 INTRODUCTION

The City of Cupertino Community Development Department has retained me to prepare this *Arborist Report* in connection with the proposed application to construct a five-story, 148-room hotel named **Hyatt House Hotel at Vallco Park**; the property is a triangular-shaped lot, bordered by Interstate 280 to the north, N. Wolfe Road to the west, and Perimeter Road to the south (APN 316-20-092), and currently serves as an overflow parking lot for Vallco Mall.

Specific tasks assigned to perform are as follows:

- Visit the site on May 12 and 15, 2014 to identify 150 trees having trunks with diameters of four inches and greater (measured 54 inches above grade).
- Determine each tree's trunk diameter at 54 inches above grade or where appropriate to obtain the best representation of trunk size. Diameters are rounded to the nearest inch, and trees listed with more than one diameter are formed by multiple trunks.
- Ascertain each tree's health and structural integrity, and assign an overall condition rating (e.g. good, fair, poor or dead).
- Determine each tree's suitability for preservation (e.g. high, moderate or low).
- Obtain photographs; see Exhibit C.
- Identify which trees have trunks situated within the public right-of-way.
- Assign tree numbers in a sequential pattern, and those locations can and numbers can be viewed on Sheet A-0.2 presented in Exhibit B (copy of the *Demolition/Tree Removal Plan*, dated 7/15/14).
- Affix metal tags with engraved, corresponding numbers to each accessible trunk or major limb (the tags are round aluminum).
- Review the plan set dated 7/15/14 to identify potential tree disposition and impacts.
- Provide tree replacement guidelines.
- Develop general protection measures to help avoid or mitigate impacts to trees planned for retention.
- Prepare a written report that presents the aforementioned information, and submit via email as a PDF document.

2.0 TREE COUNT AND COMPOSITION

One-hundred fifty (150) trees of eight various species were inventoried for this report. They are sequentially numbered as <u>1 thru 150</u>, and the table below, and continued on the following two pages, identifies their common names, assigned numbers, counts and overall percentages.

NAME	TREE NUMBER(S)	COUNT	% OF TOTAL
coast live oak	91, 92, 145, 146	4	3%
coast redwood	1, 2, 4, 5-89, 93-95, 97-102, 107	98	65%
cork oak	90, 143, 144	3	2%
evergreen pear	109, 110, 136-139	6	4%
honey locust	103, 131-133, 142, 147-150	9	6%
Monterey pine	129, 130, 134, 135, 140, 141	6	4%
pin oak	127, 128	2	1%
Shamel ash	3, 96, 104-106, 108, 111-126	22	15%

Total 150 100%

As illustrated above, the site is populated predominantly by **coast redwoods**, which form a highly dense and established screen along the north (Hwy 280) and west (N. Wolfe Road) boundaries. The redwoods exhibit symptoms of significant or severe stress from not receiving sufficient water over the years, and the vast majority appear in poor health. Of these, many are beyond recovery, and others might improve if an assertive watering program is immediately implemented. Absent of supplemental water, continued decline for many years later can be expected, and those otherwise intended for retention and protection may ultimately require removal.

Specific information regarding each tree is presented within the table in **Exhibit A**. The trees' locations and corresponding numbers can be viewed on the site map in **Exhibit B**, and photographs are presented in **Exhibit C**.

One tree, #96, is a within the public right-of-way along N. Wolfe Road and defined as a street tree.

Sheet A-0.2 identifies two 'trees #102.' The one immediately north of #101 is the correct one, and the other near #107 and 108 is small evergreen pear with a trunk diameter less than three inches; see the map in Exhibit B for further clarification.

Four coast live oaks are defined as "**specimen trees**" pursuant to Appendix B of Ordinance No. 07-2003; they include #91, 92, 145 and 146.

3.0 SUITABILITY FOR TREE PRESERVATION

Each tree has been assigned either a "high," "moderate" or "low" suitability for preservation rating as a means to cumulatively measure and consider their existing health, structural integrity, anticipated life span, available growing space, location, size and species. A description of these ratings are presented below; note that the "high" category comprises **nine** (or 6%), the "moderate" category **58** (or 39%), and the "low" category **83** (or 55%) of the total inventoried trees.

High: Applies to trees #14, 20, 29, 32, 33, 44, 89, 95 and 97.

These trees offer a good potential for contributing long-term to the site; appear reasonably healthy with stable structures; have no apparent, significant health issues or structural defects; and require regular care to maintain their longevity and vigor.

Moderate: Applies to trees #3, 5, 8, 10, 15, 16, 21-28, 30, 31, 35, 36, 39, 41, 42, 45-52, 54, 55, 57-59, 61, 63-65, 75, 82, 87, 91-93, 98-102, 107, 118, 119, 124, 125, 131, 132, 139 and 143.

These trees contribute to the site but at levels less than those assigned a high suitability; have health and/or structural issues that can potentially be reasonably addressed and property mitigated; and frequent care is typically required for their remaining lifespan. A good number of redwoods within this rating serve as established screening elements between Interstate 280 and N. Wolfe Road; they are assigned moderate suitability solely for this reason, as well as the potential of health recovery, including numerous that have been "topped" and/or suppressed growth due to adjacent, more established trees (they would otherwise be assigned a low suitability for their poor health condition).

<u>Low</u>: Applies to trees #1, 2, 4, 6, 7, 9, 11-13, 17-19, 27, 34, 37, 38, 40, 43, 53, 56, 60, 62, 66-74, 76-81, 83-86, 88, 90, 94, 96, 103-106, 108-117, 120-123, 126-130, 133-138, 140-142 and 144-150.

These trees are either dead, nearly dead, severely declined, highly suppressed in terms of canopy and trunk development, and/or have such serious structural defects that they are expected to worsen regardless of tree care measures employed (i.e. beyond recovery). None appear suitable for retention.

Of **low suitability trees**, the following four should be **immediately removed**: #94, 123, 126 and 145. Trees #94, 123 and 126 are dead. Tree #145 has a massive split where four leaders originate, and is at severe risk of breaking at any time (presents an immediate, hazardous risk to persons and vehicles below).

4.0 REVIEW OF POTENTIAL IMPACTS

4.1 Proposed Removals

The following 114 trees are identified for removal to accommodate the proposed project design and/or low suitability for preservation: #1, 2, 4, 6, 7, 9, 11-13, 17-19, 27, 34, 37, 38, 40, 43, 53 and 56-150.

The above list considers the following:

- All redwood trees along the western boundary for construction of the proposed path (the vast majority are in poor condition).
- All trees at the southwest section of the site to accommodate the proposed path, driveway, and grading.
- All trees within the existing parking lot to allow building construction.
- All trees within the planter strip along Perimeter Road for site improvements.
- Select redwoods along the north boundary due to being in poor condition.
- Trees at the northwest corner of the property for the bioretention planter.

Of the 114 trees, three are assigned a high suitability, 27 a moderate suitability, and 84 a low suitability; none are suitable for relocation. The high suitability trees include #89, 95 and 97, all sizeable coast redwoods with trunk diameters of 30, 22 and 24 inches, respectively, but appear in only fair health condition; their removal appears necessitated by the proposed path, driveway, and associated grading at the southwest corner of the site.

Sheet A-0.2 provides information regarding the proposed tree disposition. Several observations and recommendations for updating that plan are as follows:

- The elevations shown for trees differs from those provided on the civil drawings. As such, the plan needs to be **substituted** with the Sandis topo for a base map, assuming the Sandis topo reflects the correct elevation and site information.
- Trees #57, 58 and 59 need to reflect removal due to being within the proposed bioretention planter and immediately adjacent to the storm drain.
- Omit the additional #102 discussed in Section 2.0 of this report (page 3).

4.2 Potential Significant Impacts

Of the **36 trees** planned for **retention**, implementation of the proposed design would subject a number to a high or severe level of impacts. Discussion and recommendations for design modification to achieve adequate protection are provided in this section.

Redwood trees #14, 15, 16, 20 and 21 will sustain potentially severe root loss during excavation for the new section of parking lot at the northeast section of the property. To achieve protection, the section of existing planter within at least 12 feet from their trunks should remain intact and be regarded as their Tree Protection Zone ("TPZ" hereinafter).

The proposed **relocation** of the **cellular equipment enclosure** will result in excavation within a significant section of tree #10's root zone, and the process may expose root damage or loss to #14-16, 20 and 21. I recommend a plan for relocating this feature is provided to best assess impacts.

For trees retained along the northern border, excavation for the proposed **storm drain and inlets** would expose the redwood to the potential loss and/or damage to large roots within the parking lot. To reduce the risk of damage or impacts, I recommend the main line is established at least **ten feet** from the trunks. The inlets can be placed at the edge of proposed lot, however, must be strategically located away from retained trees (i.e. in voids containing trees that are either small or proposed for removal), and the lines connecting the inlets to the storm in a radial direction to tree trunks. A possible alternative is for the line to be directionally-bored by 36 inches or more below grade, and the access pits established beyond the canopy of a retained tree.

The proposed **nine light poles** along the north boundary show footings within the existing planter and immediately adjacent to the following 12 trees: #16, 21, 26, 30, 31, 35, 36, 41, 44, 45, 49 and 54. To avoid potentially significant impacts, I recommend the light poles are situated or designed so that no drilling or excavation is needed within the planter (a

July 24, 2014

possible alternative is to place them within the finger islands). The electrical layout should also be configured as described above for the storm drains.

Another potential impact for trees along the north boundary involves the footing design and installation method of the **proposed wall/curb**. It is critical that the future curb and gutter do not require lateral excavation into the existing planter (i.e. any soil and roots behind existing back of curb), including for overexcavation to construct, form and pour the wall/curb, footing and gutter. Additionally, the wall/curb and gutter should not require **excavation** into **existing base** material, or have the flexibility for as-built changes, should roots of two inches and greater in diameter be encountered. Additionally, **existing base material** should be **utilized** for the new lot where roots of this size become encountered.

The **electrical layout** for lighting or purposes becomes a critical component to avoid trenching within protection zones, and subsequently, can result in severe root loss. To avoid this from occurring, I recommend the layout is established, reviewed and approved prior to building permit issuance, and the routes established beyond tree protection zones.

The **path** proposed along the **north side** of the northern shared fence line appears to present no significant impacts to adjacent redwoods, provided excavation is not needed for its construction (i.e. a no-dig design, including for base materials, forms and edging), and direct compaction of existing soil grade can be avoided grade. A material that may achieve these specifications is Tensar[®] Biaxial **Geogrid** (*www.tensarcorp.com*).

Note that for any trees redwoods being considered for retention, it is critical to begin immediately supplying them with **supplemental water**. Their current, overall poor and dying condition can be attributed to an absence of water.

5.0 GUIDELINES FOR TREE REPLACEMENTS

Applying Section 14.18.185, Table A, of the City Code, one of the following options would be applied for mitigating removal of the 114 trees:

- Installing **187 trees** of 24-inch box size.
- Installing **109 trees** of <u>24-inch</u> box size plus **39** of <u>36-inch</u> box size.
- Installing **109 trees** of <u>24-inch</u> box size, and for the **additional 78 trees** of 24-inch box size, any **combination** of one 36-inch box for every two 24-inch boxes.

Based on the table presented on L-3, a total of **95 trees** of 24-inch box size are proposed for installation, a difference of 92 trees of 24-inch box trees to meet Code Section 14.18.185 for mitigation replacements.

My review of the landscape plans reveals several opportunities to **enhance replacement mitigation**, namely the following:

- As many trees as necessary along the front of the building could be upsized to 36inch boxes.
- Trees could be installed within the bioretention planter, such as Marina madrone,
 Fernleaf Fullmoon maple, or Elegant Brisbane box.
- Trees could be installed within the barren area at the southwest corner of the property.
- Once Sheet L-3 is coordinated with all removals shown on A-0.2, such as along the north property edge, additional space and opportunity will be created for installing new trees.

Regarding the **species** proposed for replacements, I recommend the following:

- For the London planes, substituting 'Bloodgood' with the 'Columbia.'
- Substituting Shamel ash with one of the following: Shumard red oak or Autumn purple white ash. The Shumard is preferred, but due to the multi-leader, competing structure, it is important to select ones with a dominant central leader.
- Consider additional species, such as mentioned for the bioretention planter, and possibly a valley oak or cork oak in a larger planter area.

Regarding redwoods to be installed along the **west boundary**, the existing coast redwoods are roughly spaced, on average, nine to ten feet apart. I suggest **12 feet** between each tree would provide appropriate spacing for this site.

For redwoods to be installed along the **north boundary**, there are some instances where redwoods are proposed for removal due to being under highly suppressed and crowded-growing conditions, and installing a new redwood would be futile due to inadequate space, sunlight, and the established dominance of adjacent redwoods with broad canopies. There are other instances where trees are proposed for removal due to being in poor condition, but there appears sufficient sunlight and spacing for new redwoods, if not one to each removed tree, then one between where two are removed. Suggestions and considerations for the locations and amounts of replacements are as follows:

- The area occupied by #9, 27, 34, 40, 43 and 56 should not be replaced.
- Replacements for #1, 2, 4, 11, 12, 13, 53 and 60-63 should be installed within the same trunk areas as of the removed trees.
- One tree is suggested between #17 and 18, and another between #37 and 38.
- The spacing distance between new and existing would vary along the north boundary to accommodate the above recommendations and consider existing conditions, such as the dominance of existing redwoods crowding out available planting space and sunlight.
- For new redwoods installed, I do not anticipate those planted in close proximity of established ones will sustain sufficient growing space and sunlight to reach a similar height. Those setback some from established ones do present a reasonably good opportunity though, and estimate that under favorable growing conditions, 15 to 20 years may allow them to reach a similar height.

Based on the amount of new trees to be installed, they should be **selected and tagged at the nursery** by an ISA (International Society of Arboriculture) certified arborist and/or the landscape architect prior to being shipped to the site. They should have relatively symmetrical structures mostly free of obvious defects, wounds and girdling roots.

Additionally, the arborist and/or landscape architect should be retained to examine and root prune, as needed, once the boxes are removed and before being installed.

All new trees should be **installed**, including necessary irrigation, by an experienced state-licensed **landscape contractor** or a **professional tree service company**, and performed to professional industry standards. Only if necessary to stand upright, they should be double-staked (no cross-brace) with rubber tree ties or equivalent, and the support stakes cut below the first main lateral branch. Percolation tests should also be performed for each planting pit to ensure drainage is achieved.

All **irrigation** should be supplied through valves and automatic timers separate from that of shrubs, plants and groundcover, and supplied by two bubblers placed and staked on the surface of the root ball (versus against the trunk or in a sleeve) at around the one-half or three-quarters of the distance between the trunk and rootball edges. Additionally, an eightinch tall circular berm formed by soil should be formed around the perimeter of the rootball (for water from the bubblers to flood). A two- to three-inch layer of wood-chip mulch should be spread on top and 12 inches beyond the root ball (but not piled against the trunks).

6.0 GENERAL PROTECTION MEASURES

Recommendations presented within this section serve as general design guidelines to help mitigate or avoid impacts to trees being retained. They are subject to revision upon reviewing the updated project design, and I should be consulted in the event any cannot be feasibly implemented. Please note that all referenced **distances from trunks** are intended to be from the closest edge (face of) of their outermost perimeter at soil grade.

6.1 Design Guidelines

- 1. All **recommendations** presented in **Section 4.0** of this report should be considered part of this section.
- 2. A TPZ is where all trenching, soil scraping, compaction, grading (cut and fill), removal of underground utilities and vaults, finish-grading, overexcavation, subexcavation, swales, bioswales, storm drains, equipment cleaning, stockpiling and dumping of materials, and equipment/vehicle operation shall be avoided. For general design purposes, the minimum TPZs of select trees that may potentially be retained are provided in Section 4.0 of this report. For all other inventoried trees not mentioned in Section 4.0 but being retained, I recommend their TPZs are up to 12 inches from proposed improvements, and beneath their entire canopies in all other directions. Where an impact encroaches slightly within a setback, it can be reviewed on a case-by-case basis to determine appropriate mitigation measures.
- 3. The **tree numbers** of all retained trees should be added to the civil and landscape plans to allow for efficient design review for both the City and contractors.
- 4. **Sheet C-3.0** should show the **limits of grading**.
- 5. All **existing, unused lines, pipes and manholes** within a TPZ should be **abandoned** and cut off at existing soil grade (rather than being dug up and causing subsequent root damage); this provision should be specified on A-0.2.

- 6. **Overexcavation** for constructing any curb, gutter, walk, foundation etc. within a TPZ should be reduced to the maximum extent possible, such as six inches.
- 7. **Shoring** should be specified for the north side of the proposed underground garage.
- 8. The permanent and temporary **drainage design**, including downspouts, should not require water being discharged within TPZs. Also, any **swales** needed for drainage within a TPZ should require no more than a three-inch soil cut and fill, and roots two inches and greater in diameter retained and not damaged.
- 9. Any underground utilities and services (e.g. electrical) should be routed beyond TPZs. Where this is not feasible, the section of line(s) within the TPZ should be directionally-bored by at least four feet below existing grade, or installed by other means (e.g. pipe-bursting) to avoid an open trench. The ground above any tunnel must remain undisturbed, and access pits and any above-ground infrastructure (e.g. splice boxes, meters and vaults) established beyond all TPZs.
- 10. The future **staging area** and **route(s) of access** should be shown on the final site plan and avoided on unpaved areas beneath or near canopies. Where not feasible, I should be consulted to review the location and proximity to particular trees, and strive to identify a temporary root zone buffer that could potentially minimize soil compaction within a TPZ, and in turn, lessen impacts to a tree's vigor and longevity.
- 11. To restrict spoils and runoff from traveling into root zones, the future **erosion control design** should establish any silt fence and/or straw rolls away from a tree's trunk (not against it), and as close to the canopy edge as possible. Additionally, where within a TPZ, the material should require none or a maximum vertical soil cut of two inches for its embedment.
- 12. The **landscape design** should conform to the following additional guidelines:
 - a. **Large growing trees**, such as those that can exceed the height of retained trees, should be installed beyond TPZs, and at least 10 to 15 feet from a future foundation, wall and hardscape.

- b. **Plant material** installed beneath canopies of oaks must be drought-tolerant, limited in amount, and planted at least five or more feet from their trunks. Plant material installed beneath the canopies of all other trees should be at least 36 inches from their trunks.
- c. **Irrigation and lighting features** (e.g. main line, lateral lines, valve boxes, wiring and controllers) should be established so that no trenching occurs within a TPZ. In the event this is not feasible, they may require being installed in a radial direction to a tree's trunk, and terminate a specific distance from a trunk (versus crossing past it).
- d. **Ground cover** beneath canopies should be comprised of a three- to four-inch layer of coarse wood chips or other high-quality mulch (gorilla hair, bark or rock, stone, gravel, black plastic or other synthetic ground cover should be avoided). Mulch should not be placed against the trees' trunks.
- e. **Tilling, ripping and compaction** within TPZs should be avoided.
- f. Bender board or other **edging material** proposed beneath the canopies should be established on top of existing soil grade (such as by using vertical stakes).
- g. Providing **ongoing supplemental water** during the dry months of the year following the project would benefit the longevity of redwoods and, possibly applied through bubblers strategically located throughout the root zones. Additional discussion can be provided upon request.
- h. Ensure **no recycled water** is supplied to the redwoods.

6.2 Before Demolition, Grading and Construction

- 13. A **site meeting** with the general contractor and me ("**project arborist**" hereinafter) should be conducted several weeks prior to work commencing for the purpose of reviewing **tree fencing locations** and other **measures** presented in this report. **Additional site visits** include reviewing root pruning and tree impacts during construction, and providing a final assessment of project impacts (for scheduling purposes, I request a minimum five business-day notice for these subsequent visits).
- 14. **Tree protective fencing** is needed prior to any grading, trenching or excavation for the purpose of restricting access into and enclosing the **entire TPZs**. Its location can be identified during the initial site meeting, and should remain intact and be

maintained throughout construction. One approach is to utilize five-foot tall chain link panels mounted on steel posts or concrete blocks, and the panels firmly established to avoid easily being shifted or opened. Another includes mounting five-to six-foot tall chain link on two-inch diameter steel posts that are driven into the ground 24 inches deep.

- 15. The **limits of sidewalk, streetscape and grading** should be **staked** prior to any digging occurring.
- 16. **Wood chips** may need to be spread on exposed ground beneath the canopies of select trees. They should be **coarse** (e.g. ½- to ¾-inch in size), and spread to a four- to five-inch layer beyond improvements, not piled against a trunk, and remain throughout construction.

6.3 During Demolition, Grading and Construction

- 17. **Great care** must be taken during demolition of all existing features, to including the existing structures, curbs, gutter, etc. to avoid excavating into the ground and disturbing roots.
- 18. Any approved **digging or trenching** within a **TPZ** should be **manually performed** without heavy equipment or tractors, including small ones, operating within a TPZ.
- 19. Any **roots encountered** during the process with diameters **less than two inches** in diameter can be cleanly severed at a 90-degree angle to the direction of root growth. In doing so, sharp cutting tools (e.g. loppers or handsaw) shall be used, and the cut should occur against the tree side of the trench. Roots considered for removal with diameters of **two inches and greater** must first be reviewed by the project arborist.
- 20. **Spoils** created during digging must not be piled or spread within a TPZ. If necessary, they can be temporarily piled on plywood or a tarp.
- 21. **Tree trunks** shall not be used as winch supports for moving or lifting heavy loads.

- 22. **Supplemental water** is essential to promote, and in many instances improve, the vigor and longevity of trees being retained, as well as help offset impacts. The methodology, amount and frequency can be discussed prior to construction.
- 23. The **disposal** of harmful products (such as cement, paint, chemicals, oil and gasoline) is prohibited beneath canopies or anywhere on site that allows drainage beneath or near TPZs. **Herbicides** should not be used with a TPZ; where used on site, they should be labeled for safe use near trees.
- 24. Any **tree pruning** should be performed by a California state-licensed tree service company (D-49 classification) that has an ISA certified arborist in a supervisory role, carries General Liability and Worker's Compensation insurance, and abides by in accordance with ANSI A300-2001 (Pruning) and ANSI Z133.1-2006 (Safety Operations) standards.

7.0 ASSUMPTIONS AND LIMITING CONDITIONS

- All information presented herein reflects my observations and measurements obtained from the project site on May 12 and 15, 2014.
- My observations were performed visually without probing, coring, dissecting or excavating. I cannot, in any way, assume responsibility for any defects that could only have been discovered by performing the mentioned services in the specific area(s) where a defect was located.
- The assignment pertains solely to trees listed in Exhibit A. I hold no opinion towards other trees on or surrounding the project area.
- I cannot provide a guarantee or warranty, expressed or implied, that deficiencies or problems of any trees or property in question may not arise in the future.
- No assurance can be offered that if all my recommendations and precautionary measures (verbal or in writing) are accepted and followed, that the desired results may be achieved.
- I cannot guarantee or be responsible for the accuracy of information provided by others.
- I assume no responsibility for the means and methods used by any person or company implementing the recommendations provided in this report.
- The information provided herein represents my opinion. Accordingly, my fee is in no way contingent upon the reporting of a specified finding, conclusion or value.
- The numbers shown on the site map in Exhibit B are intended to only roughly approximate a tree's location and should not be considered as surveyed trunk locations.
- This report is proprietary to me and may not be copied or reproduced in whole or part without prior written consent. It has been prepared for the sole and exclusive use of the parties to who submitted for the purpose of contracting services provided by David L. Babby.
- If any part of this report or copy thereof be lost or altered, the entire evaluation shall be invalid.

Prepared By:

David L. Babby

Registered Consulting Arborist® #399 Board-Certified Master Arborist® #WE-4001B



Date: July 24, 2014

EXHIBIT A:

TREE INVENTORY TABLE

(20 sheets)

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
1	coast redwood (Sequoia sempervirens)	13	30%	50%	Poor	Low	X
		Near bottom of h				Low	Λ
	comments.	ivear bottom of h	iii. Dead brailei	ies. Water may i	improve nearm.		
	coast redwood						_
2	(Sequoia sempervirens)	17	30%	40%	Poor	Low	X
	Comments:	Topped, a condit	ion that adversel	y impacts long-to	erm structural in	tegrity. At botto	m of hill.
	Shamel ash						
3	(Fraxinus uhdei)	27	60%	40%	Fair	Moderate	
	Comments:	Multiple leader s	tructure. Lower	trunk is covered	by ivy. At top of	of hill.	
		Υ					
4	coast redwood (Sequoia sempervirens)	20	30%	40%	Poor	Low	X
		Near top of hill.					
			,	1.7			
1 _ 1	coast redwood	1.6	400/	7 00/		36.1	
5	(Sequoia sempervirens)	Doots have contr	40%	50%	Poor	Moderate	.m. ama a 11
	Comments:	Roots have contr planter. Adjacen	_		it aspnait iot. Ti	unk nas outgrow	n smaii
		I					
6	coast redwood (Sequoia sempervirens)	20	20%	30%	Poor	Low	X
		Nearly dead and			1 001	LOW	11
			,				
	coast redwood						
7	(Sequoia sempervirens)	23	20%	30%	Poor	Low	X
	Comments:	Nearly dead and in parking lot.	beyond recovery	Adjacent curb	is raised, and ro	ots have formed	mounds
	coast redwood	20	500/	400/	Door	Moderate	
8	(Sequoia sempervirens)	20 Topped. Sparse	50%	40%	Poor	Moderate	
	comments:	Topped. Sparse	canopy, and mip	rovement omy po	ossible with regu	nai watering.	

Project: Hyatt House Hotel at Vallco Park, Cupertino

Prepared for: City of Cupertino 1 of 20
Prepared by: David L. Babby July 24, 2014

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
	coast redwood	14	200/	600/	Daan	I	v
9	(Sequoia sempervirens) Comments:	14 Declining canopy	30% with highly que	60% estionable recove	Poor ery.	Low	X
			2 7 1			•	
10	coast redwood (Sequoia sempervirens)	25	40%	70%	Poor	Moderate	
10		Topped and very					g.
						1	
11	coast redwood (Sequoia sempervirens)	22	30%	40%	Poor	Low	X
		Adjacent to tall s					
						<u> </u>	
12	coast redwood (Sequoia sempervirens)	19	30%	40%	Poor	Low	X
	Comments:	Adjacent to tall s	ign. Topped. V	ery sparse canop	y with highly qu	estionable recov	ery.
	coast redwood						
13	(Sequoia sempervirens)	21	30%	50%	Poor	Low	X
		Lower trunk swe questionable reco	•	then grows vertic	cal. Very sparse	canopy with hig	hly
	coast redwood	2.1	0021	700	<i>a</i> :	***	
14	(Sequoia sempervirens)	24 Relatively health	80%	70%	Good	High	
	comments:	Relatively nearth	y iiee wiiii good	suucture.			
	coast redwood	2.4	4021	400	ъ	26.1	
15	(Sequoia sempervirens)	24 T. 1 A 1	40%	40%	Poor	Moderate	1
		Topped. A large recovery may be	_		xisting beam. D	eclining health,	and
	coast redwood						
16	(Sequoia sempervirens)	24	40%	40%	Poor	Moderate	

Comments: Topped. Declining health, and recovery may be possible with regular watering.

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

Prepared for: City of Cupertino 2 of 20
Prepared by: David L. Babby July 24, 2014

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
1-	coast redwood	12	400/	400/	D	T	V
17	(Sequoia sempervirens)	13	40%	40%	Poor	Low	X
	Comments:	Suppressed and c	rowded-growing	g conditions.			
	coast redwood						
18	(Sequoia sempervirens)	8	40%	30%	Poor	Low	X
		Suppressed grow	th adjacent to #1	9.			
		0					
	coast redwood						
19	(Sequoia sempervirens)	13	40%	40%	Poor	Low	X
	Comments:	Suppressed grow	th adjacent to #1	8.			
20	coast redwood	28	700/	900/	G 1	11' 1	
20	(Sequoia sempervirens)		70%	80%	Good	High	
	Comments:	Relatively health	y tree with a stat	oie structure.			
	coast redwood						
21	(Sequoia sempervirens)	21	60%	60%	Fair	Moderate	
	Comments:	Nearly the entire	trunk sweeps (i.	e. grows with cur	ves).		
	coast redwood						
22	(Sequoia sempervirens)	25	70%	50%	Fair	Moderate	
	Comments:	Relatively health	y tree with decer	nt structure.			
	coast redwood	1.5	000/	4007	г.	M 1	
23	(Sequoia sempervirens)	15	80%	40%	Fair	Moderate	
	Comments:	Crowded-growin	g conditions. A	ppears nealthy.			
	coast redwood						
24	(Sequoia sempervirens)	23	40%	70%	Poor	Moderate	

Comments: Declined canopy, and recovery only possible through regular watering.

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
	coast redwood						
25	(Sequoia sempervirens)	22	40%	70%	Poor	Moderate	
	Comments:	Declined canopy	, and recovery or	nly possible thro	ugh regular wate	ring.	
	coast redwood		<u> </u>				
26	(Sequoia sempervirens)	32	40%	70%	Poor	Moderate	
		Declined canopy					
	comments.	Decimed europy	needs regular	water for recover	y. Excessive on	unen weight.	
	coast redwood						
27	(Sequoia sempervirens)	14	40%	50%	Poor	Moderate	X
	Comments:	Crowded-growin	g conditions adj	acent to #26. De	clined canopy -	needs water for r	ecovery.
	coast redwood						
28	(Sequoia sempervirens)	20	50%	50%	Fair	Moderate	
	Comments:	Crowded-growin	g conditions adj	acent to #29. Ne	eds regular wate	r for health impr	ovement.
	coast redwood						
29	(Sequoia sempervirens)	24	60%	80%	Fair	High	
	Comments:	Fairly healthy tre	ee with a stable s	tructure.			
	coast redwood						
30	(Sequoia sempervirens)	20	50%	50%	Fair	Moderate	
		Needs regular wa					
		<u> </u>	<u> </u>			<u> </u>	
31	coast redwood (Sequoia sempervirens)	20	40%	70%	Fair	Moderate	
	Comments:	Declined canopy	- needs regular	watering for heal	th improvement		
	coast redwood		<u> </u>				
32	(Sequoia sempervirens)	18	60%	70%	Fair	High	

Comments: Fairly healthy tree with a stable structure.

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
33	coast redwood (Sequoia sempervirens)	24	80%	70%	Good	High	
		Relatively health		l .	3004	111511	<u>. </u>
34	coast redwood (Sequoia sempervirens) Comments:	16 Suppressed, crow	50% orded-growing co	40% nditions.	Poor	Low	X
35	coast redwood (Sequoia sempervirens)	17	50%	50%	Fair	Moderate	
	Comments:	Crowded-growin	g conditions. Re	egular watering is	s needed to impr	ove health.	
36	coast redwood (Sequoia sempervirens)	32	50%	70%	Fair	Moderate	
	Comments:	Sparse canopy. I	Excessive branch	weight. Regula	r watering is nee	eded to improve	health.
37	coast redwood (Sequoia sempervirens)	13	50%	40%	Poor	Low	X
	Comments:	Suppressed, crow	vded-growing co	nditions.			
38	coast redwood (Sequoia sempervirens) Comments:	12 Suppressed, crow	60% wded-growing co	30% nditions.	Poor	Low	X
39	coast redwood (Sequoia sempervirens) Comments:	22 Topped. Excessi	_	30% t needs addressin	Poor ng through pruni	Moderate ng. Regular wat	ering
		needed to improv	e health.				
	coast redwood						

Comments: Topped. Crowded-growing conditions between adjacent, dominant trees.

40%

Poor

Low

50%

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

(Sequoia sempervirens)

40

12

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
41	coast redwood (Sequoia sempervirens)	32	60%	30%	Poor	Moderate	
71		Topped. Regular				Woderate	
	Comments.	Topped. Regular	watering needs	Tor improving in			
	coast redwood						
42	(Sequoia sempervirens)	24	40%	70%	Fair	Moderate	
	Comments:	Declined canopy	- needs regular	watering for heal	th improvement.		
43	coast redwood (Sequoia sempervirens)	10	50%	30%	Poor	Low	X
43		Suppressed, crow			1 001	Low	11
		Suppressed, ero	raca growing co				
	coast redwood						
44	(Sequoia sempervirens)	26	60%	80%	Fair	High	
	Comments:	Relatively health	y tree with a stal	ole structure.			
	T		1	T		1	
45	coast redwood	22	500/	500/	F-:-	Madana	
45	(Sequoia sempervirens)	Crowded-growin	50%	50%	Fair	Moderate	
	Comments.	Crowded-growin	g conditions has	resulted in a fiar	low canopy.		
	coast redwood						
46	(Sequoia sempervirens)	24	70%	40%	Fair	Moderate	
	Comments:	Topped.	•	•		•	
	coast redwood						
47	(Sequoia sempervirens)	24	40%	50%	Poor	Moderate	
	Comments:						
				<u> </u>			
48	coast redwood (Sequoia sempervirens)	26	60%	50%	Fair	Moderate	
	(3-4	= ~	0070	5070	1 411	1110001000	

Comments:

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino Prepared by: David L. Babby

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
49	coast redwood (Sequoia sempervirens)	32	60%	40%	Fair	Moderate	
	Comments:	Topped.					
50	coast redwood (Sequoia sempervirens)	20	50%	60%	Fair	Moderate	
	Comments:	Needs regular wa	atering for health	improvement.			
51	coast redwood (Sequoia sempervirens)	20	40%	40%	Poor	Moderate	
	Comments:	Declined health a	and poor structur	e.			
52	coast redwood (Sequoia sempervirens)	24 Declined health -	40%	50%	Poor	Moderate Hes a great sho	114
	comments.	midway up trunk	-	atering for heard	i improvement.	rias a crook abo	ut
53	coast redwood (Sequoia sempervirens)	20	30%	60%	Poor	Low	X
	Comments:	Very sparse cano	ppy with a highly	questionable rec	covery.		
54	coast redwood (Sequoia sempervirens) Comments:	26 Trunk bifurcates	40% into codominant	50%	Poor idway up trunk.	Moderate Needs regular w	vater if
	Seiiciitei	health improvem			and ap death.		
	coast redwood						

Comments: Top curves. Regular watering is needed to improve health.

50%

60%

Fair

Moderate

24

(Sequoia sempervirens)

55

7 of 20 Prepared by: David L. Babby July 24, 2014

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
	coast redwood						
56	(Sequoia sempervirens)	15	50%	40%	Poor	Low	X
	Comments:	Suppressed, crow	vded-growing co	nditions.			
57	coast redwood (Sequoia sempervirens)	23	60%	70%	Fair	Moderate	X
	Comments:						
58	coast redwood (Sequoia sempervirens) Comments:	30 Crowded-growin	60% g conditions. Ex	50% xcessive branch v	Fair veight.	Moderate	X
				T		<u> </u>	
59	coast redwood (Sequoia sempervirens)	22	50%	60%	Fair	Moderate	X
	Comments:	Regular watering	s is needed to im	prove health.			
60	coast redwood (Sequoia sempervirens)	18	30%	60%	Poor	Low	X
	Comments:	Very sparse cano	py, and recovery	y is highly question	onable.		
61	coast redwood (Sequoia sempervirens) Comments:	30 Topped. Needs i	60% regular watering	40% for health improv	Fair vement.	Moderate	X
				T		T	1
62	coast redwood (Sequoia sempervirens)	12	40%	40%	Poor	Low	X
	Comments:	Crowded-growin	g conditions con	tributes to poor t	runk developme	nt.	<u> </u>
63	coast redwood (Sequoia sempervirens)	22	60%	40%	Fair	Moderate	X

Comments: Needs regular watering for health improvement.

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

Prepared for: City of Cupertino 8 of 20
Prepared by: David L. Babby July 24, 2014

CONDITION

SIZE

TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
	coast redwood						
64	(Sequoia sempervirens)	14	50%	50%	Fair	Moderate	X
	Comments:	Topped. Crowde	ed-growing cond	itions. Regular v	vatering is neede	ed for health imp	rovement.
65	coast redwood (Sequoia sempervirens)	30	40%	60%	Fair	Moderate	X
	Comments:	Codominant tops	. Declined cand	ppy - needs regul	ar watering for i	mprovement.	
	coast redwood						
66	(Sequoia sempervirens)	24	20%	40%	Poor	Low	X
	Γ	Extremely poor h	nealth and beyon	d recovery.			
67	coast redwood (Sequoia sempervirens)	8	40%	20%	Poor	Low	X
	Comments:	Declined and hig	hly suppressed c	anopy.			
68	coast redwood (Sequoia sempervirens)	26	20%	50%	Poor	Low	X
	Comments:	Extremely poor h	nealth and beyon	d recovery.			
69	coast redwood (Sequoia sempervirens)	10	30%	40%	Poor	Low	X
		Suppressed, crow	/ded-growing co	nditions. Very s	parse canopy.		
70	coast redwood (Sequoia sempervirens)	13	30%	50%	Poor	Low	X
	Comments:	Very sparse cano	py. Recovery hi	ghly questionabl	e.		
71	coast redwood (Sequoia sempervirens)	18	30%	40%	Poor	Low	X
	Comments:	Crowded-growin	g conditions. Ve	ery sparse canopy	y and recovery is	s highly question	able.

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

Prepared for: City of Cupertino 9 of 20
Prepared by: David L. Babby July 24, 2014

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
	coast redwood	26	2004	500/	ъ.		v
72	(Sequoia sempervirens)	26	30%	50%	Poor	Low	X
	Comments:	Topped. Very sp	arse canopy and	recovery is high	ly questionable.		
	coast redwood						
73	(Sequoia sempervirens)	26	30%	50%	Poor	Low	X
	Comments:	Very sparse cano	py and recovery	highly questiona	ıble.		
			ı	T			
74	coast redwood (Sequoia sempervirens)	10	20%	30%	Door	Low	X
/4					Poor	Low	
	comments:	Has a dead top.	Crowded-growin	ig conditions. Ex	aremery sparse a	ina beyona recov	ery.
	coast redwood						
75	(Sequoia sempervirens)	36	40%	80%	Fair	Moderate	X
	Comments:	Adjacent curb is	buckled and rais	ed. Declined car	nopy - needs reg	ular watering if t	o recover.
	coast redwood						
76	(Sequoia sempervirens)	13	30%	40%	Poor	Low	X
		Suppressed grow					
		11 0	, 1	17	, , ,		
	coast redwood						
77	(Sequoia sempervirens)	24	30%	60%	Poor	Low	X
	Comments:	Very sparse cano	py and recovery	highly questiona	ıble.		_
	coast redwood						
78	(Sequoia sempervirens)	22	20%	40%	Poor	Low	X
	Comments:	Extremely sparse	canopy and bey	ond recovery.			
	coast redwood						
79	(Sequoia sempervirens)	12	20%	40%	Poor	Low	X

Comments: Extremely sparse canopy and beyond recovery. Crooked top. Crowded-growing conditions.

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

10 of 20 Prepared by: David L. Babby July 24, 2014

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
	coast redwood						
80	(Sequoia sempervirens)	24	20%	50%	Poor	Low	X
	Comments:	Extremely sparse	canopy and bey	ond recovery.			
	coast redwood	_					
81	(Sequoia sempervirens)	4	30%	50%	Poor	Low	X
	Comments:	Crowded-growin	g conditions. Vo	ery sparse canopy	and recovery h	ighly questionab	le.
00	coast redwood	12	400/	700/	г.	M 1 .	v
82	(Sequoia sempervirens)	12	40%	70%	Fair	Moderate	X
	Comments:	Declined canopy	and requires reg	ular watering if r	ecovery is expe	cted.	
83	coast redwood (Sequoia sempervirens)	30	30%	40%	Poor	Low	X
83						Low	Α
	Comments:	Very sparse cano	py and recovery	is nignly question	nable. Topped.		
84	coast redwood (Sequoia sempervirens)	22	30%	50%	Poor	Low	X
04		Very sparse cano				Low	Λ
				<u> </u>			
	coast redwood						
85	(Sequoia sempervirens)	17	30%	60%	Poor	Low	X
	Comments:	Adjacent curb is	buckled. Very s	parse canopy and	l recovery is hig	hly questionable.	
	coast redwood	_					
86	(Sequoia sempervirens)	26	30%	60%	Poor	Low	X
	Comments:	Adjacent curb is	buckled. Very s	parse canopy and	l recovery is hig	hly questionable.	
	coast redwood	20	20	-0			
87	(Sequoia sempervirens)	20	50%	60%	Fair	Moderate	X

Comments: Trunk curves. Regular watering is needed if improvement to health is expected.

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

Prepared for: City of Cupertino 11 of 20
Prepared by: David L. Babby July 24, 2014

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
88	coast redwood (Sequoia sempervirens)	14	40%	40%	Poor	Low	X
	Comments:	Crowded-growin	g conditions.				
89	coast redwood (Sequoia sempervirens) Comments:	30 Needs regular wa	60% atering to improv	70% re health.	Fair	High	X
90	cork oak (<i>Quercus suber</i>)	13	30%	30%	Poor	Low	X
	Comments:	Structure formed Recovery is unlik		inant leaders. Ca	nopy is one-side	ed and extremely	sparse.
91	coast live oak (Quercus agrifolia)	15 Asymmetrical, no	80%	40%	Fair	Moderate Passanahl	X
	comments.	Asymmetrical, no	earry one-sided (лапору (шакшу р	ooi siructurai ic	mii). Keasonaoi	y nearmy.
92	coast live oak (Quercus agrifolia) Comments:	14 Formed by codor	90% minant leaders at	40% 10' high. Asymi	Fair metrical, one-sid	Moderate led canopy. Enc.	X
		on large light pol	le. Lower trunk	has a large woun	d. Healthy cano	py.	
93	coast redwood (Sequoia sempervirens)	11	40%	40%	Poor	Moderate	X
	Comments:	Suppressed grow	th due to crowde	ed-growing condi	tions.		
94	coast redwood (Sequoia sempervirens) Comments:	13 Tree is dead and	0% should be remo	0% ved immediately	Dead	Low	X
95	coast redwood (Sequoia sempervirens) Comments:	22 Needs water if ex	50% spected to impro	80% ve in health.	Fair	High	X

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

Prepared for: City of Cupertino 12 of 20
Prepared by: David L. Babby July 24, 2014

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
	Shamel ash	2.1	5 004	2004	_	_	
96	(Fraxinus uhdei)	24	50%	30%	Poor	Low	X
	Comments:	Weak structure.	On road side of	fence, near sidew	alk. Street tree.		
	coast redwood						
97	(Sequoia sempervirens)	24	50%	70%	Fair	High	X
	Comments:	Needs regular wa	atering to improv	e health.			
98	coast redwood (Sequoia sempervirens)	11	60%	60%	Fair	Moderate	X
	Comments:	Crowded-growin	g conditions. No	eeds regular wate	ering to improve	health.	
99	coast redwood (Sequoia sempervirens)	8	60%	50%	Fair	Moderate	X
	Comments:	Crowded-growin	g conditions. No	eeds regular wate	ering to improve	health.	
100	coast redwood	21	400/	700/	D.	N. I.	V
100	(Sequoia sempervirens)	21	40%	70%	Fair	Moderate	X
	Comments:	Sparse canopy - 1	needs water if ex	pected to improv	e in nealth.		
101	coast redwood (Sequoia sempervirens)	14	50%	80%	Fair	Moderate	X
		Needs water if ex					
102	coast redwood (Sequoia sempervirens) Comments:	20 Sparse canopy - 1	40%	70%	Fair re in health.	Moderate	X
	Comments.	Sparse canopy - 1	needs water if ex	peeted to improv	e in neutti.	<u> </u>	
103	honey locust (Gleditsia triacanthos)	13	30%	40%	Poor	Low	X

Comments: Structure comprised of codominant leaders.

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

13 of 20 Prepared by: David L. Babby July 24, 2014

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
104	Shamel ash	17	200/	500/	T.		V
104	(Fraxinus uhdei)	17	30%	50%	Poor	Low	X
	Comments:	Extremely sparse	canopy and bur	ied root collar. F	Recovery unlikel	y.	
	Shamel ash						
105	(Fraxinus uhdei)	11	60%	40%	Fair	Low	X
	Comments:	Poor form.					
			1	ı			
400	Shamel ash	12	400/	400/			37
106	(Fraxinus uhdei)	13	40%	40%	Poor	Low	X
	Comments:	Has substantial d	eadwood in low	er canopy.			
107	coast redwood (Sequoia sempervirens)	22	40%	70%	Fair	Moderate	X
	Comments:	Sparse canopy - 1	needs water if ex	pected to improv	e in health.		
				T			
400	Shamel ash	22	400/	400/	D	.	37
108	(Fraxinus uhdei)	Use a large sindli	40%	40%	Poor	Low	X
	Comments:	Has a large girdli	ing root. Canopy	y is sparse and io	rmed by multipl	e leaders.	
109	evergreen pear (Pyrus kawakamii)	9	40%	50%	Poor	Low	X
	Comments:						
110	evergreen pear (<i>Pyrus kawakamii</i>)	8	70%	40%	Fair	Low	X
110	· · ·	Large limbs cut f	l .		1 411	LUW	2.1
	enemes.						
	Shamel ash						
111	(Fraxinus uhdei)	18	40%	50%	Poor	Low	X

Comments: Formed by multiple leaders at 12 feet high. Has a large girdling root.

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

Prepared for: City of Cupertino 14 of 20
Prepared by: David L. Babby July 24, 2014

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
112	Shamel ash (Fraxinus uhdei)	19	40%	50%	Poor	Low	X
	1	Codominants original					
113	Shamel ash (Fraxinus uhdei) Comments:	10 Very weak struct poor form.	40% ure. Large limb	30% previously cut.	Poor Canopy is highly	Low y asymmetrical a	X nd has
114	Shamel ash (Fraxinus uhdei)	14	50%	30%	Poor	Low	X
	Comments:	Severely pruned	ın past.				
115	Shamel ash (Fraxinus uhdei)	6	30%	30%	Poor	Low	X
	Comments:	Suppressed and v	ery sparse cano	py. Extensive de	adwood. Buried	l root collar.	
116	Shamel ash (Fraxinus uhdei) Comments:	13 Very sparse cano	30% ppy.	40%	Poor	Low	X
117	Shamel ash (Fraxinus uhdei) Comments:	5 Mostly dead and	20% well-beyond rec	20% overy.	Poor	Low	X
118	Shamel ash (Fraxinus uhdei) Comments:	11 Declined canopy	50%	50%	Fair	Moderate	X
119	Shamel ash (<i>Fraxinus uhdei</i>)	10	40%	60%	Fair	Moderate	X

Comments: Declined canopy.

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

15 of 20 Prepared by: David L. Babby July 24, 2014

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
120	Shamel ash (Fraxinus uhdei)	8	40%	40%	Poor	Low	X
120		Declined canopy		4070	F 001	LUW	Λ
				<u> </u>			
121	Shamel ash (<i>Fraxinus uhdei</i>)	7	50%	40%	Poor	Low	X
		Declined canopy		1070	1001	2011	
122	Shamel ash (<i>Fraxinus uhdei</i>)	13	20%	40%	Poor	Low	X
		Extensive diebac	k and well-beyo	nd recovery.			
123	Shamel ash (Fraxinus uhdei)	9	0%	0%	Dead	Low	X
	Comments:	Tree is dead and	should be imme	diately removed	l.		
124	Shamel ash (Fraxinus uhdei)	19	80%	60%	Good	Moderate	X
	Comments:	Curb along down	ihill side is raise	d, and roots have	formed mounds	in adjacent asph	alt walk.
125	Shamel ash (Fraxinus uhdei)	16	50%	60%	Fair	Moderate	X
	Comments:	Curb downhill is	broken. Decline	ed canopy.			
126	Shamel ash (Fraxinus uhdei)	7 Tree is dead and	0%	0%	Dead	Low	X
	Comments:	rice is ueau allu	snould be mille	ulately removed			
127	pin oak (<i>Quercus palustris</i>)	10	50%	40%	Poor	Low	X

Comments: Has a large wound along major limb, as well as a small girdling root. Canopy is sparse and broad.

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
128	pin oak (Quercus palustris)	11	40%	20%	Poor	Low	X
		Large deadwood	and very sparse	canopy. Form i	s very poor. The	ere is a large dec	
		wound along mo	st of trunk, as we	ell as extensive d	ecay at trunk's b	ase.	
	Monterey pine						
129	(Pinus radiata)	15	40%	50%	Poor	Low	X
	Comments:	Has red turpentin at multiple locati			The state of the s	•	
	Monterey pine						
130	(Pinus radiata)	32	50%	20%	Poor	Low	X
	Comments:	Base of trunk is a Structure is form along both sides	ed by five leader				-
131	honey locust (Gleditsia triacanthos)	10	50%	50%	Fair	Moderate	X
	<u> </u>	Declined canopy	<u> </u>				
	1 1 1	<u> </u>	<u> </u>				
132	honey locust (Gleditsia triacanthos)	7	50%	50%	Fair	Moderate	X
-	Comments:	Has a small would	nd along trunk.	Canopy is asymn	netrical.		
133	honey locust (Gleditsia triacanthos)	8	50%	40%	Poor	Low	X
	Comments:	Crowded-growin	g conditions has	formed an asym	metrical, one-sic	led canopy.	
134	Monterey pine (Pinus radiata)	20	30%	500/	Роот	Low	X
134	(Finus radiala)	20	JU%	50%	Poor	Low	Λ

Comments: Has girdling roots. Trunk is outgrowing planter, and roots adjacent curb is raised. Canopy is very sparse and beyond recovery.

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

TREE INVENTORY TABLE

		SIZE	CONDITION				
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
135	Monterey pine (Pinus radiata)	23	50%	50%	Fair	Low	X
	· ' '	Declined canopy planter, and adjace	, and recovery hi	ghly unlikely for			
136	evergreen pear (<i>Pyrus kawakamii</i>)	11	40%	40%	Poor	Low	X
	Comments:	Multiple leaders	and has been exc	cessively pruned	in past.		
137	evergreen pear (Pyrus kawakamii)	8	50%	40%	Poor	Low	X
	Comments:	Excessively prun and there may be		ppy is asymmetric	cal due to crowd	ed-growing cond	litions,
138	evergreen pear (Pyrus kawakamii)	12	50%	40%	Poor	Low	X
	Comments:	Has been excessi	vely pruned. Ca	anopy has a low-	growing form.		
139	evergreen pear (Pyrus kawakamii)	7	60%	40%	Fair	Moderate	X
	Comments:	Has a wound alor	ng trunk's base.				
140	Monterey pine (Pinus radiata)	16	40%	50%	Poor	Low	X
	Comments:	Adjacent curb is	damaged. Decli	ned canopy and I	beyond recovery		
141	Monterey pine (Pinus radiata)	19	50%	30%	Poor	Low	X

Comments: Declined canopy and recovery is highly unlikely for this species. Adjacent curb is damaged. Infested by red turpentine beetle.

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

TREE INVENTORY TABLE

		SIZE		CONDITION			
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
142	honey locust (Gleditsia triacanthos)	9	30%	50%	Poor	Low	X
		Canopy is very s					<u>, </u>
143	cork oak (<i>Quercus suber</i>)	20	70%	40%	Fair	Moderate	X
	Comments:	Structure consists	s of multiple lead	lers that form a b	oroad canopy. P	oor structure.	
		Γ	<u> </u>			<u> </u>	
144	cork oak (<i>Quercus suber</i>)	5	40%	40%	Poor	Low	X
		Sparse canopy. I					
		•					
145	coast live oak (<i>Quercus agrifolia</i>)	20	30%	20%	Poor	Low	X
	Comments:	Has a very broad weight and a sub crack where four at severe risk of l	stantial level of o main leaders ori	leadwood. Shou	ld be removed i	immediately due	e to a large
146	coast live oak	17	400/	200/	Door	Low	v
146	(Quercus agrifolia)	Sparse canopy w	40% ith excessive lim	30% b weight Poors	Poor	Low	X
	Comments.	Sparse earlopy w	iai caccasive iiii	o worgin. 1 001	acture.		
147	honey locust (Gleditsia triacanthos)	10	30%	40%	Poor	Low	X
	Comments:	Roots have forme	ed mounds in lot	and raised adjac	ent curb. Very	sparse canopy.	
148	honey locust (Gleditsia triacanthos)	8	40%	50%	Poor	Low	X

Comments: Adjacent curb has been damaged. Sparse canopy.

Project: Hyatt House Hotel at Vallco Park, Cupertino Prepared for: City of Cupertino

TREE INVENTORY TABLE

		SIZE	CONDITION				
TREE/ TAG NO.	TREE NAME	Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)	Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
149	honey locust (Gleditsia triacanthos)	9	40%	40%	Poor	Low	X

Comments: Adjacent curb has been damaged. Sparse canopy and poor structure.

	honey locust						
150	(Gleditsia triacanthos)	9	50%	60%	Fair	Low	X

Comments: Decline, as with adjacent locusts, can be expected.

EXHIBIT B:

SITE MAP

(one sheet)

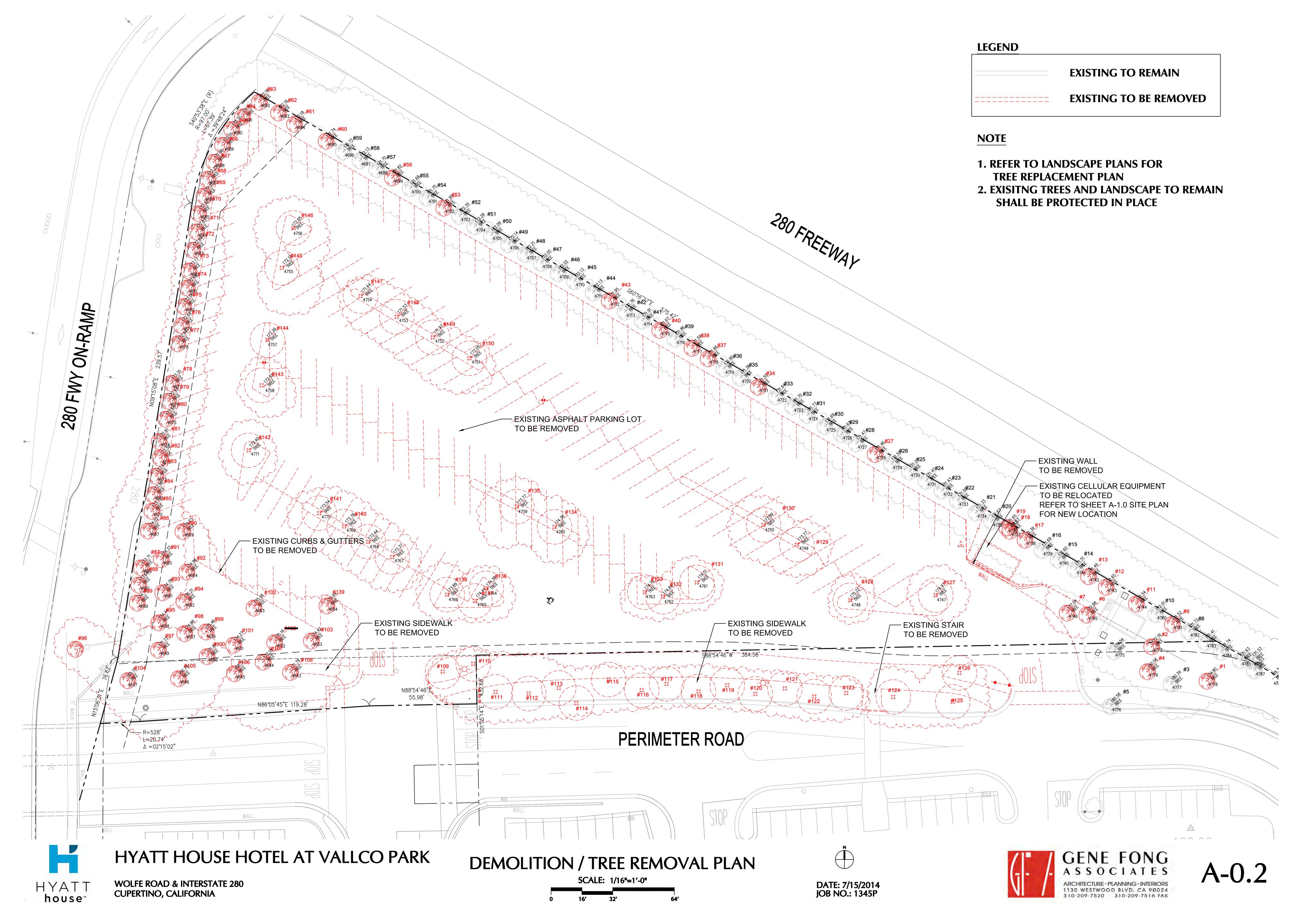


EXHIBIT C:

PHOTOGRAPHS

(11 sheets)

Photo Index

Page C-1: Trees #1 thru 9	Page C-7: Trees #111 thru 122
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Page C-3: Trees #20 thru 42 Page C-9: Trees #131-138, 140, 141

Page C-6: Trees #103-110, 139



Hyatt House Hotel at Vallco Park, Cupertino City of Cupertino Community Development Department











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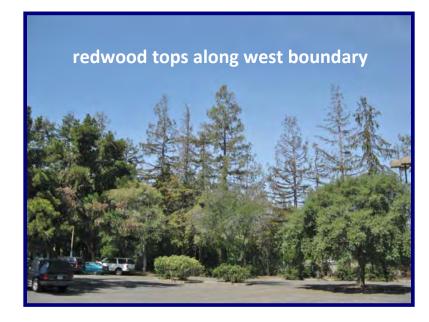
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Page C-3









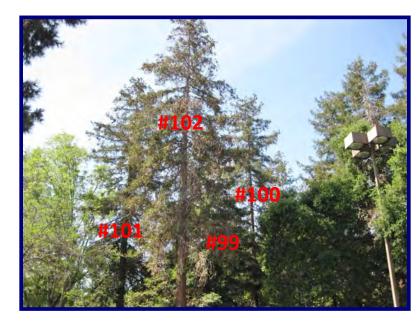
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A Peer Review of the Arborist Report The Hills at Vallco Project N. Wolfe Road and Stevens Creek Boulevard Cupertino, California

Assignment

I was asked by Mr. Geoff Bradley, ACIP, Principal/President of M-Group and Assistant to the Planning Department, City of Cupertino, to conduct a Peer Review of the Arborist Report for The Hills at Vallco Project, Cupertino, California.

The Arborist Report was prepared by Mr. Walter Levison, ISA Certified Arborist and ASCA Registered Consulting Arborist. Mr. Levison states that he reviewed the exiting at this site in the Spring and Fall, 2015. Mr. Levison's Report is dated 10-5-15, Revised 10-30-15.

Observations

I inspected the trees at the site on November 16, 17, 2015.

I have worked with Mr. Levison on a few projects in previous years. I know Mr. Levison to be a well qualified arborist, competent, and thorough. At the initiation of this review, I had no reason to expect that Mr. Levison's work concerning this project was anything less than competent and thorough. For this reason, I did not look at each tree individually, and I did not take the time to review each tree with the detail prepared in Levison's report. I looked at groups of trees primarily, except when an individual tree would catch my eye. In those cases, I inspected those trees more closely.

This does not suggest that I agree with Mr. Levison concerning each tree. I found many trees, in which I would rate their overall condition (health/structural integrity) slightly lower than Levison.

Some trees have declined since Levison's report, despite the fact that the last revision was 10-30-15. For example, Levison reported the coast redwood (*Sequoia sempervirens*) Trees # 332, 333, 335, 501, 51, and 52 poor. These trees are now dead.

The Hills at Vallco N. Wolfe Road Cupertino, California

I observed the following trees to be dead, but it is possible that I may have over looked 2-3. The current dead trees are: 17, 51, 52, 112, 113, 182, 203, 204, 209, 213, 218, 328, 332, 333, 335, 358, 479, 499, 500, 501, 502, 612, 659, 699, 700, 704, 709, 716, 718, 719, 812, 814, 815, 821, 827, and 1100. The majority of these are Coast Redwood (*Sequoia sempervirens*), which should not be surprising. Although *Sequoia sempervirens* is the State Tree, it is a very high water consumer. Most landscapes have cut back on water usage. Some have turned off landscape irrigation. Thirsty trees, for example, *Sequoia sempervirens* have declined or died in large numbers all over northern California. This is expected to continue.

On this property, the single and double row of *Sequoia sempervirens* adjacent to the West side property boundary are declining rapidly. I expect many more of these to be dead within a year.

Most of the *Sequoia sempervirens* specimens near the buildings still have a fairly dense canopies, but a close inspection suggests that these are all severely drought stressed. I expect many of these to decline sharpely in the months ahead.

Another fairly high water consuming species, which was used extensively at this property, is Shamel Ash (*Fraxinus uhdei*). The majority of the street trees (Trees # 8-50) along Stevens Creek Boulevard and along N. Wolfe Road (Trees # 52-285 and Trees # 475-428) are Shamel Ash.. It appears that the irrigation has been maintained (perhaps with minor reduction), because the majority of these trees are still in Fair to Good health.

However, it must be stated that the majority of these mature Shamel Ash are reaching the end of their useful life. By this, they have grown to the point of using up most, if not all, of their limited soil growing space. Once the roots stop growing, because they have nowhere else to grow, the trees will start to decline. This is a slow process, but I expect virtually all of the Shamel ash street trees to decline and die intermittently within a few years (10-20 years estimated). Bear in mind, the Shame ash species is well known for causing damage to sidewalks and infrastructure, especially as they mature.

The overwhelming majority of the trees in the interior of the site (parking areas primarily) and the trees on the West and East boundaries are in decline and are in fair to poor condition. This is in great part due to the reduction in irrigation, which is predicted to continue. Experts are saying that California demand has exceeded supply and this circumstance is not expected to change any time soon.

The Hills at Vallco N. Wolfe Road Cupertino, California

In my opinion, this is an opportunity to strategically and methodically remove the "thirsty trees" a few at a time, and to replace them with low or very low water consuming replacement trees and shrubs. Should this strategy be adopted for replacement, unfortunately it would not be workable to remove "thirsty" trees intermittently in a group of "thirsty" trees and to replant low water replacements. This would create an incompatible planting. If you irrigate sufficiently to maintain the "thirsty" trees in those areas, the low water consuming replacements would die from excess water. If you were to suddenly change the irrigation to meet the needs of the low water consuming trees, the "thirsty" trees would die. I would recommend that at new planting strategy of low water consuming plants must be done be water zones. All of the trees and plants within those zones must have similar needs. In places where this has been done successfully, it is usually done on the basis of a 5 or 10 year plan, or longer.

Levison "recommends avoiding any transplants of existing trees at the Vallco site" (P.24). I agree with this assessment. For example, the Holly oak (*Quercus ilex*) is in excellent condition. It is one that could be considered for transplant, except for the fact that specimens of the *Quercus ilex* species in recent years sometimes contract an disease, which is a mystery and is unidentified by plant pathologists. Experts do not know what the disease is and do not know what causes it. In my opinion, this makes a Holly oak, even in excellent condition, a questionable candidate.

The plan proposes to remove and replace 115 trees. In light of my previous comments, I think this number will be exceeded, not because of the proposed re-development, but because of the fact that this property, like so many other properties, were planted at time when it appeared that the supply of water would be plentiful. I suggest one of two strategies to arrive at a more realistic number.

- 1. Use the Tree List provided by Levison. All, if not most of those trees, which Levison has identified as having a health condition of 25% or less, I suspect will not survive the construction period.
- 2. Strategically remove and replace trees essentially all of the "thirsty" specimens with low water consuming specimens in planned areas that would coincide with the redevelopment plan and schedule.

Respectfully submitted,

Michael L. Bench, Consulting Arborist International Society of Arboriculture Certification # WE 1897A American Society of Consulting Arborists Member

ISA Certified Arborist #WC-3172

Assessment of 895 Trees at The Hills at Vallco Project North Wolfe Road Cupertino, California

Prepared for: Vallco Property Owner LLC c/o Mr. Reed Moulds Sand Hill Property Co. 2882 Sand Hill Road, Suite 241 Menlo Park, CA 94025

Site Visits:

Walter Levison (WLCA)

Spring & Fall, 2015

Report:

Walter Levison

10/5/2015, Revised 10/30/2015



Table of Contents

1.0	Summary
2.0	Assignment & Background
3.0	Observations & Discussion
3.1	Predominant Tree Species at Vallco
3.2	Tree Condition Study
3.3	Drought Effects on Vallco Trees
3.4	Soil Moisture Deficit / Moisture Requirements
3.5	Ion Content in Recycled Water / Standards
3.6	Effects of Proposed New Utilities Plan on Woody Roots _
4.0	Risk of Failure / Tree Risk Assessment Qualified (TRAQ)
5.0	Landscape & Irrigation Pipe Installation Concerns
6.0	Tree Transplant Options
7.0	Consultant's Qualifications
8.0	Assumptions and Limiting Conditions
9.0	Certification
10.0	Tree Maintenance Vendors and Tree Sources
11.0	Digital Images Archived 9/25/2015 (WLCA)
12.0	Tree Maintenance Recommendations / Phase
13.0	Tree Protection Recommendations / Phase
14.0	Attached, Tree Data Charts Updated (WLCA)
15.0	Attached, Tree Location Map (2015, Olin Studio)
16.0	Attached, U.S. Forest Service Fact Sheet – Coast Redwo



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1.0 Summary

The following matrix summarizes existing conditions at the site, and includes detailed information on tree disposition related to the current proposed development entitled The Hills at Vallco. The information was too complex to be presented in standard bulleted format:

Line Number	Description	Details	Species		Condition Ratings	Municipal Protection Status?	Total Count
1	Total trees at site	875 trees plus 20 median trees along N. Wolfe	Various		Ranging from "dead" to "good"	None, except for six (6) trees as noted below on line 2.	895
2	Protected trees on site (City of Cupertino ordinance)	#260, 261, 262, 414, 415, 416	California sycamores		Fair to Good (see Excel tree data charts for more details)	Yes	6
3	Transplants initially proposed by team (WLCA suggests considering retaining the trees in-situ, or removing the trees.	2 protected trees in medians (sycamores #260 and #416)	California sycamo (protected specime		Good and Fair respectively	Yes	2
	Removals proposed by team (Tag	sed am	Aleppo pine (Pinus halepensis) Canary Island pine (Pinus canariana)	1		No	
4	numbers noted in the updated WLCA Excel tree	Direct conflicts with proposed demolition and new	carrotwood or carob (Cupaniopsis or Ceratonia)	4	(Various condition ratings)		361
		construction	coast redwood (Sequoia sempervirens)	77			
	data charts attached to this report)		dollar gum (Eucalyptus polyanthemos)	3			

Site Address: Vallco Shopping Center, Cupertino, CA © Walter Levison 2015 All Rights Reserved

Version: 10/30/2015

3 of 48





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Line Number	Description	Details	Species		Condition Ratings	Municipal Protection Status?	Total Count
			evergreen pear (<i>Pyrus kawakamii</i>)	15			
			fern pine (Podocarpus gracilior)	15			
			Ficus species	7			
			flowering cherry cultivar (<i>Prunus serrulata</i> Cult.)	1			
			flowering pear cultivar (<i>Pyrus calleryana</i> Cult.)	8			
			giant sequoia (Metasequoia glyptostroboides)	1			
			holly oak (<i>Quercus ilex</i>)	3			
			Italian stone pine (<i>Pinus pinea</i>)	18			
			Monterey pine (<i>Pinus radiata</i>)	10			
			oak species (Quercus sp.)	2			
			pine species (<i>Pinus sp.</i>)	1			
			red oak (Quercus rubra)	1			
			shamel ash (<i>Fraxinus uhdei</i>)	163			
			southern magnolia (Magnolia grandiflora)	17			
			species not identified (out of leaf, etc.)	4			
			strawberry tree (Arbutus Cult.)	2			
			tulip tree (<i>Liriodendron</i> <i>tulipifera</i>)	7			





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Line Number	Description	Details	Species	Condition Ratings	Municipal Protection Status?	Total Count
5	Removals proposed by WLCA due to very poor overall condition ratings (in addition to those noted in line 4 above)		(Tag Numbers) #51, 227, 281, 434, 435, 43 496, 497, 521, 522, 523,536 567, 592, 597, 598, 603, 604 607, 610, 628, 629, 631, 634 637, 639, 646, 653, 654, 659 671, 675, 677, 683, 684, 685 699, 700, 702, 704, 705, 706 711, 714, 716, 717, 718, 719 722, 724, 726, 728, 731, 732 758, 763, 764, 768, 810, 812 815, 821, 827, 834, 836, 843	5, 555, 564, 1, 605, 606, 2, 635, 636, 3, 660, 670, 5, 689, 691, 6, 707, 709, 7, 720, 721, 7, 735, 736, 2, 813, 814,	No	89
6	West perimeter road trees in vicinity of trenching. Various tag numbers (#571 to #871, etc.) Tree disposition: Unknown until building set of plans is available for review.	Proposed utility trenching per street plan sheet P-0506 Expect potential negative impacts to trees if utilities not installed using pit to pit directional bore technology	Coast redwoods, shamel ash, etc.	Various	No	300+





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Line Number	Description	Details	Species	Condition Ratings	Municipal Protection Status?	Total Count
7	East side of east perimeter road. Various tag numbers (#518 to #570, etc.) Tree disposition: Unknown until building set of plans is available for review.	Proposed utility trenching per street plan sheet P-0506 Expect potential negative impacts to trees if utilities not installed using pit to pit directional bore technology	Shamel ash, Chinese elm, etc.	Various	No	50+
8	Potential root loss to trees along east side of alternate lot west. Various tag numbers (#953 to #1,049, etc.)	Proposed utility trenching per street plan sheet P-0506 Proposed new water line route (if the utility is not installed using pit to pit directional bore technology)	Coast redwood	Various	No	100+





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Line Number	Description	Details	Species	Condition Ratings	Municipal Protection Status?	Total Count
9	Potential root loss to trees along N. Wolfe Rd. Tree tags #1106, 1107, 1108	Proposed utility trenching per street plan sheet P-0506 Proposed new storm drain line trench along N. Wolfe Rd. (if the utility is not installed using pit to pit directional bore technology)	Southern magnolia	"Fair"	No	3
10	Potential root loss to trees along east side of N. Wolfe Rd. Tree tag numbers #430, 431, 432, 433, 434 435, 437, 438, 439	Proposed utility trenching per street plan sheet P-0506 Proposed communication line trench running north- south between freeway 280 and Block 12 development (if the utility is not installed using pit to pit directional bore technology)	Giant sequoia, coast redwood, shamel ash (Note that author WLCA suggests considering some trees in this grouping for removal, such as #434, 435, and 438, per line 5 of this matrix).	Ranges from 'very poor' to 'good'.	No	9





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Line Number	Description	Details	Species	Condition Ratings	Municipal Protection Status?	Total Count
11	Conceptual Landscape plan and Irrigation plan impacts to existing trees (as applicable)	Only limited impact assessment was performed by WLCA, due to the conceptual nature of the current designs shown on proposed plan sheets available as of the date of writing.	WLCA reviewed tree species proposed for use by the landscape architect Olin Studio, and offered alternatives to some species or cultivars deemed inappropriate. WLCA also offered limited analysis of potential landscape and irrigation trenching impacts to existing trees. See section 5.0 of this report below.			

2.0 Assignment & Background

Walter Levison, Consulting Arborist (WLCA) was initially retained by Vallco Property Owner LLC (VPO) to tag and assess 895 trees throughout the existing site that extends from perimeter road west to perimeter road east, and from freeway 280 to Stevens Creek Boulevard, Cupertino, California, including median trees along North Wolfe adjacent to the Vallco site. The east boundary of the survey area was a property owned by Apple Inc. The west boundary of the survey area was a developed single family residential area. Tags in this area are tagged #1 through #875 (round-shaped tags), with median trees tagged as #1,106 through #1,125 (racetrack-shaped tags) along N. Wolfe Road.

WLCA's initial work product consisted of an Excel tree data set in PDF format, along with digitally marked up tree location maps, delivered to VPO in spring, 2015. The initial proposed development set of plans for The Hills at Vallco had not yet been developed at that time, and was not available for review.

A secondary tree study was also completed by WLCA, which involved tagging, assessing, and locating on a topo sheet all trees located north of the Vallco site in a triangular lot known as 'alternate lot west', situated between the northwest corner of the Vallco shopping center property and freeway 280. Trees in this area were tagged as trees #876 through #1,105, with round-shaped tags to #1,000, and racetrack-shaped tags for trees numbering greater than 1,000. N. Wolfe Road median trees #1,106 through #1,125 were added at this time, using the racetrack-shaped tags as noted above.

WLCA was later retained in September 2015 to prepare a formal written arborist report that was to include the following items:

a) Review the DropBox set of proposed plan sheets as available in September 2015. If possible, note conflicts where initial proposed utilities and construction may impact trees being retained, and discuss adjustments to the plans as applicable.



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- b) Update the existing Excel tree data spreadsheet to note an "X" in removal column indicating tree to be removed.
- Discussion of trees to be retained and trees to be removed, including species overviews, condition ratings, etc.
- d) Note trees protected per Cupertino City Tree Ordinance being retained and removed.
- e) Note trees suggested by WLCA to be removed due to very poor condition.
- f) Note possible adjustments to the scope of construction to optimize tree survival and/or preserve important trees on the site as applicable (see also item 'a' above).
- g) Note irrigation and soil moisture deficit concerns and options.
- h) Note tree part failure risk concerns.
- Archive digital images of some important or otherwise noteworthy tree specimens and include those images in the report.
- j) Attach the updated Excel tree data charts and a master tree location basemap to the report.
- k) Prepare recommendations for transplanting on-site for significant sized trees that are expected to be removed as a result of site plan work, with new install locations to be noted by Consultant on the proposed site plan drawings. Specifications for holding trees in boxes, etc. (i.e. "box holding" recommendations for irrigation, maintenance, etc.).
- Recommendations for tree protection and maintenance based on arboriculture BMPs, with phased protection and maintenance conforming to the current proposed demolition and construction phases 1, 2, and 3.

All of the above items are included in this written report. Most of the information has been presented in matrix form, for ease of reference. The updated WLCA tree data sheets (Excel format) are attached to this report. Olin Studio's single PDF landscape plan sheet P0601 "existing tree conditions", based off WLCA's original Spring 2015 rough-plot tree location maps, is attached to this report for reference of existing tree locations.

3.0 Observations & Discussion

Existing trees at the Vallco site (not including alternate lot west):

3.1 Predominant Tree Species at Vallco

Tree Species	Number of individuals	Percent of total tree population of 895
Shamel ash (<i>Fraxinus uhdei</i>)	399	45%
Coast redwood (Sequoia sempervirens)	319	36%
Pine species (mainly <i>Pinus radiata</i> and <i>Pinus pinea</i>)	65 (approx.)	7%

As seen above, the tree population percentages of coast redwood and shamel ash along the Vallco property perimeter are far too high for a stable urban forest situation. In an ideal world, we would stratify the population out using a large number of tree genera and species to guard against pest and disease outbreaks (and abiotic issues such as drought conditions) that could potentially wipe out a large percentage of the tree population.

9 of 48





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The existing monoculture type planting was from an earlier era when the Vallco site was originally built out and planted using mainly coast redwood and shamel ash. These trees are very heavy water users, and have been suffering for years during the continuing California drought conditions with subnormal rainfall. Supplemental very heavy irrigation on a regular basis throughout the year is crucial to keeping coast redwood and shamel ash alive and vigorous. However, the ash and redwood specimens at Vallco have not been receiving this level of irrigation, and are spiraling into decline and in many cases death.

At this time, the property owner is not proposing any significant alterations to the perimeter tree populations on Vallco property, and the screening benefit of the perimeter trees will remain as long as individual trees are alive and thriving. Note also that many of these trees are not actually on Vallco property and are within a public utility right of way (personal communication, Vallco property owner 10/23/2015).

3.2 Tree Condition Study

Overall Tree Condition Ratings for Two Main Species in Population (Not including alternative lot west)

Tree Species	Number of individuals	Dead	Very Poor	Poor	Fair	Good	Excellent
Coast redwood	319	15	52	74	110	66	2
Percent of redwood population	(100%)	5%	16%	23%	34%	21%	<1%
Tree Species	Number of individuals	Dead	Very Poor	Poor	Fair	Good	Excellent
Shamel ash	399	2	65	161	156	15	0
Percent of Shamel ash population	(100%)	<1%	16%	40%	39%	4%	0%

Interestingly, the above study shows somewhat of a bell curve form, where most of the tree individuals rated out with overall condition ratings in the middle portion of the rating range (range is from dead (0%) to excellent (90% to 100%). If droughty conditions continue in California with subnormal natural rainfall this winter, many of these trees could continue spiraling into decline and end up with all ratings in the dead, very poor, and poor portion of the rating range, unless very heavy irrigation were to be commenced at this time and continued regularly through the entire winter.

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3.3 **Drought Effects on Vallco Trees**

Given the current low soil moisture conditions that have been present in the San Francisco Bay Area for multiple years now, and continued subnormal natural rainfall conditions, the moisture available to the coast redwood and shamel ash tree root zones at Vallco is very minimal. This has resulted in chronic loss of live twig density and live foliar density in the trees, which is expressed visually as desiccated, dead patches of canopy seen in the trees, especially in the outermost, uppermost sections of the tree canopies of individual specimens along the east and west sides of the west perimeter road (see images below in this report).

It is not clear whether tree vigor (new live twig and foliar growth) will be or can be boosted through either very heavy, sustained supplemental irrigation of the trees' root zones, or through natural rainfall finally occurring after the (existing) prolonged period of subnormal soil moisture. Generally, trees that decline to an overall condition rating of poor (i.e. less than 50%) will not increase in vigor until very heavy irrigation is applied over an extended period of 6, 12, or even 18 months 1 to the trees' entire root zone areas. Even after this type of serious irrigation regime commences and is continued for the extended period, the trees may still not respond favorably, and will continue to decline.

High quality irrigation water with low ionic content needs to be available for supplemental irrigation of coast redwoods. See section 3.5 below for more information.

3.4 Soil Moisture Deficit / Moisture Requirements

Shamel Ash and Coast Redwood Moisture Requirements

In order to keep coast redwood and shamel ash specimens from declining in live twig density, live twig extension, and live foliar density over time, a very heavy irrigation regime will need to be set in place as an overgrade no-dig type system placed over the ground throughout the open soil root zones of individual trees and groupings of these trees being retained at Vallco.

Although the actual volume of supplemental water to be applied per week per coast redwood specimen varies with soil conditions, weather, solar exposure, and other issues, the following is a set of rough guidelines for water application based on the author's experience. Note that use of a heavy mulch of coarse chipper truck type wood chips lain over the



¹ Levison, Walter. Professional consulting experience with irrigation of coast redwoods on construction sites on South Bay and Peninsula, Bay Area locations, between 1999 and 2015.

11 of 48





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ground surface in a 4 to 6 inch thick layer can significantly reduce evaporation, and thereby help reduce supplemental irrigation needs:

Supplemental Irrigation	Per Week	Per Month, Year-Round (See "Winter Tier")	
Tier 1 "Optimal" for an individual coast redwood	Suggest 1x/week irrigation event	20 gallons per each 1 inch of trunk diameter	Based on the Barrie D. Coate and Associates published standard
Tier 2 Moderate level (OK for trees with grafted root systems, etc.)	Suggest 1x/week irrigation event	10 gallons per each 1 inch of trunk diameter	
Tier 3 During water use restriction periods	Suggest 1x/week irrigation event	5 gallons per each 1 inch of trunk diameter	
4. Tier 4 During Winter Storms (regular heavy rain events)		Temporary shutoff of irrigation system OK between December and March, depending on intensity of and frequency of rain events.	
5. Optional: Fog, Spray, or Mist Systems	(3x to 7x/week)		

WLCA generally recommends that irrigation events occur once weekly (1x/week) throughout the entire "open soil sections of the root zones" of the trees, which may be as large as 25 feet radius or more in some cases. The trees' root zone areas need to be allowed to "dry down" as water percolates through the uppermost few feet of the soil profile, and is then used by the trees (transpired) or evaporates into the atmosphere (evaporation from open soil). As noted above in this section, use of mulch is beneficial if a layer 4 inches thick can be placed over the open soil root zone areas of the trees, between approximately 1 foot out and 25 feet out from the trunks of the trees.

Optionally, we could install some type of fogging system to augment moisture uptake by the trees by adding fog water to some lower canopy or mid canopy locations. Redwoods in their natural range along the Northern California coast and Oregon coast forests derive a significant

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percentage of their water moisture through direct acquisition of fog water through their needles². Thus, use of a fogging system could potentially be of great benefit to the trees, if such as system could be affixed to locations near canopies at varying elevations above grade. Above are images of aerial sprinkler or aerial misting systems that were in actual use on local peninsula Bay Area project redwood specimens (images courtesy of Ray Morneau, Consulting Arborist). The images shown in this report section show materials used to build a

misting system, with the system activated and running in the last of the three images. These systems would require a substantial initial investment in piping, mistheads, and labor to install, but have been beneficial in terms of increasing tree survival during hot or windy periods, according to other arborists and nurserymen I spoke with in 2015.

3.5 Ion Content in Recycled Water / **Standards**

Many municipalities such as San Jose and Palo Alto are using recycled water as a regular component of their City parks irrigation regime. However, this does come with known drawbacks. Coast redwoods are known to be sensitive to ion concentrations in soil water per the text referenced below³. The text notes that coast redwood has low tolerance of boron ion in recycled water. Ion sensitivity of coast redwood as related to other ions such as





² Burgess SSO, Dawson TE (2004). The Contribution of Fog to the Water Relations of Sequoia sempervirens (D. Don): Foliar Uptake and Prevention of Dehydration. Plant Cell Environs. 27:1023-1034. ³ Costello, Perry, Matheny, Henry, and Geisel (2003). Abiotic Disorders of Landscape Plants: A Diagnostic Guide. UC ANR Publication 3420. ANR Communications Services. Oakland, California.

Version: 10/30/2015





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ISA Certified Arborist #WC-3172

sodium, chloride, or ammonium was not specifically noted in the text. However, per the author's conversations with numerous city arborists and consulting arborists in the Bay Area, coast redwood appears to have low tolerance of specific ionic content in water in addition to boron ion.

The following table derived from information in the below-referenced text provides some guidelines for total ion content of various ions in recycled water at levels that could be deemed "safe" for trees with low tolerance (high ion sensitivity), although this is only a guideline, and was published more than 10 years ago:

Irrigation Water Ion	Type of Measurement	Content Range Considered "Safe"	Unsafe for Tree Species with Low Tolerance to Stated Ions
TDS Total Dissolved Solids	Mg/l	<450	450 to 2,000
Salinity	Mmhos/cm	<0.7	0.7 to 3.0
Boron	Mg/l	<0.5	0.5 to 1.0
Chloride (surface bubbler irrigation)	Mg/l	<140	140 to 300
Chloride (sprinkler irrigation)	Mg/l	<100	>100
Sodium (surface bubbler irrigation)	SAR	<3	3 to 9
Sodium (sprinkler irrigation)	Mg/l	<70	>70

Salinity tolerance of various tree species proposed in the Hills project tree palette by OLIN is noted in the reference shown in this report as citation #3. WLCA is in communication with OLIN staff to discuss salinity tolerance issues.

EXISTING REDWOODS

The new project does not proposed to use recycled water for irrigation of the existing redwoods being retained as perimeter screening (personal communication 10/23/2015, Mr. Steve Lynch, Sand Hill Property Co.). Therefore, the ionic content of irrigation water appears (at the time of writing) to be an issue with new proposed tree plantings only.





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USE OF RECYCLED WATER BLEND AND FLUSHING SEQUENCES

To reduce ion content in irrigation water to acceptable levels per the above matrix guidelines, recycled water with high ion content can be blended with standard municipal drinking water prior to running it through irrigation systems for surface application to trees. Per the Vallco property owner, this blending will be performed seasonally during non water-restriction periods in order to comply with local regulations regarding potable water use for landscapes during drought periods.

Another "trick" that can be performed to reduce ionic content remaining in the root zones of trees is to use recycled water for a number of irrigation cycles (e.g. 4 to 9 cycles), then "flush" the root zones by using a 5th or 10th irrigation cycle of 100% municipal drinking water (anecdotal reference). This would require that a very detailed record of irrigation be maintained by a groundsperson on site, to record exactly when recycled water and drinking water was applied to very specific landscape zones. Both recycled water and drinking water would need to be available side by side as irrigation system inputs with manual levers that would be operated by the groundsperson.

OAK TREES BEING INSTALLED

Per discussions with Apple Inc.'s arborist Mr. Dave Muffly who is an expert in oak tree selection and cultivation, oak species being installed at The Hills should be provided with municipal drinking water as the irrigation water source, without any blending with recycled water. This is recommended to avoid potential problems with ion sensitivity by the oaks. Mr. Muffly notes that the Apple Campus 2 project will <u>not</u> use recycled water for irrigation of the oaks (AC2 campus is also within the jurisdiction of City of Cupertino, and has recycled water piping that will be used for irrigation of non-oak landscape zones).

As regards The Hills roof planting area where many oak species will be installed at Vallco, we may need to develop a special dual piping system which will allow for recycled water and standard drinking water sources to be piped up separately. This would allow the two water sources to be applied in an alternating manner and/or blended in a tank prior to being applied to sensitive species such as the oaks and fruit bearing orchard trees, to reduce the overall ionic content being applied to the landscape over time.

WEEPING WILLOW AND FREMONT COTTONWOOD AT ROOF DRAINAGE SWALES

The Abiotic Disorders text (citation #3) noted above in this report contains a list of various tree species along with referenced scientific studies during which salinity and boron tolerance was determined for certain species. Per this list, Fremont cottonwood, proposed to be installed at The Hills in swales where runoff collection will occur, exhibit "moderate" to "high" tolerance of salinity (i.e. ionic concentrations) in recycled water, which would suggest that they can tolerate soil moisture derived from runoff water that may contain higher than normal ionic concentration. Weeping willow, also proposed by the project team for inclusion in drainage runoff swales at our site, also appears to exhibit "moderate" to "high" tolerance of ionic concentration in irrigation water, which also suggests tolerance to runoff water as the main source of their root zone soil moisture. Even so, WLCA suggests considering removal of these two species from the proposed plant palette list, given that they require heavy irrigation year round to maintain vigor.





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ISA Certified Arborist #WC-3172

RECYCLED WATER EFFECTS ON FRUIT-BEARING ORCHARD TREES

Per the text referenced in citation #3 in this report, fruit-bearing tree species proposed by the team for the rooftop orchard which will be for human consumption are noted in the text as exhibiting "low" relative tolerance to ionic content in recycled water used for irrigation. Given that fruit bearing orchard trees generally require heavy irrigation, this is of concern if recycled water is going to be used on the Hills greenroof where the orchard areas will be located. As noted above in this section of the report, blending recycled water with municipal drinking water can bring down ionic concentration to levels below the safe thresholds noted above in the matrix. Flushing the tree root zones by use of 100% drinking water on a periodic basis may also be a viable method of reducing ionic concentration buildup in the root zones of the trees, such as the example WLCA noted of 4 to 9 irrigation cycles using recycled water, followed by a 5th or a 10th irrigation cycle using 100% municipal drinking water (anecdotal reference).

Per the author's recent conversation with a Northern California soil scientist who specializes in orchard soils, the inability for fruit trees such as cherry, apricot and apple to tolerate ion content in recycled water used for irrigation appears to be verified. Blending and/or other dilution is warranted.

Again, use of a dual piping system to bring up both standard drinking water and recycled water sources to the greenroof may be able to solve the problem of ionic content in recycled water being applied to the orchard areas, as it will allow us to blend the two sources of water and/or apply them to the landscape in an alternating manner to flush salts through the soil.

WLCA suspects that over time, municipal recycled water may become of increasingly higher quality in terms of ionic content being reduced to below the low-tolerance sensitivity threshold of 0.7 Mmhos/cm salinity. Refer to the ionic content table on page 14 above for more information.

3.6 Effects of Proposed New Utilities Plan on Woody Roots

The negative effect of proposed new utility trenching per project sheet P-0506 on existing trees to be retained could be significant to severe, depending on the actual final sprayed routes of these utility trenches. The current plan sheet shows utilities as conceptual routing only, and it is therefore difficult to determine actual impacts to specific trees. However, WLCA did note various groupings of trees and expected (potential) impacts to those trees from utility trenching, in the summary matrix section 1.0 lines #6 through #10 above in this report.

Typical woody lateral root growth extends from trees at least 3X to 5X the canopy dripline radius per previously published arboriculture science texts. This growth is generally present between grade elevation (i.e. soil surface) and down to approximately 24 inches below grade in our western Bay Area urban clay-based soils, though in some cases, older redwoods and oaks can achieve large diameter woody root growth at depths as far as 50 to 60 inches below grade⁴

For tree stability maintenance, it is acceptable to sever roots at locations within 25 to 30 feet of large diameter coast redwoods and shamel ash. However, utility trenching within 25 feet of those trees may cause severe negative impacts to the trees' health and structural condition, resulting in premature decline and/or death. In those cases where utilities need to be routed within 25 feet of large trees being retained, WLCA suggests using pit to pit directional bore technology whereby conduit is pushed and pulled **below** the root systems of trees being retained, thereby allowing for

16 of 48

Version: 10/30/2015

⁴ Levison, Walter. Professional experience on Bay Area construction sites from 1999 to 2015.





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ISA Certified Arborist #WC-3172

almost complete root preservation when done correctly. See image of pit to pit directional bore in action below on one of my projects in the Bay Area. In this particular case, the bore started above ground, and ended at a pit. Typical method would be to start and end at a small dug pit.







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4.0 Risk of Failure / Tree Risk Assessment Qualified (TRAQ)

Prior to the newer International Society of Arboriculture (ISA) TRAQ system (tree risk assessment qualified) coming into place as the new international standard for tree part and whole tree failure risk assessment, arborist consultants referred to an older numeric system of 12 points which consisted of:

- Failure potential of identified part (1 to 4 points)
- Size of part (1 to 4 points)
- Target rating (1 to 4 points)

The final numeric "hazard rating" derived from this system ranged from 3 to 12 points⁵.

The newer system is based on alpha-type ratings, and requires the tree risk assessor to attend a rigorous training class sponsored by the ISA, after which the assessor takes a final exam. Assessors that pass the final exam are then given the title "tree risk assessment qualified", after which time they are allowed to use the published system and its components and prepare information on tree risk in written reports. Qualified tree risk assessors must retake the qualification course and exam every few years to renew status as tree risk assessment qualified.

The basic TRAQ process has been amalgamated into a matrix below (next page) for readers of this report.

Note that TRAQ risk ratings are derived after consideration of various different failure modes (e.g. branch, scaffold limb, mainstem, whole tree) and different targets such as vehicles, pedestrians, bicyclists, residential structures, commercial buildings, etc. Target frequency and duration at a specific target zone, such as cars and pedestrians stopped at a traffic light, are considered when determining target "occupancy", in order to determine risk of tree part failure and impact of that tree or tree part onto that specific target at that moment when the target is occupying the target zone radius.

⁵ Matheny, Nelda and Clark, James. 1994. *Evaluation of Hazard Trees in Urban Areas*. 2nd edition. International Society of Arboriculture, Urbana, Illinois.

⁶ Duster, Julian et. al. 2013. *Tree Risk Assessment Manual*. International Society of Arboriculture, Champaign, Illinois.



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ISA Certified Arborist #WC-3172

TRAQ Protocol Amalgamation

Likelihood of Failure		Likelihood of I	mpacting Tar	get
	Very Low	Low	Medium	High
Imminent	Unlikely	Somewhat Likely	Likely	Very Likely
Probable	Unlikely	Unlikely	Somewhat Likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat Likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Improbable: The tree or branch is not likely to fail during normal weather conditions and may not fail in many severe weather conditions.

Possible: Failure could occur, but it is unlikely during normal weather conditions.

Probable: Failure may be expected during normal weather conditions.

Imminent: Failure has started or is most likely to occur in the near future, even if there is no significant wind or increased load.

Very Low: Remote chance that failure will impact target. Rarely used site fully exposed; occassionally used site partially protected. Rarely used trail or trailhead in a rural area, or an occassionally used area that has some protection due to other trees between the failure and the target.

Low: Not likely that failure will impact target. Occassionally used area fully exposed; frequently used area partially exposed; constant target well protected. EX: a little-used service road next to the tree, or a frequently used street with a street tree between the assessed tree and the street.

Medium: Even odds that failure will impact target. Frequently used area fully exposed on one side of tree; constantly occupied area partially protected. EX: suburban street next to street tree, or a house partially protected by an intermediate tree.

High: Likely that the failure will contact the target. A fixed target is fully exposed. EX: near a high-use road or walkway with an adjacent street tree.

Likelihood of Failure		Conse	equences		
and Impact	Negligible	Minor	Significant	Severe	
Very Likely	Low	Moderate	High	Extreme	
Likely	Low	Low	Moderate	High	
Somewhat Likely	Low	Low	Low	Moderate	
Unlikely	Low	Low	Low	Low	

Negligible: low value damage or disruption, no personal injury.

Minor: low to moderate damage, small disruptions to traffic or communication lines, or very minor personal injury.

Significant: moderate to high value damage, considerable disruption, or personal injury.

Severe: high value damage, major disruption, severe personal injury or death.





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ISA Certified Arborist #WC-3172

Approximately 360 trees at the Vallco site are proposed to be removed from the interior sections of the existing property, and approximately 90 additional trees are proposed by WLCA to be removed due to very poor overall condition or structural and/or health issues that are unmitigable, for a total of approximately 450 potential removals. This leaves a total of approximately 450 trees to remain on site, mainly coast redwoods and shamel ash, along the perimeters of the site that are vulnerable to proposed construction damages in terms of both subgrade impacts to roots from trenching, soil compaction, etc. and above-grade physical impacts to the trunk tissues and canopy live wood and foliage.

Use of WLCA and/or other arborists as monitors will help minimize risk of tree damages that could increase risk of whole tree and tree part failure and impact to targets.

Designing around trees to avoid deep excavation, trenching, grading, construction, and other work within 20 horizontal feet of trunk edges can go a long way toward reducing impacts to the trees being retained, and reducing risk of tree failure and impact to targets.

Given the existing issue of soil moisture deficit (i.e. "drought stress") and lack of adequate irrigation to boost soil moisture within the root zones of trees being retained, WLCA expects that many of the trees to remain may actual become moderate risk or high risk specimens over time due to their premature decline in terms of loss of live twig density. As an example of our current risk exposure and future risk of tree failure and impact to targets as related to irrigation, WLCA offers the following sample risk assessment of a typical coast redwood along the west perimeter road:

SAMPLE RISK ASSESSMENT FOR A TYPICAL VALLCO COAST REDWOOD TO REMAIN

Typical coast redwood specimen / Mode of Failure	Location	Condition (Average existing)	Likelihood of failure	Likelihood of impacting target pedestrians and cars	Likelihood of failure and impact	Consequences	Risk of Failure and Impact (Existing)
#772 to #871 Failure Mode: Branch	West side of west perimeter road	Fair	Possible	High	Somewhat Likely	Significant	Low
Typical coast redwood specimen / Mode of Failure	Location	Condition (Future estimated)	Likelihood of failure (Future est.)	Likelihood of impacting target pedestrians and cars	Likelihood of failure and impact	Consequences	Risk of Failure and Impact (Future est.)
#772 to #871 Failure Mode: Whole Tree	West side of west perimeter road	Very Poor (if trees not heavily irrigated year round)	Probable	High	Likely	Severe	High

20 of 48

Version: 10/30/2015





ISA Certified Arborist #WC-3172

EXISTING "ELEVATED RISK" TYPE TREES

Although outside of the initial scope of WLCA's tree assessment assignment, it is noteworthy that some existing trees exhibiting significant lean off from vertical, girdling roots, and/or woody buttress roots severed one one or more side of the root plate during landscape irrigation pipe trenching and/or sidewalk replacement could be categorized as "elevated risk" type trees that currently rate out as moderate or high risk of failure and impact to target. These include trees such as, but not limited to:

Trees #434, 435, 438, 726. 1109, 1110, 1111, 1112, and 1115.

Many of these elevated-risk type trees are included in the group of trees suggested to be removed per WLCA in summary matrix 1.0 line 5, or are to be removed outright due to site plan conflicts. However, N. Wolfe Road median shamel ash specimen #1115, for example, is proposed to remain per the current proposed site plan tree disposition sheet.

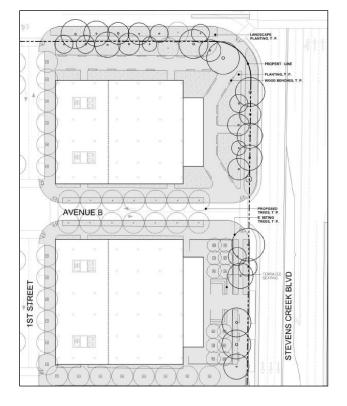
There may be many additional trees that become "elevated risk" specimens due to root loss, root damage, and continued soil moisture deficit, during the actual construction of phases 1, 2, and 3 at The Hills at Vallco project over time. Use of heavy irrigation at the site starting now (Fall 2015) may be very beneficial in the long run in terms of reducing dieback and lengthening expected useful lifespan of the trees by providing good soil moisture to trees being retained.

5.0 Landscape & Irrigation Pipe Installation Concerns

Demolition of Existing Planters / Concerns:

Demolition of existing curbs, planting areas, asphalt parking stall surface materials, etc. to make way for new landscaping may cause significant or severe damage to the below ground portions of trees being retained such as shamel ash at the southwest end of the site along the south boundary of the existing SEARS parking lot. The image capture at right shows a portion of project team sheet P-0609 main entry area landscaping proposed for this southwest corner area of The Hills project:

Some of the trees such as those circles drawn along the hard black line property boundary that rings the site are shamel ash specimens being retained, while other trees drawn on this sheet by the landscape architect are proposed new "in-fill" trees to augment existing screening.



21 of 48

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WLCA's main concern in areas such as this involves demolition crew activities during removal of surface hardscape and deep curbs, which may be comingled with existing woody tree root systems. When pulling out the curbs and hardscape piece by piece, these roots may become tangled with the machinery bucket teeth and be pulled, ripped, or otherwise destroyed or damaged in the process. Therefore, an arborist monitor is suggested during demolition of any material within approximately 20 feet of a tree to be retained. As noted above in this report, we know that woody tree roots can extend laterally as far as 3x to 5x the canopy dripline distance from the trunk edge, which means that a 20 foot radius canopy tree may theoretically have roots extending as far as 60 to 100 feet radius out from trunk, even under asphalt, if there are no physical impediments to growth extension such as deep curbs or deep foundation footings.

Irrigation Pipe Trenching / Concerns:

New irrigation pipe trenching will need to be performed in a manner that allows for maximum lateral woody root retention when within 20 horizontal feet of trees being retained such as those shown in the image above near Stevens Creek Blvd. Toward this end, we will need to modify the standard (typ.) municipal code 18 inch depth of cover spec detail used in most jurisdictions for schedule 40 PVC piping, and instead use one of the following options:

a. Option 1: "No Dig". This irrigation type uses flexible ½" diameter tubing that starts at a PVC riser at 20 feet or farther from a tree trunk of a tree being retained, and proceeds to snake over the ground to locations within 20 feet of a trunk of an existing tree where irrigation is needed. Bubblers are either affixed to the tubing itself, or to offshoot ¼" diameter tubing with bubblers. There is also emitter line that is available in ½" diameter, with built in bubblers, though these tend to clog easily.

The no-dig option is optimal in terms of protecting lateral tree roots extending out from existing trees. However, vandalism is always a problem. The tubing can be buried slightly by covering it with a 4 inch thick layer of wood chip mulch to avoid some vandalism, but further measures may need to be taken to keep the tubing flush with the soil surface, such as pinning down the tubing with professional grade steel landscape U-pins, etc. See image at right.

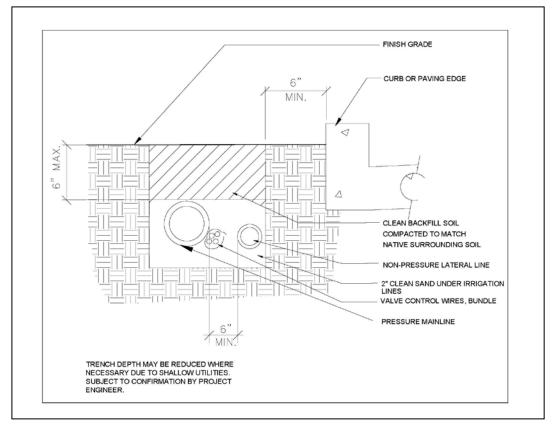




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b. Option 2: "Six Inch Cover" Rule: Use a modified specification such as a setup where a maximum of six (6) inches of soil cover is specified as the maximum allowable vertical space between top of newly installed PVC irrigation pipe and original soil grade elevations, within 20 feet of a tree trunk. At right is a sample specification side cut detail showing this setup that was used for a recent project where new landscaping was to be installed within 20 feet of valuable cedar specimens being retained in Palo Alto, California. See sample spec image below (copyright Sandis Civil).



Version: 10/30/2015





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6.0 Tree Transplant Options

Transplanting, depending on whether a tree is immediately moved and installed at another location, or is boxed up and held above ground with temporary irrigation for a number of months or years prior to permanent reinstallation at the transplant site, can cost on the order of \$5,000 to \$20,000 per tree for larger trees (e.g. a 15 inch diameter coast live oak, for example). Thus, the costs of transplant are generally infeasible in terms of the cost of transplant versus appraised dollar value of the tree.

Typically, smaller diameter trees such as those 10 inches trunk diameter or less, in good overall condition (i.e. 70% overall condition rating or better), with upright, symmetrical branch and limb architecture are the best candidates for transplant.

Larger diameter trees, older trees, trees in poor or fair condition, and specimens with asymmetrical root systems, sloping root systems on a non-level slope, and those which exhibit asymmetrical above-ground branch architecture, are for the most part <u>not</u> good transplant candidates.

Trees currently proposed by the project team for transplant include two (2) protected-size California sycamore specimens protected by City tree ordinance:

1. **Sycamore #260.** This tree is in good overall condition, but is of relatively large diameter at over 15 inches diameter. The tree is an older specimen, and exhibits lean to the northeast as well as a canopy lopsided to the northeast.

The asymmetrical nature of the tree's above-ground architecture, plus the fact that the root system could be limited or asymmetrical in the median planting area that it currently resides in, are negative factors when considering the tree for transplant. I suggest attempting to work around the tree, and retaining it during construction, rather than attempting to transplant this specimen. See the images section below in this report which shows the severe westward lean of the canopy.

2. **Sycamore #416**. This tree is in fair overall condition (50% out of 100% possible points), which is the lowest possible "fair" rating just 1 point above the threshold for "poor" (49%).

The tree exhibits a lopsided canopy that extends eastward, and also exhibits a severe girdling root issue that downgraded the structural value of the tree to a 30%. This girdling root issue caused the overall condition rating to be bumped down to a 50%.

Trees with lopsided canopies, and limited or otherwise asymmetrical root systems such as this tree with its girdling root problem, are poor candidates for transplant, especially since the overall condition rating is only 50%. Again, I suggest trying to retain the tree and work around it during construction. See the images section below which shows the tree's eastward lopsided canopy.

In summary, WLCA recommends avoiding any transplants of existing trees at the Vallco site. If trees #260 and #416 are required to be removed due to issues related to conflicts with proposed new construction, then remove the trees, or redesign the project to work around the trees. Note that many trees currently proposed to be retained may need to be removed due to root loss and root damage that could occur during construction activities, especially during utility installations if those pipes and conduits are not installed using pit to pit bore technology to avoid trenching.



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7.0 Consultant's Qualifications

- ISA Tree Risk Assessment Qualified
- ASCA Registered Consulting Arborist #401
- Millbrae Community Preservation Commission (Tree Board) 2001-2006
- ASCA Arboriculture Consulting Academy graduate, class of 2000
- ISA Certified Arborist #WC-3172
- B.A. Environmental Studies/Soil and Water Resources UC Santa Cruz, Santa Cruz, California 1990
- Peace Corps Soil and Water Conservation Extension Agent Chiangmai Province, Thailand 1991-1993
- Associate Consulting Arborist Barrie D. Coate and Associates 4/99-8/99
- Contract City Arborist, City of Belmont Planning and Community Development Department 5/99-present
- Continued education through attendance of arboriculture lectures and forums sponsored by The American Society of Consulting Arborists, The International Society of Arboriculture (Western Chapter), and various governmental and non-governmental entities.

(My full curriculum vitae is available upon request)





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8.0 Assumptions and Limiting Conditions

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

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

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

The consultant/appraiser 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.

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

Unless required by law otherwise, 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 the prior expressed conclusions, identity of the consultant/appraiser, or any reference to any professional society or institute or to any initiated designation conferred upon the consultant/appraiser as stated in his qualifications.

This report and any values expressed herein represent the opinion of the consultant/appraiser, and the consultant's/appraiser's 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, drawings, and photographs in this report, being intended for visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys unless expressed otherwise. The reproduction of any information generated by engineers, architects, or other consultants on any sketches, drawings, or photographs is for the express purpose of coordination and ease of reference only. Inclusion of said information on any drawings or other documents does not constitute a representation by Walter Levison to the sufficiency or accuracy of said information.

Unless expressed otherwise:

- a. information contained in this report covers only those items that were examined and reflects the conditions of those items at the time of inspection; and
- b. the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

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

Arborist Disclosure Statement.

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Tree are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborist cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot





Version: 10/30/2015

ASCA Registered Consulting Arborist #401

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ISA Certified Arborist #WC-3172

take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate the trees.

9.0 Certification

I hereby certify that all the statements of fact in this report are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Signature of Consultant

10.0 Tree Maintenance Vendors and Tree Sources

Service	Company	What they offer	Contact
Transplanting	Tree Movers Inc.	Large specimen trees, transplant services.	650-968-6117
	Valley Crest Tree Co. tree moving division	Large specimen trees, transplant services.	818-223-8500
Pruning	Advanced Tree Care	Pruning, root crown excavation, fertilization, tree installation, support systems for high risk trees, SOD phosphate sprays.	650-839-9539
	Maguire Tree Care	Pruning performed directly by an ISA Certified Arborist	650-245-2620
	Trees 360	Pruning performed directly by an ISA Certified Arborist (upon request).	408-866-1010
	Commercial Tree Care	Pruning of very high quality if request ISA Certified Arborist Joe Nama to directly monitor pruning work.	408-985-TREE
	The Shady Tree Co.	High quality pruning.	650-326-0406 www.theshadytreecompany.co m
Special Tree Sources	Specialty Oaks Lower Lake, CA	California native oak species	www.specialtyoaks.com
	Oracle Oak Nursery	Various oaks and hybrid elms. Only local purveyor of hard to find Italian oak (Q. frainetto 'Forest Green'). Can also order Quercus frainetto directly from the grower in Oregon which is JF Schmidt.	www.oracleoaknursery.com
	Sweet Lane Wholesale Nursery Santa Rosa, CA	Can import rare oaks such as the fantastic 'Forest Green' Hungarian oak, from Oregon growers. Also may be able to request the excellent Cathedral live oak (<i>Quercus virginiana</i> 'Cathedral')	www.sweetlanenursery.com
	J.F. Schmidt & Son Co. Oregon	Is the actual grower of the 'Forest Green' Hungarian oak (Quercus frainetto 'Forest Green'). Order direct from them and have trees shipped into California from their grow site in Oregon	http://www.jfschmidt.com/introd uctions/forestgreen/index.html (503) 663-4128
	L.E. Cooke Nursery	Current local source of the rare 'Roberts' sycamore: a cultivar of deciduous California sycamore that is reported to be resistant to both powdery mildew and sycamore anthracnose, while exhibiting fast upright growth appropriate for urban landscape conditions.	http://www.lecooke.com/cms/contact-le-cooke.html Visalia, CA (800) 845-5193

Version: 10/30/2015

11.0 Digital Images Archived 9/25/2015 (WLCA)

Tree #	Image	Tree #	Image
285 to 289 to be removed, looking northeast		277 to 284 to be retained, looking north	
261 and 262 to be retained, looking south		Sycamore 260 initially proposed by team to be transplanted. WLCA suggests removal of tree, or redesign the plan to work around it.	



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Tree #	Image	Tree #	Image
414 and 415 to be retained		416 initially proposed by the project team to be transplanted (WLCA suggests removal, or redesign the project to work around it)	
426 to 444 along west side of Alexander's Steakhouse Some of these trees are to remain, and others are suggested by WLCA to be removed due to safety (risk) concerns	ALE	Close-up of the roots severed along the west side of tree 438, (suggested by WLCA to be removed), during sidewalk replacement.	



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Tree #	Image	Tree #	Image
Sidewalk heave (vertical displacement) along the east side of tree 431 to be retained. Infrastructure such as this with roots likely travelling under the hardscape should be left in-situ instead of being removed (if possible), since severe root loss could occur if the walk were rebuilt. Use diamond grinding to level.		Redwoods 423, 424, 425 to be removed at the steakhouse parking lot.	
Italian stone pines in JC Penny parking lot, looking south.		Example of redwoods and ash specimens 332, 333, and 335 in very poor condition due to soil moisture deficit, at the JC Penny parking lot.	



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Tree #	Image	Tree #	Image
Trees 338 to 358 to be removed along the east side of the JC Penny parking lot.		Chinese elms and other trees being retained 521 to 541, looking south along the Apple Inc. property.	
Redwoods 500, 501, and 502 are dead in the southeast corner of the JC Penny parking lot area. These trees are planned to be removed.		In contrast to dead redwoods 500, 501, and 502 shown in the image at left, redwoods 505 and 510 at right are in decent condition just 30 or 40 feet west. The trees are to be removed.	
Shamel ash and redwoods 396 to 404 to be removed at the west side of JC Penny parking lot		Shamel ash 452 to 457 to be removed from the east side of N. Wolfe Rd.	



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Tree #	Image	Tree #	Image
Close-up of tree 267 to be removed, which exhibits a severe girdling root issue due to planting strip width which severely restricted normal lateral root extension from the trunk		Grove of redwoods 204 to 218 to be removed just west of Dynasty Restaurant.	
Looking south down west perimeter road, at rows starting with tree 240 on left (row to be removed), and 703 at right (row to be retained)		Redwood specimens along the west side of west perimeter road are suffering severely from soil moisture deficit, and are generally declining or dying	

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Tree # **Image** Tree # **Image** Looking south along Monterey west pine 726 perimeter rates out with road, again a probable with trees on risk of failure left to be due to lean, removed girdling roots, (tree 165 etc. This tree southward), is in WLCA's and trees on suggested right to be removal list. retained (tree 771 southward) The dense screen along the west side of west perimeter road as shown here near tree 771 is in danger of dying due to soil moisture deficit. Looking south along west perimeter road. Replacement of these high The trees at right are trees 752 water use southward, and 852 southward, and are trees with currently proposed to be retained. drought tolerant Trees along the left side (east side) of evergreen west perimeter road are to be removed. species is a viable option.



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Tree #	Image	Tree #	Image
Shamel ash trees 8 and 9 to be retained at the southwest corner of the Vallco site. Note curb and asphalt displacement from root growth. If this hardscape is removed and replaced, severe root loss and root damage may result, ending in further tree decline or death.			Shamel ash 9 to 36 to be retained along this south border of the site, looking east. Again, removal of or alternation of existing curb and asphalt materials could cause severe root damage to these already drought-stressed specimens, resulting in further tree decline or death.
Shamel ash 23 to 36 to be retained, looking southeast.		Shamel ash 42 to 50 to be retained along south border. Looking southeast.	



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Tree #	Image	Tree #	Image
Monterey pine 51 at southeast corner of the Vallco site. This tree is dead, and needs to be removed at this time as a high risk of failure and impact to targets.		Looking north at shamel ash 55, 57, 59, 61, 63, 65 to be retained.	
Southern magnolias 1106, 1107, 1108 proposed by the project team to be retained, are in decline due to severe soil moisture deficit, and may need to be removed.		Looking north at shamel ash 102, 103, 104, and 105 to be retained. Note canopy dieback in the form of live twig density decline.	





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Tree #	Image	Tree #	Image
Looking northeast at shamel ash 459 to 475 to be retained along the east side of N. Wolfe Rd.		Long-lived, drought tolerant oak species like these two existing holly oaks 97 and 98 to be removed at Vallco are the types of trees we should be installing on the proposed Hills at Vallco project.	

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12.0 Tree Maintenance Recommendations / Phase

The following matrix shows all tree maintenance recommendations by WLCA for those trees located south of the alternate lot west area. Note:

- Trees being removed as shown on the proposed tree disposition plan sheet P-0602 are <u>not</u> included in this list.
- Trees recommended to be removed by WLCA due to very poor condition, extreme lean, etc. are <u>not</u> included in this list (see list of eighty nine (89) WLCA-recommended removals in section 1.0 matrix, line 5, above in this report).

Line Number	Maintenance Action Suggested	Tree Tag Number	Phase
1	Branch endweight reduction pruning on lengthy sections of canopy	#8, 9, 104, 414, 442	Prior to phase 1 demolition.
2	Arborist cable and/or bracing installation per ANSI A300 support system standards	#443	Prior to phase 1 demolition.
3	Verify spring 2016 leafout of tree. If no leafout occurs, then remove tree as "dead"	#17, 518, 554	May, 2016.
4	Arborist monitor tree for stability and for declines in vigor (recent pre-project trenching or other work in 2015 resulted in root damage to many of these trees, the impacts of which may be significant or severe)	#225, 226, 228, 282, 283, 285, 454, 459, 460, 463, 465, 468, 469, 473, 475, 695, 737, 744, 865, 1115, 1122, 1123, 1124, 1125.	2x/year.
5	Remove one of two existing codominant mainstems at the fork, by an ISA Certified Arborist, per ANSI A300 pruning standards.	#246	Prior to phase 1 demolition.





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Line Number	Maintenance Action Suggested	Tree Tag Number	Phase
6	Commence heavy weekly irrigation over root zone, and continue through winter. Rate of approx. 25 to 100 gallons per tree per week, year-round. Consider use of aerial based sprinkler systems and/or aerial based misting systems to be installed in redwood specimens.	(All trees to remain)	As soon as possible, continuing 1x/week minimum, year-round.
7	Add 4 inch layer of chipper truck type wood chips over soil to reduce irrigation water evaporation. Pull mulch out at least 6 to 12 inches away from trunk edges to avoid moisture retention at root crown.	(All trees to remain)	Prior to start heavy periodic irrigation.
8	Remove electrical utility company guy wire and strapping that is surrounding the trunk.	#669	Call utility representatives to schedule this for prior to start of phase 1 demolition.

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13.0 Tree Protection Recommendations / Phase

Phase:	Acronym:
Phase 1 Demolition	1D
Phase 1 Construction	1C
Phase 2 Demolition	2D
Phase 2 Construction	2C
Phase 3 Demolition	3D
Phase 3 Construction	3C

Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
1	ROOT PROTECTION FENCE – 5-foot high chain link, hung on 7-foot long 2-inch diameter iron tube posts driven 24- inches into the ground, max. 6 feet spacing on-center.		219, 220, 221, 239, 240, 241, (245 through 251), 277, 278, (280 through 292), (571 through 703), (1114 through 1125). (Not including individual trees in this group that are to be removed per author recommendation in report section 1.0 line 5).	1D, 1C
2	TRUNK BUFFER – 20 wraps of orange plastic with wood boards overlaid and duct taped in place around the wood		260, 261, 262, plus all trees at the outermost portions of the tree root zone protection fence sections that face construction work.	1D, 1C

Cell (415) 203-0990 / Email drtree@sbcglobal.net





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Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
3	WOOD CHIP MULCH – 4 inch thick layer of chipper truck type wood chips (not bark chips). Place over entire open soil root zone areas, and pull 6 to 12 inches away from tree trunk edges.		Where possible, all trees to remain	1D, 1C
4	IRRIGATION TEMPORARY Heavy 1x/week 25 to 100 gallons per tree, per week, minimum, year-round		Where possible, all trees to remain	1D, 1C
5	ROOT PRUNING Back-dig around exposed roots, and prune at right angle to root growth direction, removing all broken, shattered, or otherwise damaged sections of roots	THE MENT OF STATE OF	Where applicable during excavation, trenching, grading, etc.	1D, 1C
6	HARDSCAPE REMAIN Allow existing hardscape areas to remain, where possible, to avoid root loss and root damage. Arborist monitoring required during demolition within 20 feet of trunk.		219, 220, 221, 239, 240, 241, (245 through 251), (260?), 261, 262, 277, 278, (280 through 292)	1D, 1C

41 of 48

Version: 10/30/2015

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Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
7	PIT TO PIT DIRECTIONAL BORE for all trenching, including utilities, drain pipes, downspout drain lines, etc., for all trenches within 20 feet of trunks of trees being retained.		Various, along west perimeter road and N. Wolfe Rd.	1D, 1C
8	IRRIGATION PERMANENT Use no-dig over grade tubing, or max. of "6 inch cover within 20 feet of trees" as blurb- specified on all plans.		All areas	1D, 1C

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Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
9	ROOT PROTECTION FENCE – 5-foot high chain link, hung on 7-foot long 2-inch diameter iron tube posts driven 24- inches into the ground, max. 6 feet spacing on-center.		(7 through 36), (42 through 65), (69 through 88), (746 through 754), (840 through 871), 317, 318, 319, 426, 427, 430, 431, 432, 433, 435, 435, 437, 438, 439, 442, 443, 444 (518 through 546), (550 through 570). (Not including individual trees in this group that are to be removed per author recommendation in section 1.0 line 5).	2D, 2C
10	TRUNK BUFFER – 20 wraps of orange plastic with wood boards overlaid and duct taped in place around the wood		317, 318, 319, 426, 427, 430, 431, 432, 433, 435, 435, 437, 438, 439, 442, 443, 444, 451, 452, 454, 414, 415, (416?), 740, 741, 742, 743, 744, 745, 1106, 1107, 1108, plus all trees at the outermost portions of the tree root zone protection fence sections that face construction work),	2D, 2C



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Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
11	WOOD CHIP MULCH – 4 inch thick layer of chipper truck type wood chips (not bark chips). Place over entire open soil root zone areas, and pull 6 to 12 inches away from tree trunk edges.		Where possible, all trees to remain	2D, 2C
12	IRRIGATION TEMPORARY Heavy 1x/week 25 to 100 gallons per tree per week minimum, year-round		Where possible, all trees to remain	2D, 2C
13	ROOT PRUNING Back-dig around exposed roots, and prune at right angle to root growth direction, removing all broken, shattered, or otherwise damaged sections of roots	THE MEN	Where applicable during excavation, trenching, grading, etc.	2D, 2C

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Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
14	HARDSCAPE REMAIN Allow existing hardscape areas to remain where possible, to avoid root loss and root damage. Arborist monitoring required during demolition within 20 feet of trunk.		8, 9, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 33, 35, 43, 45, 47, 49, 52, 54, 56, 58, 60, 62, 64, 69, 70, 71, 73, 75, 77, 79, 81, 83, 85, 87, 88, 317, 318, 319, 426, 427, 430, 431, 432, 433, 435, 435, 435, 437, 438, 439, 442, 443, 444, 451, 452, 454, 414, 415, (416?), (740 through 745)	2D, 2C
15	PIT TO PIT DIRECTIONAL BORE for all trenching, including utilities, drain pipes, downspout drain lines, etc., for all trenches within 20 feet of trunks of trees being retained.		Various, along N. Wolfe Rd., east perimeter road, north perimeter road, and west perimeter road.	2D, 2C
16	IRRIGATION PERMANENT Use no-dig over grade tubing, or max. of "6 inch cover within 20 feet of trees" as blurb- specified on all plans.		All areas	2D, 2C



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Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
17	ROOT PROTECTION FENCE – 5-foot high chain link, hung on 7-foot long 2-inch diameter iron tube posts driven 24- inches into the ground, max. 6 feet spacing on-center.		102, 102, 104, 105, (459 through 475), 671, 672, 673, (704 through 839) (Not including individual trees in this group that are to be removed per author recommendation in report section 1.0 line 5).	3D, 3C
18	TRUNK BUFFER – 20 wraps of orange plastic with wood boards overlaid and duct taped in place around the wood		102, 102, 104, 105, (459 through 475), plus all trees at the outermost portions of the tree root zone protection fence sections that face construction work)	3D, 3C
19	WOOD CHIP MULCH – 4 inch thick layer of chipper truck type wood chips (not bark chips). Place over entire open soil root zone areas, and pull 6 to 12 inches away from tree trunk edges.		Where possible, all trees to remain	3D, 3C

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Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
20	IRRIGATION TEMPORARY Heavy 1x/week 25 to 100 gallons per tree per week minimum, year-round		Where possible, all trees to remain	3D, 3C
21	ROOT PRUNING Back-dig around exposed roots, and prune at right angle to root growth direction, removing all broken, shattered, or otherwise damaged sections of roots	E THE WAY	Where applicable during excavation, trenching, grading, etc.	3D, 3C
22	HARDSCAPE REMAIN Allow existing hardscape areas to remain where possible, to avoid root loss and root damage. Arborist monitoring required during demolition within 20 feet of trunk.		102, 102, 104, 105, (459 through 475)	3D, 3C
23	PIT TO PIT DIRECTIONAL BORE for all trenching, including utilities, drain pipes, downspout drain lines, etc., for all trenches within 20 feet of trunks of trees being retained.		Various, along N. Wolfe Rd., and west perimeter road.	3D, 3C



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Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
24	IRRIGATION PERMANENT Use no-dig over grade tubing, or max. of "6 inch cover within 20 feet of trees" as blurb- specified on all plans.		All areas.	3D, 3C

- 14.0 Attached, Tree Data Charts Updated (WLCA)
- 15.0 Attached, Tree Location Map (2015, Olin Studio)
- 16.0 Attached, U.S. Forest Service Fact Sheet Coast Redwood

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupuro Ordinario of Cuparino Ordinario (10.0** single stem, 20** multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
1	x			13.0						13.0		Shamel ash	Fraxinus uhdei	30/18	20/30	25% very poor	poor			6				11	x			
2	x			10.9						10.9		Shamel ash	Fraxinus uhdei	25/20	50/35	40% poor	moderate			7								
3	x			13.9						13.9		Shamel ash	Fraxinus uhdei	30/25	60/45	50% fair	moderate											
4	x			16.6						16.6		Shamel ash	Fraxinus uhdei	35/30	55/60	57% fair	moderate											
5	x			22.0						22.0		Shamel ash	Fraxinus uhdei	45/45	75/60	66% fair	good			12								
6	x			13.3						13.3		Shamel ash	Fraxinus uhdei	35/15	50/35	43% poor	moderate											
7				27.6						27.6		Monterey pine	Pinus radiata	55/30	65/65	65% fair	moderate											
8				19.9						19.9		Shamel ash	Fraxinus uhdei	55/30	70/60	64% fair	moderate	w									Needs endweight reduction pruning	
9				26.2						26.2		Shamel ash	Fraxinus uhdei	55/40	60/50	55% fair	poor to mod					GR					Needs endweight reduction pruning	
10				27.0						27.0		Shamel ash	Fraxinus uhdei	55/30	60/50	55% fair	poor to mod	N										
11				28.8						28.8		Shamel ash	Fraxinus uhdei	55/30	60/60	60% fair	moderate	s				GR						
12				20.2						20.2		Shamel ash	Fraxinus uhdei	55/25	55/50	53% fair	poor to mod	E										
13				22.2						22.2		Shamel ash	Fraxinus uhdei	55/25	60/50	55% fair	poor to mod	s										
14				24.7						24.7		Shamel ash	Fraxinus uhdei	60/28	60/60	60% fair	moderate	N										

Tree Tag # To be Removed Per CurrentSite Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Fallure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.) Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cuputo Ordinance (10.0" single stem, 20" multi, various specified nafive and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
15			24.6					24.6		Shamel ash	Fraxinus uhdei	60/30	60/45	55% fair	moderate	N										
16			20.6					20.6		Shamel ash	Fraxinus uhdei	55/30	55/55	55% fair	moderate	N										
17			17.7					17.7		Shamel ash	Fraxinus uhdei	45/25	0/0	0% dead (not verified)		s									Verify tree condition once spring leafout is complete in April May.	
18			31.6					31.6		Shamel ash	Fraxinus uhdei	60/30	65/48	59% fair	moderate	N				GR		10 to 12				
19			18.2					18.2		Shamel ash	Fraxinus uhdei	45/25	60/50	55% fair	moderate	s										
20			21.5					21.5		Shamel ash	Fraxinus uhdei	50/35	55/55	55% fair	poor to mod											
21			17.0					17.0		Shamel ash	Fraxinus uhdei	35/20	50/60	55% fair	moderate	s				GR						
22			32.3					32.3		Shamel ash	Fraxinus uhdei	55/50	75/65	70% good	good	NE										
23			24.5					24.5		Shamel ash	Fraxinus uhdei	55/30	65/40	50% fair	moderate	s		30		GR						
24			29.7					29.7		Shamel ash	Fraxinus uhdei	55/40	65/50	60% fair	moderate	N				GR						
25			20.7					20.7		Shamel ash	Fraxinus uhdei	50/30	55/45	50% fair	moderate	SE		30		serious GR						
26			20.2					20.2		Shamel ash	Fraxinus uhdei	35/35	50/50	50% fair	moderate	N				GR						
27			25.8					25.8		Shamel ash	Fraxinus uhdei	55/35	65/50	57% fair	moderate	s										
28			36.9					36.9		Shamel ash	Fraxinus uhdei	60/40	75/45	60% fair	good	N				GR						

Tree Tag #	Current Site Plan Author Recommends Removal Due to Very Poor	Removal Dus to very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupy and Cup	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems Will Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
29				32.3						32.3		Shamel ash	Fraxinus uhdei	60/35	70/50	60% fair	good	s				GR						
30				29.5						29.5		Shamel ash	Fraxinus uhdei	50/40	60/55	59% fair	good	NE										
31				6.3						6.3		Shamel ash	Fraxinus uhdei	18/10	40/30	35% poor	moderate	s				BRC					Stunted	
32				17.9						17.9		Shamel ash	Fraxinus uhdei	55/35	60/40	50% fair	moderate	N										
33				26.0						26.0		Shamel ash	Fraxinus uhdei	55/35	60/50	57% fair	moderate					GR					Diameter estimated.	
34				24.0						24.0		Shamel ash	Fraxinus uhdei	50/25	50/40	45% poor	?	s						9			Tree out of leaf. Condition estimated.	
35				23.3						23.3		Shamel ash	Fraxinus uhdei	55/25	60/55	57% fair	moderate	N										
36				26.6						26.6		Shamel ash	Fraxinus uhdei	55/45	65/80	63% fair	moderate											
37				32.9						32.9		Shamel ash	Fraxinus uhdei	80/35	70/60	65% fair	good	N										
38				18.2						18.2		Shamel ash	Fraxinus uhdei	50/25	65/50	56% fair	moderate	s										
39				23.0						23.0		Shamel ash	Fraxinus uhdei	55/40	65/50	57% fair	good	N						GR			Diameter estimated.	
40				28.2						28.2		Shamel ash	Fraxinus uhdei	55/45	60/45	52% fair	moderate	s		25		GR						
41				18.3						18.3		Shamel ash	Fraxinus uhdei	50/20	60/50	55% fair	moderate	NE										
42				6.5						6.5		Shamel ash	Fraxinus uhdei	20/8	30/25	28% very poor	poor	s	s									

Tree Tag # To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk S (in.) Trunk S (in.)	Adjusted Trunk Diameter Inches @ 54" A.G.	"Protected Tree" per City of Cupertino Ordinance (110.0" single stem, 20" multi, various specified native and non-native.	Cos es decigos)	mmon Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2018 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
43			24.0					24.0		s	ihamel ash	Fraxinus uhdei	55/30	65/60	63% fair	good	N				GR					Diameter estimated.	
44			30.7					30.7		s	ihamel ash	Fraxinus uhdei	50/35	65/45	55% fair	good	s				GR						
45			18.0					18.0		s	ihamel ash	Fraxinus uhdei	50/20	50/50	50% fair	poor to mod	N										
46			30.5					30.6		s	ihamel ash	Fraxinus uhdei	55/35	65/45	55% fair	good	s				GR		7 to 9				
47			26.0					26.0		s	ihamel ash	Fraxinus uhdei	55/30	70/60	67% fair	good	N									Diameter estimated.	
48			31.6					31.6		s	Shamel ash	Fraxinus uhdei	55/30	60/55	57% fair	mod to good	s				GR						
49			24.5					24.5		s	Shamel ash	Fraxinus uhdei	55/25	55/55	55% fair	moderate	N										
50			39.5					39.5		s	Shamel ash	Fraxinus uhdei	55/40	55/55	55% fair	moderate	E				serious GR						
51	×		45.7					45.7		Mc	onterey pine	Pinus radiata	55/45	25/25	25% very poor	poor										Bark beetle issues	
52			25.9					25.9		Mc	onterey pine	Pinus radiata	55/30	40/40	40% poor	poor											
53			16.9					16.9		s	Shamel ash	Fraxinus uhdei	45/25	65/60	63% fair	good	E	E									
54			31.6					31.6		s	Shamel ash	Fraxinus uhdei	55/40	60/50	55% fair	moderate	w				GR						
55			21.8					21.8		s	Shamel ash	Fraxinus uhdei	50/25	65/60	60% fair	good											
56			18.3					18.3		s	Shamel ash	Fraxinus uhdei	50/20	55/55	55% fair	moderate	w										

Tree Tag#	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupuro Ordinance (10.0** single stem, 20** multi, various specified makes and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spillout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
57				19.5						19.5		Shamel ash	Fraxinus uhdei	55/30	65/60	63% fair	good	E										
58				26.4						26.4		Shamel ash	Fraxinus uhdei	55/30	60/55	58% fair	moderate	w										
59				33.8						33.8		Shamel ash	Fraxinus uhdei	55/30	60/50	55% fair	good	E						11				
60				24.9						24.9		Shamel ash	Fraxinus uhdei	45/35	65/55	60% fair	good	w										
61				24.4						24.4		Shamel ash	Fraxinus uhdei	55/35	60/60	60% fair	moderate	E										
62				27.9						27.9		Shamel ash	Fraxinus uhdei	55/25	50/50	50% fair	poor to mod	w										
63				31.5						31.5		Shamel ash	Fraxinus uhdei	55/40	70/65	68% fair	good											
64				20.8						20.8		Shamel ash	Fraxinus uhdei	40/25	50/50	50% fair	poor to mod	w										
65				20.7						20.7		Shamel ash	Fraxinus uhdei	50/25	65/53	55% fair	good	E				GR						
66	x			37.8						37.8		Shamel ash	Fraxinus uhdei	60/25	70/63	68% fair	good	w										
67	х			18.3						18.3		Shamel ash	Fraxinus uhdei	55/25	65/65	65% fair	moderate	w										
68	x			41.0						41.0		Shamel ash	Fraxinus uhdei	55/50	60/55	58% fair	mod to good	NW						possible bark inclusion issues				
69				19.4						19.4		holly oak	Quercus ilex	45/20	60/60	60% fair	moderate	w										
70				13.2						13.2		holly oak	Quercus ilex	25/20	60/60	60% fair	moderate	w										

Tree Tag # To be Removed Part Current Site Plan Author Recommends Removed Date to Very Poor Condition or Elevand Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.) Trunk 6 (in.)	Adjusted Trunk Dlameter Inches @ 54" A.G.	"Protected Tree" per City of Cupartino Ordinarce (10.0 * single stem, 20" multi, various specified naive and non-naive species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
71		40.8					40.8		Shamel ash	Fraxinus uhdei	60/45	65/55	60% fair	good							10				
72		24.3					24.3		Shamel ash	Fraxinus uhdei	55/25	55/50	50% fair	moderate	E				serious GR						
73		26.2					26.2		Shamel ash	Fraxinus uhdei	55/35	50/50	50% fair	poor	w						16				
74		28.0					28.0		Shamel ash	Fraxinus uhdei	55/30	60/60	60% fair	moderate	E										
75		21.4					21.4		Shamel ash	Fraxinus uhdei	40/25	50/50	50% fair	moderate	w										
76		20.2					20.2		Shamel ash	Fraxinus uhdei	50/18	40/50	47% poor	poor to mod	E										
77		15.8					15.8		Shamel ash	Fraxinus uhdei	45/15	40/30	35% poor	poor	w										
78		17.0					17.0		Shamel ash	Fraxinus uhdei	55/35	65/40	50% fair	moderate					serious GR						
79		21.2					21.2		Shamel ash	Fraxinus uhdei	55/25	55/55	55% fair	poor to mod	w				GR						
80		28.2					28.2		Shamel ash	Fraxinus uhdei	55/35	60/50	55% fair	moderate	E										
81		24.7					24.7		Shamel ash	Fraxinus uhdei	55/35	55/50	53% fair	moderate	w										
82		19.0					19.0		Shamel ash	Fraxinus uhdei	55/20	45/50	49% poor	poor to mod	E										
83		17.8					17.8		Shamel ash	Fraxinus uhdei	55/30	60/55	57% fair	moderate	w										
84		21.2					21.2		Shamel ash	Fraxinus uhdei	35/30	55/55	55% fair	moderate	E										

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Dlameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupuro Ordinance (10.0" single stem, 20" multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Cancpy Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
85				20.3						20.3		Shamel ash	Fraxinus uhdei	55/30	65/60	65% fair	moderate to good	w										
86				23.2						23.2		Shamel ash	Fraxinus uhdei	55/35	65/50	58% fair	good					GR						
87				22.8						22.8		Shamel ash	Fraxinus uhdei	55/35	65/55	60% fair	mod to good	NW										
88				5.9	5.0	4.9				15.8		Monterey pine	Pinus radiata	9/11	65/65	65% fair	moderate										ID of species not verified	
89	x			23.5						23.5		Canary Island pine	Pinus canariensis	45/18	80/75	78% good	good						0 to 4					
90	x			16.0						16.0		Monterey pine	Pinus radiata	18/25	30/30	30% poor	moderate					GR					IID of species not verified. Tree appears to be infected by pine pitch canker fungus.	
91	x			20.4						20.4		Monterey pine	Pinus radiata	25/25	40/40	40% poor	poor to mod		w								Tree has bank beetle issues and/or pine pitch canker infection.	
92	x	х		15.5						15.5		carrotwood, or carob tree	Cupaniopsis anacardioides, or Ceratonia siliqua	20/15	25/10	15% very poor	poor to mod	w					0 to 8					
93	x			11.6						11.6		carrotwood, or carob tree	Cupaniopsis anacardioides, or Ceratonia siliqua	20/15	50/30	45% poor	moderate						4 to 7					
94	x			13.0						13.0		carrotwood, or carob tree	Cupaniopsis anacardioides, or Ceratonia siliqua	20/20	45/35	40% poor	poor to mod						6 to 12					
95	x			6.0	6.0	6.0	6.0	6.0	5.0	35.0		carrotwood, or carob tree	Cupaniopsis anacardioides, or Ceratonia siliqua	20/20	65/10	30% poor	good							1			Failing at bank inclusion at 1 foot above grade.	
96	x			34.0						34.0		Shamel ash	Fraxinus uhdei	40/25	65/55	57% fair	good								х			
97	×			15.3						15.3		holly oak	Quercus ilex	20/25	75/75	75% good	good											
98	x			14.0						14.0		holly oak	Quercus ilex	25/25	75/75	75% good	good											

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of City of Cuputo Ordinance (10.0" single stem, 20" multi, various specified native and non-native specified	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2018 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
99	x			11.6						11.6		helly cak	Quercus ilex	22/20	70/70	70% good	moderate											
100	x			12.3						12.3		Monterey pine	Pinus radiata	18/15	50/50	50% fair	moderate		SE	13							ID of species not verified.	
101	x			16.0						16.0		Monterey pine	Pinus radiata	28/20	50/50	50% fair	moderate											
102				25.9						25.9		Shamel ash	Fraxinus uhdei	50/35	50/35	40% poor	moderate				x			12				
103				24.7						24.7		Shamel ash	Fraxinus uhdei	55/35	50/40	45% poor	moderate		E		x			9				
104				16.5						16.5		Shamel ash	Fraxinus uhdei	55/30	55/50	50% fair	moderate	E	E		x						Needs endweight reduction pruning	
105				16.0						16.0		Shamel ash	Fraxinus uhdei	45/25	45/45	45% poor	moderate	E			x		4					
106	x			21.7						21.7		Shamel ash	Fraxinus uhdei	50/35	60/50	55% fair	good				х				х			
107	x			19.4						19.4		Shamel ash	Fraxinus uhdei	50/25	60/45	55% fair	moderate	s			x							
108	x			15.9						15.9		Shamel ash	Fraxinus uhdei	35/30	55/55	55% fair	poor to mod											
109	x			14.4						14.4		Shamel ash	Fraxinus uhdei	35/25	40/40	40% poor	poor to mod	N										
110	x			18.9						18.9		Shamel ash	Fraxinus uhdei	45/30	40/30	35% poor	poor							11				
111	x	x		29.7						29.7		Monterey pine	Pinus radiata	45/35	60/55	57% fair	moderate										Measured at 2 feet.	
112	x	×		19.1						19.1		Monterey pine	Pinus radiata	25/18	0/0	0% Dead												

Tree Tag#	To be Removed Per Current Site Plan	Author Recommends Removal Dus to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupy confliction Ordinance (10.0" single stem, 20" multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-10% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Swere Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
113	x	x		28.0	15.0					43.0		Monterey pine	Pinus radiata	30/20	25/25	25% very poor	poor	w									Bark beetle issues and/or pine pitch canker fungus.	
114	x			41.0						41.0		Monterey pine	Pinus radiata	35/35	55/45	50% fair	moderate	s									Measured at 2 feet.	
115	x			19.8						19.8		Shamel ash	Fraxinus uhdei	50/30	50/40	43% poor	poor to mod	E							x			
116	х			12.7						12.7		Shamel ash	Fraxinus uhdei	35/25	45/50	47% poor	poor to mod								x			
117	x			14.4						14.4		Shamel ash	Fraxinus uhdei	35/25	40/45	45% poor	poor to mod								x			
118	x			7.9						7.9		Shamel ash	Fraxinus uhdei	25/15	30/30	30% poor	poor								x			
119	x			10.3						10.3		Shamel ash	Fraxinus uhdei	25/20	45/50	48% poor	poor to mod	E							x			
120	x			11.4						11.4		Shamel ash	Fraxinus uhdei	25/20	40/30	37% poor	poor to mod	E							x			
121	x			10.9						10.9		Shamel ash	Fraxinus uhdei	30/20	60/50	57% fair	mod to good	E							x			
122	x			8.3						8.3		Shamel ash	Fraxinus uhdei	25/15	40/30	30% poor	poor		E			GR						
123	x			30.1						30.1		coast redwood	Seguaia sempervirens	60/25	30/30	30% poor	poor								x	x		
124	х			22.9						22.9		Shamel ash	Fraxinus uhdei	55/40	60/50	55% fair (? Tree is leafless).						GR					Tree condition needs to be verified after spring leafout.	
125	x			24.9						24.9		Shamel ash	Fraxinus uhdei	60/30	40/40	40% poor	poor					GR			x			
126	x			12.0						12.0		Shamel ash	Fraxinus uhdei	50/20	30/30	30% poor	poor	E							x			

Tree Tag#	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Dlameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupate of Cupate of Cupaten Confinance (10.0" single stem, 20" multi, various specified mative and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-10% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Loan (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems With Sever 8 Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
127	х			25.1						25.1		Shamel ash	Fraxinus uhdei	55/35	45/55	50% fair	moderate	E	E			GR			х			
128	x			19.4						19.4		Shamel ash	Fraxinus uhdei	50/35	40/50	42% poor	poor	E							x			
129	х			4.0						4.0		fern pine	Podocarpus gracilior	15/3	70/50	55% fair	moderate				х						Located at P1 parking level.	
130	х			4.0						4.0		fern pine	Podocarpus gracilior	15/3	70/50	55% fair	moderate				х						Located at P1 parking level.	
131	х			4.2						4.2		fern pine	Podocarpus gracilior	15/3	70/50	55% fair	moderate				х						Located at P1 parking level.	
132	x			4.4						4.4		fern pine	Podocarpus gracilior	15/3	70/50	55% fair	moderate				х						Located at P1 parking level.	
133	х			4.3						4.3		fern pine	Podocarpus gracilior	15/3	70/50	55% fair	moderate				х						Located at P1 parking level.	
134	x			4.0						4.0		fern pine	Podocarpus gracilior	15/3	70/50	55% fair	moderate				х						Located at P1 parking level.	
135	x			4.8						4.8		fern pine	Podocarpus gracilior	15/3	70/50	55% fair	moderate				х						Located at P1 parking level.	
136	x			4.7						4.7		fern pine	Podocarpus gracilior	15/3	70/50	55% fair	moderate				x						Located at P1 parking level.	
137	x			4.6						4.6		fern pine	Podocarpus gracilior	15/3	70/50	55% fair	moderate				х						Located at P1 parking level.	
138	x			7.8	4.9					12.7		Ficus species	Ficus sp.	20/12	70/50	55% fair	moderate				х						Located at P1 parking level.	
139	x			6.8	4.1					10.9		Ficus species	Ficus sp.	20/12	70/50	55% fair	moderate				х						Located at P1 parking level.	
140	х			6.8						6.8		Ficus species	Ficus sp.	20/12	70/50	55% fair	moderate				х						Located at P1 partiting level.	

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of City and Ordinarios of Cluparino Ordinarios multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-10% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems Will Sever Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Mois ture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
141	x			5.9	3.7					9.6		Ficus species	Ficus sp.	20/12	70/50	55% fair	moderate				х						Located at P1 parking level.	
142	х			5.0	4.3					9.3		Ficus species	Ficus sp.	20/12	70/50	55% fair	moderate				х						Located at P1 parking level.	
143	х			5.0	4.1					9.1		Ficus species	Ficus sp.	20/12	70/50	55% fair	moderate				х						Located at P1 parking level.	
144	х			5.0	4.6	4.4				14.0		Ficus species	Ficus sp.	20/12	70/50	55% fair	moderate				х						Located at P1 parking level.	
145	x			24.7						24.7		Monterey pine	Pinus radiata	35/25	60/60	60% fair	moderate											
146	x			8.1						8.1		evergreen pear	Pyrus kawakamii	20/15	60/50	57% fair	moderate											
147	x			7.2						7.2		evergreen pear	Pyrus kawakamii	15/12	40/40	40% poor	poor	w										
148	x			42.2						42.2		coast redwood	Sequoia sempervirens	60/25	80/80	80% good	good									×		
149	х			28.0						28.0		coast redwood	Sequoia sempervirens	55/15	35/45	40% poor	poor								х	×		
150	х			4.0	3.1					7.1		flowering cherry cultivar	Prunus serrulata Cult.	12/8	30/30	30% poor	? Out of leaf					BRC					Needs root crown excavation. Condition not verified (tree out of leaf during survey).	
151	x			27.7						27.7		coast redwood	Sequoia sempervirens	60/20	80/60	66% fair	good						0 to 3		х	×		
152	х			31.2						31.2		coast redwood	Seguoia sempervirens	55/16	60/60	60% fair	moderate									x		
153	x			29.5						29.5		coast redwood	Seguoia sempervirens	55/15	60/60	60% fair	moderate									x		
154	x			18.0						18.0		coast redwood	Sequoia sempervirens	50/15	70/70	70% good	moderate									×		

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	Protected Tree" per City of City and City and Cyling area (10.0" single stem, 20" multi, various specified naive and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Rafings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spiltout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
155	х			20.0						20.0		coast redwood	Sequoia sempervirens	50/15	70/70	70% good	moderate									х		
156	х			27.4						27.4		coast redwood	Sequoia sempervirens	60/18	75/75	75% good	good									x		
157	x			29.0						29.0		coast redwood	Sequaia sempervirens	60/18	70/70	70% good	moderate									x		
158	x			27.2						27.2		coast redwood	Sequoia sempervirens	60/15	50/40	40% poor	poor									×	Root system severed during ADA ramp installation.	
159	х			34.9						34.9		coast redwood	Sequoia sempervirens	70/25	60/40	48% poor	poor to mod									×	Root system severed during ADA ramp installation.	
160	х			16.2						16.2		fern pine	Podocarpus gracilior	55/12	70/20	35% poor	moderate				х			3				
161	x			14.6						14.6		fem pine	Podocarpus gracilior	50/6	40/20	27% very poor	poor				х			17				
162	х			11.1						11.1		tree species out of leaf	Genus species	45/16	50/25	32% poor	poor	s	s					At various elevations				
163	х			21.5						21.5		Shamel ash	Fraxinus uhdei	45/30	30/30	30% poor	poor	E						9	х			
164	x			18.8						18.8		Shamel ash	Fraxinus uhdei	50/30	35/35	35% poor	poor								х			
165	х			21.4						21.4		Shamel ash	Fraxinus uhdei	50/30	30/30	30% poor	poor							6	х			
166	x	x		16.9						16.9		Shamel ash	Fraxinus uhdei	35/25	25/25	25% very poor									х			
167	x			21.6						21.6		Shamel ash	Fraxinus uhdei	40/25	30/30	30% poor	poor					GR			х			
168	х			12.1						12.1		Shamel ash	Fraxinus uhdei	35/20	50/40	45% poor	poor to mod					GR			x			

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupy confliction of Cuper Intro Ordinance (10.0" single stem, 20" multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod. Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spilitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
169	x	x		20.1						20.1		Shamel ash	Fraxinus uhdei	40/25	25/25	25% very poor	very poor								х			
170	x			25.9						25.9		Shamel ash	Fraxinus uhdei	55/30	55/40	45% poor	poor					severe GR			x			
171	x			40.2						40.2		coast redwood	Sequoia sempervirens	60/25	80/80	80% good	moderate								x	х		
172	х			21.2						21.2		Shamel ash	Fraxinus uhdei	45/30	55/45	49% poor	poor							8				
173	х			27.2						27.2		coast redwood	Sequoia sempervirens	65/18	45/45	45% poor	poor									х		
174	x			29.5						29.5		Shamel ash	Fraxinus uhdei	55/40	30/30	30% poor	poor						0 to 7			х		
175	x			26.5						26.5		Shamel ash	Fraxinus uhdei	55/40	50/60	55% fair	moderate									х		
176	х	x		22.5						22.5		Shamel ash	Fraxinus uhdei	55/40	25/30	27% very poor	very poor									х		
177	x			37.5						37.5		coast redwood	Sequala sempervirens	65/25	55/60	58% fair	poor to mod								х	х		
178	x			5.7	3.8					9.5		strawberry tree	Arbutus unedo	15/15	70/50	80% fair	moderate	w	w		x							
179	x			8.1						8.1		strawberry tree	Arbutus unedo	20/12	80/60	70% good	good	w	w									
180	x	x		21.2						21.2		Shamel ash	Fraxinus uhdei	55/25	15/15	15% very poor	very poor							11	х			
181	x	x		11.6						11.6		coast redwood	Sequaia sempervirens	55/6	10/10	10% very poor	very poor								х	х		
182	x	x		21.2						21.2		coast redwood	Sequoia sempervirens	65/12	5/5	5% very poor	very poor									х		

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183	x	x		13.8						13.8		Shamel ash	Fraxinus uhdei	45/16	20/20	20% very poor	very poor					GR				x		
184	х	x		11.9						11.9		Shamel ash	Fraxinus uhdei	45/12	5/5	5% very poor	very poor									х		
185		x		13.3						13.3		Shamel ash	Fraxinus uhdei	50/18	20/20	20% very poor	very poor									×		
186	x	x		9.7						9.7		Shamel ash	Fraxinus uhdei	30/12	8/8	8% very poor	very poor									x		
187	x			34.7						34.7		coast redwood	Sequala sempervirens	55/25	60/60	60% fair	moderate									х		
188	x	x		12.2						12.2		dollar gum seedling	Eucalyptus polyanthemos (seedling)	50/20	20/20	20% very poor	very poor	N	N							x		
189	x			18.1						18.1		coast redwood	Sequoia sempervirens	60/20	40/40	40% poor	poor									х		
190	x			26.9						26.9		coast redwood	Sequoia sempervirens	70/25	40/40	40% poor	poor									х		
191	x			17.5						17.5		dollar gum seedling	Eucalyptus polyanthemos (seedling)	60/35	60/50	58% fair	moderate		s									
192	x	x		22.3						22.3		coast redwood	Sequaia sempervirens	70/12	10/10	10% very poor	very poor											
193	x			21.0						21.0		coast redwood	Seguaia sempervirens	70/16	50/50	50% fair	moderate											
194	x			20.4						20.4		dollar gum seedling	Eucalyptus polyanthemos (seedling)	60/20	40/40	40% poor	poor								х	х		
195	x			27.6						27.6		coast redwood	Sequala sempervirens	70/20	30/30	30% poor	poor								x	x		
196	x			19.5						19.5		coast redwood	Sequoia sempervirens	55/20	55/55	55% fair	moderate								х	x		

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197	x			30.1						30.1		coast redwood	Sequoia sempervirens	75/25	70/70	70% good	moderate								х	х		
198	x			5.0						5.0		evergreen pear	Pyrus kawakamii	15/12	40/40	40% poor	poor										Stunted.	
199	x			6.0						6.0		evergreen pear	Pyrus kawakamii	20/13	40/40	40% poor	poor					GR			х		Infected with bacterial fireblight.	
200	x	x		10.1								evergreen pear	Pyrus kawakamii	22/20	30/20	25% very poor	moderate					GR			х		Infected with bacterial fireblight.	
201	x			16.5						16.5		evergreen pear	Pyrus kawakamii	30/30	45/55	50% fair	moderate	N	E								Infected with bacterial fireblight.	
202	x			6.0						6.0		evergreen pear	Pyrus kawakamii	15/12	50/40	45% poor	poor	N										
203	x	x		18.6						18.6		tulip tree (ID not verified - tree out of leaf during survey)	Liriodendron tulipillera	60/20	0/0	0% dead						GR					High risk of failure. Dead tree.	
204	x	x		11.2						11.2		tulip tree (ID not verified - tree out of leaf during survey)	Liriodendron tulipillera	45/15	? Tree out of leaf. May be dead.	?			Ē			GR				Hig	h risk of failure. Tree may be dead (verify after spring leafout).	
205	x			36.0						36.0		coast redwood	Seguoia sempervirens	80/30	75/75	75% good	good										Possible steep hillstope stability issues.	
206	x			24.1						24.1		coast redwood	Seguoia sempervirens	75/20	75/65	70% good	good										Possible steep hillstope stability issues.	
207	x			29.9						29.9		coast redwood	Seguoia sempervirens	80/25	75/40	50% fair	good							25		Po	ssible sleep hillslope stability issues. Needs arborist abling between mainstems, or remove one of two mainstems, if retain tree.	
208	x			32.2						32.2		coast redwood	Seguoia sempervirens	80/25	75/40	50% fair	good							30		Po	asible steep hillslope stability issues. Needs arborist tabling between mainstems, or remove one of two mainstems, if retain tree.	
209	x	x		22.4						22.4		tulip tree (ID not verified - tree out of leaf during survey)	Liriodendron tulipilera	75/20	0/0	0% dead											High risk of failure. Dead tree.	
210	x			49.0						49.0		coast redwood	Seguoia sempervirens	85/25	75/60	65% fair	moderate							65		Por	sible stability issue on the hill. Roots may have been severed.	

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211	x			14.9						14.9		coast redwood	Seguoia sempervirens	50/15	65/65	65% fair	moderate								х	х		
212	х			22.0						22.0		coast redwood	Seguoia sempervirens	65/15	75/75	75% good	moderate								х	×		
213	x	x		16.0						16.0		tulip tree (ID not verified - tree out of leaf during survey)	Liriodendron tulipilera	35/30	0/0	0% dead (Confirm in spring)		w									Tree appears dead, but may simply be above ground dormant until spring leafout.	
214	х			31.3						31.3		coast redwood	Seguoia sempervirens	75/25	75/65	70% good	moderate								х			
215	x			20.3						20.3		fern pine	Podocarpus gracilior	50/20	80/60	70% good	good	w										
216	х			15.4						15.4		fern pine	Podocarpus gracilior	50/20	75/65	70% good	good	w										
217	х			13.6						13.6		fern pine	Podocarpus gracilior	50/20	75/65	70% good	good	w										
218	х	×		17.4						17.4		tulip tree (ID not verified - tree out of leaf during survey)	Liriodendron tulipilera	55/20	0/0	0% dead? (Verify once tree has leafed out in spring)		w									Verify condition once tree has leafed out (or not) in spring.	
219				20.8						20.8		Shamel ash	Fraxinus uhdei	50/25	40/50	43% poor	poor to mod	w							х			
220				26.8						26.8		Shamel ash	Fraxinus uhdei	55/35	60/55	59% fair	moderate											
221				19.3						19.3		Shamel ash	Fraxinus uhdei	50/25	50/50	50% fair	moderate											
222	x			19.5						19.5		Shamel ash	Fraxinus uhdei	55/35	60/55	58% fair	moderate		E									
223	x			30.4						30.4		Shamel ash	Fraxinus uhdei	55/40	70/45	55% fair	good	E	E			GR		12	x			
224	x			18.4						18.4		Shamel ash	Fraxinus uhdei	50/15	40/50	40% poor	poor to mod	w										

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225				25.4						25.4		Shamel ash	Fraxinus uhdei	55/35	50/40	48% poor	moderate	E									Roofs severed on west side.	
226				15.5						15.5		Shamel ash	Fraxinus uhdei	45/25	50/30	37% poor	moderate	E	E				0 to 1				Roots severed on west side.	
227		х		18.5						18.5		Shamel ash	Fraxinus uhdei	45/25	30/20	25% very poor	poor	E					0 to 5	14			Roots severed on west side.	
228				11.5						11.5		Shamel ash	Fraxinus uhdei	30/25	40/30	35% poor	moderate	E									Roots severed on west side.	
229	x			9.6						9.6		coast redwood	Sequoia sempervirens	25/12	90/90	90% excellent	good											
230	х			8.9						8.9		coast redwood	Sequoia sempervirens	30/14	90/90	90% excellent	good											
231	х			14.4						14.4		Shamel ash	Fraxinus uhdei	45/20	35/45	39% poor	poor											
232	x			19.3						19.3		Shamel ash	Fraxinus uhdei	55/30	40/45	42% poor	poor to mod	E										
233	x			19.6						19.6		Shamel ash	Fraxinus uhdei	55/30	50/40	47% poor	moderate	E					0 to 1					
234	x			15.1						15.1		Shamel ash	Fraxinus uhdei	50/25	35/35	35% poor	poor	E										
235	х			17.8						17.8		Shamel ash	Fraxinus uhdei	55/25	55/40	50% fair	moderate											
236	x			17.4						17.4		Shamel ash	Fraxinus uhdei	55/25	56/55	55% fair	moderate											
237	х			6.5						6.5		Shamel ash	Fraxinus uhdei	30/15	75/85	70% good	mod to good											
238	x			9.2						9.2		Shamel ash	Fraxinus uhdei	35/18	75/60	72% good	mod to good											

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupy confliction Ordinarco (10.0" single stem, 20" multi, various specified matrix and non-native specified).	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Spiltout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
239				6.8						6.8		Shamel ash	Fraxinus uhdei	30/18	70/45	54% fair	mod to good					serious GR						
240				8.1						8.1		Shamel ash	Fraxinus uhdei	30/18	70/60	70% good	mod to good											
241				6.4						6.4		coast redwood	Sequoia sempervirens	30/10	85/85	85% good	good											
242	х			5.4						5.4		coast redwood	Sequoia sempervirens	30/10	85/85	85% good	good											
243	x			5.7						5.7		coast redwood	Sequoia sempervirens	30/10	85/85	85% good	good											
244	х			4.6						4.6		coast redwood	Sequoia sempervirens	25/10	75/75	75% good	good											
245				6.7						6.7		flowering pear (out of leaf)	Pyrus calleryana Cult.	30/14	85/65	75% good	good	N										
246				5.8						5.8		flowering pear (out of leaf)	Pyrus calleryana Cult.	25/13	85/80	68% fair	good							see notes			Two codominant mainstems, Remove one of two.	
247				4.9						4.9		flowering pear (out of leaf)	Pyrus calleryana Cult.	24/10	85/50	55% fair	moderate	N									Root crown anomaly.	
248				7.8						7.8		flowering pear (out of leaf)	Pyrus calleryana Cult.	30/18	85/55	62% fair	good	N						Various elevations				
249				6.5						6.5		flowering pear (out of leaf)	Pyrus calleryana Cult.	30/12	85/65	75% good	good	N										
250				6.3						6.3		flowering pear (out of leaf)	Pyrus calleryana Cult.	30/12	85/55	60% fair	good	N						12				
251				6.1						6.1		flowering pear (out of leaf)	Pyrus calleryana Cult.	20/10	85/60	68% fair	good											
252	х			3.6						3.6		flowering pear (out of leaf)	Pyrus calleryana Cult.	18/8	85/75	80% good	good											

Tree Tag # To be Removed Per	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G.	(1+2+3+4+5)	"Protected Tree" per City of Cupartino Ordinanco (10.0" single stem, 20" multi, various specified nafve and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
253	×			7.3					7:	.3		flowering pear (out of leaf)	Pyrus calleryana Cult.	30/15	85/65	73% good	good											
254	×			7.5					7.	.5		flowering pear (out of leaf)	Pyrus calleryana Cult.	30/18	85/55	63% fair	good							7				
255	×			9.0					9.	.0		flowering pear (out of leaf)	Pyrus calleryana Cult.	30/20	85/45	55% fair	good				х			7				
256	×			7.5					7.	.6		flowering pear (out of leaf)	Pyrus calleryana Cult.	30/15	85/50	58% fair	good				х			7				
257	×			7.4					7.	4		flowering pear (out of leaf)	Pyrus calleryana Cult.	30/15	85/55	65% fair	good				х			10				
258	×			6.7					6.	.7		flowering pear (out of leaf)	Pyrus calleryana Cult.	30/15	85/60	67% fair	good			x	x							
259	×			4.9					42	.9		flowering pear (out of leaf)	Pyrus calleryana Cult.	25/12	85/65	69% fair	good			х								
260			x	35.9					35	i.9	х	California sycamore	Platanus racemosa	65/45	65/50	60% fair	moderate	w	w									
261				22.8	21.9				44	1.7	х	California sycamore	Platanus racemosa	65/45	75/45	57% fair	moderate		N&S			GR	See notes at right	At zero ft.			Bark sloughing at root crown, possibly due to irrigation water spray.	
262				15.4					15	i.4	x	California sycamore	Platanus racemosa	45/30	70/70	70% good	moderate	NE	NE				18.					
263	×			13.5					13	1.5		Shamel ash	Fraxinus uhdei	35/15	50/45	47% poor	moderate	s	s			GR						
264	x			14.9					14	1.9		Shamel ash	Fraxinus uhdei	55/20	56/55	55% fair	poor to mod	s	s									
265	х			19.0					19	1.0		Shamel ash	Fraxinus uhdei	50/20	55/40	45% poor	moderate					GR		25				
266	x			20.8					20	1.8		Shamel ash	Fraxinus uhdei	55/30	50/30	35% poor	poor to mod				х						Roots have been severed.	

Tree Tag # To be Removed Per	Author Recommends Removal Due to Very Poor Condison or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.) Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (142-3-44-5)	"Protected Tree" per City of Cupartino Ordinance (10.0 single stem, 20" must, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spiltout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Grown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
267 X			23.7					23.7		Shamel ash	Frexinus uhdei	50/35	65/30	30% poor	good	sw	sw			GR					Roots have been severed.	
268 X			26.5					26.5		Shamel ash	Frexinus uhdei	55/25	75/55	65% fair	good	s							х			
269 X			27.1					27.1		Shamel ash	Fraxinus uhdei	55/25	75/45	55% fair	good					serious GR		25	х			
270 X			28.7					28.7		Shamel ash	Fraxinus uhdei	60/35	75/55	63% fair	good							10			Root system asymmetrical	
271 X			35.2					35.2		coast redwood	Sequoia sempervirens	60/20	70/70	70% good	moderate									х		
272 X			19.3					19.3		coast redwood	Sequoia sempervirens	70/12	68/70	69% fair	moderate									х		
273 X			23.3					23.3		coast redwood	Sequoia sempervirens	60/12	70/70	70% good	moderate									х		
274 X			23.9					23.9		coast redwood	Sequoia sempervirens	60/12	70/70	70% good	moderate									x		
275 X			17.0					17.0		Shamel ash	Frexinus uhdei	55/16	65/65	65% fair	moderate									х		
276 X			15.4					15.4		Shamel ash	Fraxinus uhdei	50/12	40/30	34% poor	poor	E						at root crown	х			
277			19.3					19.3		Shamel ash	Fraxinus uhdei	50/25	50/40	40% poor	moderate	E	E			serious GR			х			
278			21.0					21.0		Shamel ash	Fraxinus uhdei	60/25	60/50	55% fair	moderate	w	w			GR						
279 X			26.7					26.7		coast redwood	Sequaia sempenvirens	50/20	80/80	80% good	good											
280			16.4					16.4		Shamel ash	Fraxinus uhdei	40/20	30/45	37% poor	poor					serious GR			х			

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (142+3+4+5)	*Protected Tree" per City of Cupuro Ordinario Ordinario Ordinario Ordinario Minulti, various specified native and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems With Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
281		x		21.2						21.2		Shamel ash	Fraxinus uhdei	50/35	30/20	20% very poor	very poor			6					х		Roots severed.	
282				15.0						15.0		Shamel ash	Fraxinus uhdei	35/18	30/30	30% poor	poor	E				GR			x		Roots severed.	
283				18.1						18.1		Shamel ash	Fraxinus uhdei	50/20	40/30	35% poor	poor to mod		E			GR			х		Roots severed.	
284				14.4						14.4		Shamel ash	Fraxinus uhdei	40/25	40/40	40% poor	poor					GR			х			
285				18.4						18.4		Shamel ash	Fraxinus uhdei	50/25	50/40	44% poor	poor to mod	E	E			GR			х		Roots severed.	
286				17.0						17.0		Shamel ash	Fraxinus uhdei	40/45	60/60	60% fair	moderate	N										
287				24.3						24.3		coast redwood	Sequala sempervirens	60/15	70/70	70% good	moderate									x		
288				15.7						15.7		coast redwood	Sequoia sempervirens	60/15	70/70	70% good	moderate									x		
289				26.9						26.9		coast redwood	Seguaia sempervirens	60/15	50/65	63% fair	moderate									×	Apical meristem showing physical symptoms of soil moisture deficit.	
290				14.8						14.8		Shamel ash	Fraxinus uhdei	40/20	45/35	40% poor	poor to mod	w				serious GR			х			
291				24.2						24.2		Shamel ash	Fraxinus uhdei	50/40	55/45	48% poor	moderate	w				serious GR		6				
292				16.3						16.3		coast redwood	Sequaia sempervirens	35/10	70/70	70% good	moderate											
293	x			11.0						11.0		giant sequoia	Metasequoia glyptostroboides	20/10	30/30	30% poor	poor	w	w								Has a <i>Botryospheria</i> Infection.	
294	х			18.7						18.7		fern pine	Podocarpus gracilior	30/18	50/40	45% poor	moderate	w						5	х			

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295	x			8.6						8.6		southern magnolia	Magnolia grandiflora	18/15	25/25	25% very poor	very poor	w		9					х	x		
296	х			17.3						17.3		Shamel ash	Fraxinus uhdei	30/15	35/35	35% poor	poor	w	w									
297	x	×		12.1						12.1		Shamel ash	Fraxinus uhdei	25/15	35/20	20% very poor	poor						6					
298	х	x		18.8						18.8		coast redwood	Sequoia sempervirens	60/12	15/15	15% very poor	very poor									x		
299	х			16.0						16.0		Shamel ash	Fraxinus uhdei	45/15	30/45	40% poor	poor		E									
300	x	x		23.3						23.3		coast redwood	Sequala sempervirens	60/15	20/20	20% very poor	very poor									x		
301	x	x		15.2						15.2		Shamel ash	Fraxinus uhdei	25/18	20/15	19% very poor	very poor									х		
302	х			26.9	15.0					41.9		coast redwood	Sequoia sempervirens	70/25	60/60	80% Sair	moderate									x		
303	х			17.2						17.2		Shamel ash	Fraxinus uhdei	35/25	55/60	55% fair	moderate	NW										
304	x	x		19.0						19.0		coast redwood	Sequala sempervirens	45/10	5/5	5% very poor	very poor									x		
305	x	x		20.1						20.1		Shamel ash	Fraxinus uhdei	20/15	10/10	10% very poor					х			6				
306	x			17.5						17.5		Shamel ash	Fraxinus uhdei	45/25	50/40	40% poor	poor to mod	w						8				
307	x	x		17.7						17.7		Shamel ash	Fraxinus uhdei	40/20	30/25	29% very poor	poor				x		0 to 6					
308	x			21.1						21.1		coast redwood	Sequoia sempervirens	50/15	75/75	75% good	good											

Tree Tag # To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupartino Ordinance (110.° single stem, 20" multi, various specified natve and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems With Severe Bark (Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
309 X			16.2						16.2		coast redwood	Sequoia sempervirens	50/15	75/70	73% good	good											
310 X			20.6						20.6		Shamel ash	Fraxinus uhdei	50/35	50/50	50% fair	moderate	w										
311 X			27.0						27.0		Shamel ash	Fraxinus uhdei	55/45	65/55	60% fair	good	w						8				
312 X			16.1						16.1		Shamel ash	Fraxinus uhdei	35/20	50/25	32% poor	moderate	w				GR	at root crown due to sprinkler irrigation most likely					
313 X			20.9						20.9		Shamel ash	Fraxinus uhdei	45/35	50/35	45% poor	poor	w				GR			х			
314 X			30.6						30.6		Shamel ash	Fraxinus uhdei	55/45	70/40	50% fair	Good				х			6			Root system on steep slope	
315 X			21.8						21.8		coast redwood	Sequoia sempervirens	60/12	55/60	57% fair	moderate	E								х		
316 X			18.5						18.5		Shamel ash	Fraxinus uhdei	55/20	50/45	48% poor	moderate	N									Root system on steep slope	
317			10.2						10.2		Shamel ash	Fraxinus uhdei	45/12	40/40	40% poor	poor											
318			9.9						9.9		Shamel ash	Fraxinus uhdei	50/12	45/45	45% poor	poor											
319			18.6						18.6		Shamel ash	Fraxinus uhdei	50/30	50/50	50% fair	moderate	N										
320 X			13.3						13.3		Shamel ash	Fraxinus uhdei	35/12	50/40	45% poor	moderate							7				
321 X			16.2						16.2		Shamel ash	Fraxinus uhdei	50/20	55/60	58% fair	mod to good									х		
322 X			11.9						11.9		Shamel ash	Fraxinus uhdei	45/15	40/40	40% poor	poor									х		

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupus of Cupus no Ordinario Ordinarce (10.0** single stem, 20** multi, various specified mative and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
323	x			9.4						9.4		Shamel ash	Fraxinus uhdei	45/12	30/30	30% poor	poor									x		
324	x			12.8						12.8		Shamel ash	Fraxinus uhdei	40/12	30/40	35% poor	poor									х		
325	x	x		7.4						7.4		Shamel ash	Fraxinus uhdei	28/12	20/20	20% very poor	very poor									х		
326	x			13.0						13.0		Shamel ash	Fraxinus uhdei	45/20	45/55	48% poor	poor									х		
327	x			11.9						11.9		Shamel ash	Fraxinus uhdei	45/12	30/30	30% poor	poor		E			GR				х		
328	x	x		5.7						5.7		southern magnolia	Magnolia grandiflora	12/6	0/0	0% dead										х		
329	x			14.2						14.2		Shamel ash	Fraxinus uhdei	45/20	35/40	38% poor	poor		s							х		
330	x			15.7						15.7		Shamel ash	Fraxinus uhdei	40/20	30/40	35% poor	poor		s							х		
331	х			10.1						10.1		Shamel ash	Fraxinus uhdei	30/20	40/35	37% poor	poor	s	s							х		
332	х	x		18.9						18.9		coast redwood	Sequoia sempervirens	55/12	5/5	5% very poor	very poor									x		
333	x	x		18.4						18.4		coast redwood	Sequaia sempervirens	55/8	5/5	5% very poor	very poor									х		
334	х			18.5						18.5		Shamel ash	Fraxinus uhdei	45/25	45/55	50% fair	moderate									x		
335	x	x		16.0						16.0		coast redwood	Sequala sempervirens	50/12	5/5	5% very poor	very poor									х		
336	x	x		9.6						9.6		Shamel ash	Fraxinus uhdei	25/10	10/10	10% very poor	moderate						mainstem			х		

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Dus to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupacity Services of Cupacity Configuration of Cupacity and Institute of Cupacity of	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems With Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deffcit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
337	x	x		8.8						8.8		Shamel ash	Fraxinus uhdei	25/7	5/5	5% very poor	very poor						mainstem			x		
338	x			8.7						8.7		Shamel ash	Fraxinus uhdei	30/8	30/10	15% very poor	poor						mainstem			х		
339	x			12.8						12.8		Shamel ash	Fraxinus uhdei	40/20	40/40	40% poor	poor	w								х		
340	x			14.3						14.3		Shamel ash	Fraxinus uhdei	50/20	35/40	38% poor	poor									х		
341	x	x		10.9						10.9		Shamel ash	Fraxinus uhdei	35/8	10/10	10% very poor	very poor						mainstem			х		
342	x	x		12.0						12.0		Shamel ash	Fraxinus uhdei	45/18	10/10	10% very poor	very poor						mainstem			х		
343	x			13.7						13.7		Shamel ash	Fraxinus uhdei	45/18	35/35	35% poor	poor									x	Verify condition once tree leafs out in spring.	
344	x	x		7.3						7.3		Shamel ash	Fraxinus uhdei	20/12	20/20	20% very poor	very poor									х		
345	x			14.4						14.4		Shamel ash	Fraxinus uhdei	50/20	40/30	35% poor	poor							8		x		
346	x	x		10.7						10.7		Shamel ash	Fraxinus uhdei	25/12	10/10	10% very poor	very poor	E								х		
347	x	x		11.3						11.3		Shamel ash	Fraxinus uhdei	25/12	25/10	17% very poor	poor									х		
348	x	х		12.9						12.9		Shamel ash	Fraxinus uhdei	45/18	25/20	20% very poor	very poor									х		
349	x	x		12.2						12.2		Shamel ash	Fraxinus uhdei	30/20	25/25	25% very poor	very poor									х		
350	x	x		14.2						14.2		Shamel ash	Fraxinus uhdei	50/15	20/20	20% very poor	very poor									х		

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupuro Ordinario Ordinario Ordinario Ordinario Minulti, various specified native and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Cancpy Spread	Health & Structural Ratings (0-100% each)	Overall Cendition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
351	x			14.6						14.6		Shamel ash	Fraxinus uhdei	30/20	40/25	28% very poor	poor to mod							6		x		
352	x			11.7						11.7		Shamel ash	Fraxinus uhdei	25/20	10/10	10% very poor	very poor	w	w							х		
363	х			17.7						17.7		Shamel ash	Fraxinus uhdei	40/25	35/35	35% poor	poor	E								х		
354	х			13.4						13.4		Shamel ash	Fraxinus uhdei	35/20	45/35	40% poor	poor									х		
355	x			12.5						12.5		Shamel ash	Fraxinus uhdei	35/15	20/15	18% very poor	very poor									х		
356	х			18.0						18.0		Shamel ash	Fraxinus uhdei	45/30	20/10	15% very poor	very poor	w	s							x		
357	x			20.8						20.8		Shamel ash	Fraxinus uhdei	45/45	40/50	46% poor	М									х		
358	x			10.9						10.9		Shamel ash	Fraxinus uhdei	35/15	0/0	0% dead	E	E								х		
359	x			18.3						18.3		Pine species (not verified)	Pinus sp.	30/20	80/55	65% fair	good	N					0 to 1 foot		x			
360	x			24.4						24.4		Italian stone pine	Pinus pinea	30/35	90/60	77% good	excellent											
361	x			26.6						26.6		Italian stone pine	Pinus pinea	30/30	60/60	60% fair	moderate								x	х	Measured at 2 feet.	
362	х			28.6						28.6		Italian stone pine	Pinus pinea	25/35	70/70	70% good	good								x		Measured at 2 feet.	
363	x			7.2						7.2		red oak	Quercus rubra (not verified)	20/15	80/50	60% fair	good										Tree out of leaf. Needs training pruning.	
384	х			5.5						5.5		oak species	Quercus sp.	12/8	60/40	40% poor	moderate				×			5			Tree out of leaf. Needs training pruning.	

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupy confliction of Cupperflox Ordinance (10.0" single stem, 20" multi, various specified mathic and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
365	x			7.3						7.3		southern magnolia	Magnolia grandiflora	18/13	40/40	40% poor	poor to mod									x		
366	x			17.0						17.0		Italian stone pine	Pinus pinea	18/25	80/50	60% fair	good	N							х		Measured at 3.5 feet	
367	x			24.3						24.3		Italian stone pine	Pinus pinea	25/30	80/35	45% poor	good	N						5	х			
368	x			20.2						20.2		Italian stone pine	Pinus pinea	25/30	80/35	45% poor	good	N				GR		7	x		Measured at 3.5 feet.	
369	x			23.8						23.8		Italian stone pine	Pinus pinea	25/30	50/50	50% fair	poor to mod			10							Measured at 2.0 feet.	
370	x			5.7						5.7		tree species out of leaf	(Genus, species)	25/15	75/55	65% fair	moderate										Verify species in spring after full leafout.	
371	x			26.3						26.3		Aleppo pine	Pinus halepensis	30/35	80/60	70% good	good								x		Codominant mainstems at 5 feet.	
372	x			21.6	18.7					40.3		Italian stone pine	Pinus pinea	30/35	80/70	75% good	good	N							х			
373	x	x		7.4						7.4		southern magnolia	Magnolia grandillora	20/15	25/25	25% very poor	very poor									х		
374	x	х		7.2						7.2		tulip tree	Liriodendron tulipilera	12/8	20/10	15% very poor	very poor	N			x				х	x		
375	x	x		5.6						5.6		tulip tree	Liriodendron tulipilera	12/8	20/10	15% very poor	very poor				х				х	х		
376	x	x		5.6						5.6		southern magnolia	Magnolia grandiflora	13/10	25/25	25% very poor	very poor									x		
377	x			7.6						7.6		southern magnolis	Magnolia grandiflora	19/12	35/35	35% poor	poor									x		
378	х	x		7.0						7.0		southern magnolia	Magnolia grandiflora	20/14	20/20	20% very poor	very poor									x		

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (142+3+44-5)	*Protected Tree" per City of Cuper of Cuper no Ordinarco (10.0** single stem, 20.* multi, various specified mative and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-10% each)	Over all Cendition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
379	x	x		6.5						6.5		southern magnolis	Magnolia grandiflora	14/12	25/25	25% very poor	very poor									x		
380	x	x		7.4						7.4		southern magnolia	Magnolia grandiflora	20/10	20/20	20% very poor	very poor	w								х		
381	x			23.0	14.7					37.7		Italian stone pine	Pinus pinea	25/30	75/55	64% Sair	moderate							5	x			
382	x			20.8						20.8		Italian stone pine	Pinus pinea	25/25	70/80	65% fair	moderate					GR			х			
383	х			19.5						19.5		Italian stone pine	Pinus pinea	25/30	80/85	74% good	good		E			GR			х			
384	x			22.0						22.0		Italian stone pine	Pinus pinea	25/30	70/60	65% fair	moderate	s	s						x		Measured at 2.0 feet.	
385	x			33.2						33.2		Italian stone pine	Pinus pinea	25/35	60/30	38% poor	moderate	s						3	х			
386	х	x		4.5						4.5		southern magnolia	Magnolia grandillora	13/8	15/15	15% very poor	very poor							1	х	х		
387	x	x		7.8						7.8		southern magnolia	Magnolia grandiflora	18/18	20/20	20% very poor	very poor									x		
388	x	x		7.5						7.5		southern magnolia	Magnolia grandiflora	18/15	20/20	20% very poor	very poor									х		
389	x			31.9	22.3					54.2		Italian stone pine	Pinus pinea	30/45	50/40	47% poor	moderate							2	x			
390	x			13.2	13.0					26.2		Italian stone pine	Pinus pinea	25/15	80/30	45% poor	good	N	N					3	х			
391	х			12.4	12.0					24.4		Italian stone pine	Pinus pinea	25/30	80/60	67% fair	good	E	E					3	x			
392	x			14.6						14.6		Italian stone pine	Pinus pinea	25/18	80/65	69% fair	good	E							х			

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393	х			14.3						14.3		Italian stone pine	Pinus pinea	20/20	70/70	70% good	good		E						x			
394	x			10.3						10.3		tree species out of leaf	(Genus, species)	35/20	80/65	75% good	good											
395	x			9.8						9.8		tree species out of leaf	(Genus, species)	35/20	80/85	75% good	good	w										
396	x			18.1						18.1		coast redwood	Sequaia sempervirens	85/12	70/70	70% good	moderate										Steep stope	
397	x			20.5						20.5		coast redwood	Seguaia sempervirens	85/12	75/75	75% good	moderate										Steep slope	
398	x			13.4						13.4		Shamel ash	Fraxinus uhdei	40/25	80/70	74% good	good										Steep slope	
399	x			11.3						11.3		Shamel ash	Fraxinus uhdei	35/15	30/30	30% poor	poor										Steep slope	
400	x			21.3						21.3		Shamel ash	Fraxinus uhdei	40/25	60/50	55% fair	moderate							6			Steep slope	
401	x			20.2						20.2		Shamel ash	Fraxinus uhdei	45/20	50/35	40% poor	moderate	w					8	10			On steep slope.	
402	x			18.4						18.4		Shamel ash	Fraxinus uhdei	45/25	60/45	55% fair	good							6			On steep slope.	
403	x			15.0						15.0		Shamel ash	Fraxinus uhdei	40/18	40/40	40% poor	poor	w					6	8			On steep slope.	
404	х			25.7						25.7		Shamel ash	Fraxinus uhdei	55/35	40/40	40% poor	poor	sw						various elevations			On steep slope.	
405	х			29.5						29.5		Shamel ash	Fraxinus uhdei	65/35	40/35	40% poor	poor	s	s					7			On steep slope.	
406	x			17.4						17.4		coast redwood	Sequoia sempervirens	50/8	70/70	70% good	moderate										On steep slope.	

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407	x	x		4.1						4.1		southern magnolia	Magnolia grandiflora	15/1	5/5	5% very poor	very poor							0 to 10				
408	x	x		5.9	3.8					9.7		southern magnolia	Magnalia grandiflora	18/6	10/10	10% very poor	very poor							various elevations				
409	x			18.3						18.3		coast redwood	Seguoia sempervirens	55/15	65/65	65% fair	moderate								x			
410	x			20.7						20.7		coast redwood	Sequaia sempervirens	55/13	65/65	65% fair	moderate								x			
411	x			22.4						22.4		coast redwood	Seguaia sempervirens	55/13	60/60	60% fair	poor to mod								х			
412	x			32.4						32.4		Shamel ash	Fraxinus uhdei	65/35	65/55	65% fair	good	s										
413	x			15.6						15.6		Shamel ash	Fraxinus uhdei	60/18	50/40	45% poor	poor to mod	N										
414				22.5						22.5	х	California sycamore	Platanus racemosa	55/30	50/45	50% fair	moderate	w	w			GR					Will need endweight reduction pruning at west side of canopy.	
415				18.3						18.3	x	California sycamore	Platanus racemosa	60/30	50/50	50% fair	moderate	N				GR						
416			x	17.8						17.8	x	California sycamore	Platanus racemosa	50/20	50/50	50% fair	moderate	E				GR						
417	x			19.2						19.2		Shamel ash	Fraxinus uhdei	30/25	75/55	70% good	good											
418	x			11.5						11.5		Shamel ash	Fraxinus uhdei	30/15	45/40	40% poor	moderate					GR						
419	x			17.3						17.3		Shamel ash	Fraxinus uhdei	35/40	60/50	55% fair	moderate	w				GR						
420	x			11.1						11.1		Shamel ash	Fraxinus uhdei	35/25	75/70	70% good	good	w										

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421	x			13.7						13.7		Shamel ash	Fraxinus uhdei	35/25	50/50	50% fair	poor to mod											
422	x			14.3						14.3		Shamel ash	Fraxinus uhdei	30/30	75/45	60% fair	good							9				
423	x			29.1						29.1		coast redwood	Seguaia sempervirens	70/20	70/70	70% good	moderate											
424	x			33.6						33.6		coast redwood	Sequala sempervirens	70/18	60/60	60% fair	moderate											
425	x			24.9						24.9		coast redwood	Sequoia sempervirens	65/15	70/70	70% good	moderate											
426				27.8						27.8		coast redwood	Sequoia sempervirens	55/20	75/68	70% good	moderate											
427				17.3						17.3		Shamel ash	Fraxinus uhdei	60/20	40/40	40% poor	poor	E							х			
428	x			29.0						29.0		Shamel ash	Fraxinus uhdei	60/36	50/50	50% fair	poor to mod	w										
429	x			22.0						22.0		Shamel ash	Fraxinus uhdei	55/35	70/55	65% fair	good										Codominant mainstems fork at 13 feet.	
430				27.4						27.4		giant sequoia	Metasequoia glyptostroboides	75/15	65/45	55% fair	poor to mod										Tree was limbed up.	
431				27.9						27.9		Shamel ash	Fraxinus uhdei	65/45	45/30	40% poor	poor to mod	w	E					9				
432				24.0						24.0		Shamel ash	Fraxinus uhdei	55/35	50/60	55% fair	poor to mod	w										
433				16.9						16.9		Shamel ash	Fraxinus uhdei	60/25	75/60	63% fair	good	E	E									
434		?		29.3						29.3		giant sequoia	Metasequoia glyptostroboides	75/12	35/20	25% very poor	poor	E			x						Roots were severed during installation of ADA walkway.	

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435		?		31.1						31.1		Shamel ash	Fraxinus uhdei	65/45	40/20	25% very poor	poor	w				GR					Roots severed during sidewalk replacement	
436	х			23.0	12.0					35.0		coast redwood	Sequoia sempervirens	65/18	75/60	65% fair	good							3			Diameters estimated.	
437				27.7						27.7		Shamel ash	Fraxinus uhdei	60/30	30/30	30% poor	poor	w						9				
438		?		23.5						23.5		Shamel ash	Fraxinus uhdei	65/18	60/30	37% poor	moderate	E									Roots severed during sidewalk replacement	
439				27.0						27.0		coast redwood	Sequoia sempervirens	75/16	70/70	70% good	good				х						Crown raising pruning was performed to limb up this tree.	
440	x			18.7						18.7		Shamel ash	Fraxinus uhdei	60/30	35/35	35% poor	very poor	w	w					1			Condition estimated prior to spring leafout.	
441	х			21.2						21.2		Shamel ash	Fraxinus uhdei	60/45	50/50	50% fair	moderate							1			Roots severed during sidewalk replacement	
442				31.2						31.2		Shamel ash	Fraxinus uhdei	60/45	60/45	53% fair	moderate	w	s								Roots severed during sidewalk replacement . Will need endweight reduction pruning.	
443				41.0						41.0		coast redwood	Sequoia sempenvirens	70/20	75/60	68% fair	good							5			Cable installation recommended.	
444				21.5						21.5		Shamel ash	Fraxinus uhdei	55/30	70/50	60% fair	moderate	w										
445	x			15.4						15.4		Shamel ash	Fraxinus uhdei	60/18	50/50	50% fair	moderate	N			x							
446	х			21.1						21.1		coast redwood	Sequaia sempervirens	70/15	75/75	75% good	good											
447	х			17.5						17.5		Shamel ash	Fraxinus uhdei	60/20	55/50	52% fair	poor to mod	N										
448	x			15.7						15.7		coast redwood	Seguaia sempervirens	70/10	60/60	60% fair	moderate	E									Tree was limbed up.	

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	Protected Tree" per City of Cupy of Cupy no Ordinario Ordinario Ordinario Immiti, various specified native and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-10% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spiltout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Mosture Daricit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
449	x			16.5						16.5		coast redwood	Seguoia sempervirens	70/10	60/60	60% fair	moderate	E									Tree was limbed up.	
450	x			15.5						15.5		coast redwood	Sequoia sempervirens	70/10	60/50	55% fair	moderate	E									Tree was limbed up.	
451				19.6						19.6		Shamel ash	Fraxinus uhdei	50/25	70/55	60% fair	good	w										
452				21.5						21.5		Shamel ash	Fraxinus uhdei	55/30	50/35	40% poor	poor to mod	w						0 to 2				
453	x	x		15.0						15.0		Shamel ash	Fraxinus uhdei	50/10	10/10	10% very poor	very poor											
454				29.4						29.4		Shamel ash	Fraxinus uhdei	65/35	50/40	47% poor	poor to mod							12			Roots damaged.	
455	x			17.7						17.7		Shamel ash	Fraxinus uhdei	45/18	30/35	33% poor	poor	E									Roots damaged.	
456	x			22.3						22.3		Shamel ash	Fraxinus uhdei	60/20	40/35	37% poor	poor	w	w					15				
457	x			28.5						28.5		Shamel ash	Fraxinus uhdei	65/35	50/60	55% fair	moderate	w										
458	x			25.1						25.1		Shamel ash	Fraxinus uhdei	60/35	30/40	35% poor	poor to mod							various elevations			Bark sluffing off. Phioem/bark disorder.	
459				31.9						31.9		Shamel ash	Fraxinus uhdei	75/45	60/60	60% fair	moderate										Roots damaged.	
460				31.8						31.8		Shamel ash	Fraxinus uhdei	85/45	60/55	59% fair	moderate										Roots damaged.	
461				25.5						25.5		Shamel ash	Fraxinus uhdei	55/40	50/50	50% fair	poor to mod							15				
462				15.3						15.3		Shamel ash	Fraxinus uhdei	40/15	50/40	45% poor	moderate							8				

Tree Tag # To be Removed Per	Current Site Plan Author Recommends Removal Due to Very Poor Condition or Elevated Risk Affective	of Failure Project Team Desires to	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"P rotected Twe" per City of Cupy and Definition of Cupy ratho Ordinance (10.0" single stem, 20" multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spiltout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
463			21.0						21.0		Shamel ash	Fraxinus uhdei	55/45	75/60	70% good	good	w									Roots damaged.	
464			34.1						34.1		Shamel ash	Fraxinus uhdei	55/30	65/45	48% poor	moderate	E					0 to 5					
465			22.8						22.8		Shamel ash	Fraxinus uhdei	60/30	55/45	50% fair	moderate	w						16			Roots damaged.	
466			29.3						29.3		Shamel ash	Fraxinus uhdei	65/30	60/45	50% fair	mod to good	E						9				
467			25.6						25.6		Shamel ash	Fraxinus uhdei	65/45	50/30	37% poor	moderate					GR	3 to 10					
468			24.6						24.6		Shamel ash	Fraxinus uhdei	55/30	40/40	40% poor	poor										Roots damaged.	
469			25.2						25.2		Shamel ash	Fraxinus uhdei	50/30	40/30	38% poor	poor	w	s			GR		12			Roots damaged.	
470			27.7						27.7		Shamel ash	Fraxinus uhdei	60/35	45/35	40% poor	poor											
471			14.9						14.9		Shamel ash	Fraxinus uhdei	40/15	45/45	45% poor	poor	w	w									
472			16.4						16.4		Shamel ash	Fraxinus uhdei	50/20	45/45	45% poor	poor	E										
473			31.5						31.5		Shamel ash	Fraxinus uhdei	60/45	75/65	68% fair	good							9 and 10 (not verified)			Roots damäged	
474			25.3						25.3		Shamel ash	Fraxinus uhdei	60/30	75/60	65% fair	good	E				GR						
475			28.7						28.7		Shamel ash	Fraxinus uhdei	60/45	70/65	68% fair	moderate										Roots damaged.	
476	:		15.2						15.2		Shamel ash	Fraxinus uhdei	30/25	35/40	38% poor	poor to mod	E										

Tree Tag #	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (142+3+44-5)	Protected Tree" per City of Cupe of Cupe Tree" per City of Cupe Tree Ordinaries (10.0" single stem, 20" multi, various specified naive and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
477	x	х		13.9						13.9		Shamel ash	Fraxinus uhdei	35/20	20/20	20% very poor	very poor											
478	x			16.9						16.9		coast redwood	Sequoia sempervirens	40/15	50/50	50% fair	poor											
479	x	х		22.1						22.1		coast redwood	Sequoia sempervirens	50/20	0/0	0% dead												
480	х			13.1						13.1		Shamel ash	Fraxinus uhdei	30/18	45/45	45% poor	poor	SE										
481	x			20.0						20.0		Shamel ash	Fraxinus uhdei	35/25	45/45	45% poor	poor	w										
482	x			9.8						9.8		Shamel ash	Fraxinus uhdei	30/10	30/20	25% very poor	poor	w										
483	x			12.7						12.7		Shamel ash	Fraxinus uhdei	30/16	50/40	50% fair	moderate	N				GR						
484	x			15.9						15.9		Shamel ash	Fraxinus uhdei	30/18	60/50	55% fair	moderate											
485	x			13.7						13.7		Shamel ash	Fraxinus uhdei	30/20	55/55	55% fair	moderate	E										
486	x			22.3						22.3		coast redwood	Seguoia sempervirens	50/18	70/70	70% good	moderate											
487	х			21.9						21.9		coast redwood	Sequoia sempervirens	50/18	70/70	70% good	moderate											
488	x			12.4						12.4		Shamel ash	Fraxinus uhdei	30/16	50/35	40% poor	moderate	N					0 to 3					
489	x			8.9						8.9		Shamel ash	Fraxinus uhdei	30/20	55/35	45% poor	moderate											
490	х			14.3						14.3		Shamel ash	Fraxinus uhdei	36/35	55/45	47% poor	poor to mod	w	w									

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupuro Ordinario Ordinario Ordinario (10.0** single stem, 20** multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
491	x	x		9.3						9.3		Shamel ash	Fraxinus uhdei	20/12	40/20	27% very poor	poor	w	w					8				
492	x			9.1						9.1		Shamel ash	Fraxinus uhdei	25/18	50/35	40% poor	poor to mod	E										
493	x			12.4						12.4		Shamel ash	Fraxinus uhdei	30/18	45/30	35% poor	poor to mod	w	w									
494	x			13.8						13.8		Shamel ash	Fraxinus uhdei	30/30	40/40	40% poor	poor											
495		х		13.0						13.0		Shamel ash	Fraxinus uhdei	30/16	26/20	22% very poor	poor	w	w				0 to 8					
496		x		7.9						7.9		Shamel ash	Fraxinus uhdei	25/12	30/20	25% very poor	poor	E										
497		х		10.2						10.2		Shamel ash	Fraxinus uhdei	30/20	25/30	29% very poor	poor	w	w									
498	x			11.8						11.8		evergreen pear	Pyrus kawakamii	20/20	50/40	44% poor	poor	N		5							Fireblight infection.	
499	x	x		4.0						4.0		evergreen pear	Pyrus kawakamii	9/6	0/0	0% dead												
500	x	x		21.4						21.4		coast redwood	Sequoia sempervirens	55/15	0/0	0% dead												
501	x	х		19.0						19.0		coast redwood	Sequoia sempervirens	55/15	15/15	15% very poor	very poor									х	Steep stope.	
502	х	x		24.4						24.4		coast redwood	Sequoia sempervirens	55/12	0/0	0% dead										x		
503	х			6.7						6.7		evergreen pear	Pyrus kawakamii	13/14	40/40	40% poor	poor	s						5				
504	x			9.9	9.0					18.9		oak species	Quercus sp.	35/30	80/50	60% fair	good	s				GR					Steep stope	

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupuro Ordinarce (10.0 *single stem, 20* multi, various specified native and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-10% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems Mis Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
505	х			32.3						32.3		coast redwood	Sequoia sempervirens	50/35	70/70	70% good	moderate									x	Steep slope	
508	x			10.0						10.0		evergreen pear	Pyrus kawakamii	25/15	40/40	40% poor	poor	Ē	E		x						Fireblight infection.	
507	x	x		7.6						7.6		evergreen pear	Pyrus kawakamii	18/15	20/20	20% very poor	very poor	N	N		х						Fireblight infection.	
508	x			10.9						10.9		evergreen pear	Pyrus kawakamii	25/25	40/30	35% poor	poor	N	N		x						Fireblight infection.	
509	x	х		7.2	6.9	5.5				19.6		southern magnolia	Magnalia grandiflara	25/15	15/15	15% very poor	very poor	N								х		
510	x			28.0						28.0		coast redwood	Seguaia sempervirens	60/25	80/80	80% good	good									х		
511	x			14.4						14.4		evergreen pear	Pyrus kawakamii	20/25	40/50	44% poor	poor				x						Roots damaged on grade. Fireblight infection.	
512	x			6.0						6.0		southern magnolia	Magnolia grandiflora	15/8	50/30	37% poor	moderate				x					x		
513				5.6						5.6		southern magnolia	Magnolia grandiflora	18/10	40/40	40% poor	poor	E								x		
514				4.4						4.4		southern magnolia	Magnolia grandiflora	18/6	40/40	40% poor	poor	E								x		
515				10.5						10.5		evergreen pear	Pyrus kawakamii	25/20	30/30	30% poor	poor	E	E		х						Fireblight infection.	
516	x			10.6						10.6		evergreen pear	Pyrus kawakamii	25/20	30/40	35% poor	poor	E	E		х						Fireblight infection.	
517	x			6.5						6.5		southern magnolia	Pyrus kawakamii	13/7	40/30	30% poor	poor to mod	E					4 to 7					
518				23.2						23.2		Shamel ash	Fraxinus uhdei	50/30	55/60	58% fair	poor to mod	w	w							c	but of leaf. Overall condition verify in spring after leafout.	

Tree Tag#	Current Site Plan	Author recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 64" A.G. (1+2+3+4+5)	Protected Tree" per City of Cupe of Cupe Tree" per City of Cupe Tree Ordinaries (10.0" single stem, 20" multi, various specified naive and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems With Severe Bank Irrclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
519				18.5						18.5		Monterey pine	Pinus radiata	55/18	60/50	55% fair	poor to mod		Ē									
520				4.0						4.0		Chinese elm	Ulmus parvifolia	15/12	75/45	57% fair	moderate	N	N		x							
521		x		20.2						20.2		Shamel ash	Fraxinus uhdei	55/18	30/25	28% very poor	poor	w										
522		х		14.3						14.3		Shamel ash	Fraxinus uhdei	35/18	10/10	10% very poor	very poor	w						5				
523		х		14.0						14.0		Monterey pine	Pinus radiata	40/12	25/25	25% very poor	poor	s	s									
524				10.6						10.6		Chinese elm	Ulmus parvifolia	40/30	75/75	75% good	good	E			x							
525				17.6						17.6		Shamel ash	Fraxinus uhdei	40/25	35/35	35% poor	poor	w	w									
526				6.7						6.7		Chinese elm	Ulmus parvifolia	18/12	65/50	55% fair	moderate	E			х							
527				8.2						8.2		Shamel ash	Fraxinus uhdei	20/15	70/40	55% fair	good	s	s									
528				11.1						11.1		Chinese elm	Ulmus parvifolia	25/35	70/60	66% fair	moderate				х							
529				12.7						12.7		Shamel ash	Fraxinus uhdei	30/20	45/45	45% poor	poor to mod	w	w									
530				10.4						10.4		Chinese elm	Ulmus parvifolia	30/30	75/65	73% good	moderate	s			x							
531				9.2						9.2		Shamel ash	Fraxinus uhdei	30/18	50/40	45% poor	w	s										
532				12.3						12.3		Chinese elm	Ulmus parvifolia	50/40	65/70	70% good	moderate	SE			x							

Tree Tag# To be Removed Per	Current Site Plan Author Recommends Removal Due to Very Poor	Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	Protected Tree" per City of City and Codianno Ordinance (10.0" single stem, 20" mmilt, various specified naive and non-native species)	Common Name	Scientific Name (Genus, species)	Hoight and Canopy Spread	Health & Structural Rafings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
533				13.2						13.2		Shamel ash	Fraxinus uhdei	30/30	60/60	60% fair	moderate											
534				10.2						10.2		Chinese elm	Ulmus parvifolia	40/20	70/60	70% good	good	E			x							
535				20.6						20.6		Shamel ash	Fraxinus uhdei	35/35	60/50	55% fair	good											
536)	х		12.1						12.1		Shamel ash	Fraxinus uhdei	30/20	20/20	20% very poor	very poor											
537				13.1						13.1		Chinese elm	Ulmus parvifolia	35/35	60/55	60% fair	moderate	E			х							
538				19.9						19.9		Shamel ash	Fraxinus uhdei	35/35	50/45	50% fair	poor to mod											
539				12.7						12.7		Chinese elm	Ulmus parvifolia	25/30	75/85	70% good	good	E	E		x							
540				21.9						21.9		Shamel ash	Fraxinus uhdei	45/45	65/55	60% fair	moderate					GR						
541				12.5						12.5		Chinese elm	Ulmus parvifolia	30/30	60/50	55% fair	moderate				х							
542				13.7						13.7		Shamel ash	Fraxinus uhdei	35/25	50/50	50% fair	moderate	w	w									
543				15.2						15.2		Shamel ash	Fraxinus uhdei	40/25	55/30	34% poor	moderate	s				GR		5				
544				14.1						14.1		Chinese etm	Ulmus parvifolia	40/35	70/60	67% Sair	moderate	E	E		x							
545				17.4						17.4		Shamel ash	Fraxinus uhdei	40/30	75/55	64% fair	good	w									Tight forks at 8 feet.	
546				11.2						11.2		Chinese elm	Ulmus parvifolia	30/35	70/60	98% fair	moderate	E	E		x							

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"P rotected Twe" per City of Cupy and Definition of Cupy ratho Ordinance (10.0" single stem, 20" multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Cancapy Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems Will Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
547	x	x		12.5						12.5		Shamel ash	Fraxinus uhdei	40/20	25/25	25% very poor	very poor	w	w			GR						
548	x			16.0	13.0					29.0		Monterey pine	Pinus radiata	55/35	50/35	38% poor	poor to mod	E						4			Diameters of mainstems estimated.	
549	x			16.3						16.3		Shamel ash	Fraxinus uhdei	45/30	65/55	61% fair	moderate	w										
550				17.5						17.5		Shamel ash	Fraxinus uhdei	50/30	75/65	70% good	good	w										
551				23.0						23.0		Monterey pine	Pinus radiata	50/35	40/40	40% poor	poor	E	E								Diameter estimated	
552				11.2						11.2		Chinese elm	Ulmus parvifolia	25/25	60/60	60% fair	moderate	N	N		x							
553				14.2						14.2		Shamel ash	Fraxinus uhdei	30/20	75/65	70% good	good	w	w									
554				4.0						4.0		elm species	Ulmus sp.	20/10	75/75	75% good	good										Tree out of leaf. ID not verified at time of writing.	
555		x		9.8						9.8		Shamel ash	Fraxinus uhdei	20/15	10/10	10% very poor	very poor						0 to 10					
556				16.8						16.8		Shamel ash	Fraxinus uhdei	30/30	55/60	59% fair	moderate						0 to 1				Vehicle impact scar.	
557				12.9						12.9		Shamel ash	Fraxinus uhdei	50/25	35/35	35% poor	poor	w	w									
558				13.8						13.8		Chinese elm	Ulmus parvifolia	35/35	75/70	73% good	good	N	N		x							
559				15.9						15.9		Shamel ash	Fraxinus uhdei	50/25	55/50	54% fair	poor to mod	w										
560				11.5						11.5		Chinese elm	Ulmus parvifolia	30/30	65/70	68% fair	moderate	E			х							

Tree Tag #	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupy configuration of Cuperfullo Oddinance (10.0" single stem, 20" multi, various specified native ond non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
561				13.7						13.7		Chinese elm	Ulmus parvifolia	30/30	70/50	60% fair	good	N			x							
562				13.8						13.8		Shamel ash	Fraxinus uhdei	30/30	40/35	38% poor	poor	N							х			
563				23.6						23.6		Monterey pine	Pinus radiata	35/30	30/30	30% poor	poor	N									Bark beetle frass noted at root crown.	
584		х		14.8						14.8		Shamel ash	Fraxinus uhdei	35/25	25/20	23% very poor	very poor	w	w									
565				19.0						19.0		Monterey pine	Pinus radiata	35/25	45/45	45% poor	poor to mod											
586				17.5						17.5		Shamel ash	Fraxinus uhdei	45/35	40/40	40% poor	moderate	w	w									
567		х		16.2						16.2		Shamel ash	Fraxinus uhdei	30/15	25/25	25% very poor	very poor											
568				18.0						18.0		Shamel ash	Fraxinus uhdei	45/35	75/85	70% good	good	w										
569				13.5						13.5		Shamel ash	Fraxinus uhdei	30/25	70/65	68% fair	good	w										
570				12.7						12.7		Shamel ash	Fraxinus uhdei	18/10	50/30	40% poor	moderate	w	w		х							
571				22.7						22.7		coast redwood	Sequoia sempervirens	55/20	60/60	60% fair	moderate									x		
572				31.6						31.6		coast redwood	Sequoia sempervirens	55/20	60/45	55% fair	moderate							25		х		
573				16.5						16.5		coast redwood	Sequoia sempervirens	50/15	60/50	53% fair	moderate									х		
574				25.6						25.6		coast redwood	Sequoia sempervirens	55/15	60/60	60% fair	moderate									х		

Tree Tag#	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree* per City of Cupuro Ordinare of Cupuro Ordinare (10.0* single stem, 20* multi, various specified makes and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spillout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems With Sovere Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
675				12.0						12.0		coast redwood	Seguoia sempervirens	35/10	60/40	47% poor	moderate									x		
576				32.1	13.4	12.2				57.7		coast redwood	Sequoia sempervirens	55/25	70/70	70% good	poor									х		
577				27.6						27.6		coast redwood	Seguoia sempervirens	50/15	40/30	35% poor	poor						various elevations			х		
578				17.1						17.1		coast redwood	Sequoia sempervirens	50/12	60/60	60% fair	moderate									х		
579				17.7						17.7		coast redwood	Sequoia sempervirens	50/12	65/65	65% fair	moderate									х		
580				31.5	9.0					40.5		coast redwood	Seguaia sempervirens	60/20	75/75	75% good	moderate									х		
581				21.5	10.5					32.0		coast redwood	Seguaia sempervirens	60/15	60/60	60% fair	moderate									х		
582				31.7						31.7		coast redwood	Seguaia sempervirens	70/25	80/80	80% good	good									х		
583				8.3						8.3		coast redwood	Seguaia sempervirens	35/8	20/20	20% very poor	very poor									х	Difficult to assess visually.	
584				26.9						26.9		coast redwood	Sequoia sempervirens	70/20	65/65	65% fair	moderate									х		
585				15.9	7.3					23.2		coast redwood	Sequala sempervirens	50/15	65/65	65% fair	moderate									х		
586				25.3						25.3		coast redwood	Sequoia sempervirens	50/13	65/65	65% fair	moderate									х		
587				19.9						19.9		coast redwood	Sequaia sempervirens	50/14	65/65	65% fair	moderate									х		
588				21.0						21.0		coast redwood	Sequoia sempervirens	50/12	60/60	60% fair	moderate									х		

Tree Tag #	Current Site Plan	Author recommends Removal Due to Very Poor Condition or Elevated Risk of Fallure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupy confliction of Cuper Intro Ordinance (10.0" single stem, 20" multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spiltout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Daffet ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
589				23.3						23.3		coast redwood	Sequoia sempervirens	60/12	65/65	65% fair	moderate									x		
590				25.5	5.0					30.5		coast redwood	Sequoia sempervirens	60/10	30/40	35% poor	poor									x		
591				21.2						21.2		coast redwood	Sequoia sempervirens	55/10	50/40	45% poor	poor									x		
592		x		25.0						25.0		coast redwood	Sequoia sempervirens	60/8	25/35	28% very poor	very poor									x		
593				14.4						14.4		coast redwood	Sequoia sempervirens	40/10	30/30	30% poor	poor to mod		s				0 to 5			x		
594				18.1						18.1		coast redwood	Sequaia sempervirens	50/13	65/55	50% fair	moderate									x		
595				19.2						19.2		coast redwood	Sequoia sempervirens	25/15	40/25	30% poor	moderate			25 (apical meristem)						x		
596				12.8						12.8		coast redwood	Sequaia sempervirens	55/8	50/40	45% poor	poor to mod		s							x		
597		х		12.7	8.3					21.0		coast redwood	Sequaia sempervirens	35/10	0/0	0% dead	dead							1		x		
598		x		19.5						19.5		coast redwood	Sequoia sempervirens	50/6	30/10	20% very poor	very poor									x	Shear crack through the mainstern longitudinally.	
599				27.0						27.0		coast redwood	Sequaia sempervirens	75/25	65/65	65% fair	moderate									x		
600				18.8						18.8		coast redwood	Sequoia sempervirens	65/8	50/40	45% poor	poor	w								×	Canker developing on trunk at 5 feet elevation.	
601				25.5						25.5		coast redwood	Sequoia sempervirens	70/14	40/40	40% poor	poor									×		
602				13.7	7.7					21.4		coast redwood	Sequoia sempervirens	40/9	40/30	35% poor						BRC				x		

Tree Tag #	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Fallure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cuper College of Cuper Incomplete City Services and College of College	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-10% each)	Overall Cendition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
603		×		17.3						17.3		coast redwood	Seguoia sempervirens	50/15	25/25	25% very poor	very poor									x		
604		x		16.7						16.7		coast redwood	Sequoia sempervirens	50/12	25/25	25% very poor	very poor		w							х		
605		x		6.6						6.6		coast redwood	Seguoia sempervirens	35/7	25/25	25% very poor	very poor									х		
606		x		26.4						26.4		coast redwood	Sequals sempervirens	60/18	20/30	25% very poor	poor									х	Codominant mainstem fork at 20 feet.	
607		x		15.4						15.4		coast redwood	Sequois sempervirens	55/10	15/20	17% very poor	very poor									х		
608				22.4						22.4		coast redwood	Sequais sempervirens	60/14	30/30	30% poor	poor	w								х		
609				27.1						27.1		coast redwood	Sequala sempervirens	70/18	35/35	35% poor	poor									х		
610		x		13.0						13.0		coast redwood	Sequala sempervirens	30/8	40/20	28% very poor	poor to mod									х		
611				39.4						39.4		coast redwood	Sequala sempervirens	75/15	70/70	70% good	good									х	Cankers on trunk at 6 feet.	
612				8.0						8.0		coast redwood	Sequais sempervirens	25/4	0./0	0% dead	dead									х		
613				26.5						26.5		coast redwood	Sequala sempervirens	75/18	75/75	75% good	good									х		
614				32.3						32.3		coast redwood	Sequais sempervirens	65/15	70/70	70% good	mod to good									х		
615				15.4						15.4		coast redwood	Sequoia sempervirens	50/10	50/50	50% fair	poor									х		
616				24.4						24.4		coast redwood	Sequoia sempervirens	65/11	55/50	53% fair	mod									х		

Tree Tag#	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Fallure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupuro Ordinance (10.0* single stem, 20* multi, various specified mative and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Cancpy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
617				10.1						10.1		coast redwood	Seguoia sempervirens	25/9	65/45	55% fair	mod									х		
618				26.7						26.7		coast redwood	Sequoia sempervirens	70/18	55/60	58% fair	poor to mod									х		
619				12.5						12.5		coast redwood	Seguaia sempervirens	45/10	50/40	50% fair	moderate									х		
620				15.3						15.3		coast redwood	Sequoia sempervirens	35/10	50/40	50% fair	moderate									х		
621				12.6						12.6		coast redwood	Sequoia sempervirens	45/11	60/50	55% fair	moderate									х		
622				23.4						23.4		coast redwood	Seguaia sempervirens	75/15	50/50	50% fair	poor									х		
623				25.1						25.1		coast redwood	Seguaia sempervirens	75/15	50/50	50% fair	poor									х		
624				15.9						15.9		coast redwood	Seguaia sempervirens	70/12	50/40	49% poor	poor									х		
625				19.7	6.4					26.1		coast redwood	Seguaia sempervirens	65/10	50/50	50% fair	poor									х		
626				19.6						19.6		coast redwood	Sequoia sempervirens	60/10	60/50	55% fair	poor to mod									х		
627				22.9						22.9		coast redwood	Sequala sempervirens	75/12	60/50	53% fair	poor									х		
628		x		14.1						14.1		coast redwood	Sequoia sempervirens	45/8	20/30	25% very poor	very poor									х		
629		х		11.9						11.9		coast redwood	Sequaia sempervirens	45/7	10/10	10% very poor	very poor									х		
630				12.0						12.0		coast redwood	Sequoia sempervirens	35/10	35/35	35% poor	poor									х		

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (14243+445)	*Protected Tree" per City of Cupuro Ordinario of Cuper Intro Ordinario (10.0 * single stem, 20* multi, various specified native and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
631		x		16.2						16.2		coast redwood	Sequoia sempervirens	45/15	20/20	20% very poor	very poor							25		х		
632				15.5						15.5		coast redwood	Sequoia sempervirens	50/18	40/30	35% poor	poor to mod							30		x		
633				9.3						9.3		coast redwood	Seguoia sempervirens	40/10	35/35	35% poor	poor									х		
634		x		11.5						11.5		coast redwood	Sequoia sempervirens	50/12	20/20	20% very poor	very poor									x		
635		x		18.4						18.4		coast redwood	Sequoia sempervirens	50/12	10/10	10% very poor	very poor									x		
636		x		20.9						20.9		coast redwood	Sequoia sempervirens	70/18	25/25	25% very poor	very poor									x		
637		x		13.8						13.8		coast redwood	Sequoia sempervirens	50/15	25/25	25% very poor	very poor									x	One of two mainstems was removed at grade.	
638				27.9						27.9		coast redwood	Sequoia sempervirens	80/25	75/75	75% good	mod to good									х		
639		х		10.8						10.8		coast redwood	Sequoia sempervirens	35/8	25/25	25% very poor	very poor									х	Difficult to assess visually.	
640				21.1						21.1		coast redwood	Sequoia sempervirens	70/12	40/40	40% poor	poor	w								х		
641				19.6						19.6		coast redwood	Sequoia sempervirens	60/12	65/55	60% fair	moderate		N							x		
642				30.3						30.3		coast redwood	Sequoia sempervirens	75/20	50/50	50% fair	moderate									х		
643				24.3						24.3		coast redwood	Sequoia sempervirens	70/18	60/55	56% fair	moderate									x		
644				11.1						11.1		coast redwood	Sequoia sempervirens	55/12	50/50	50% fair	poor									х		

Tree Tag # To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	Protected Tree" per City of Cupertino Ordinance (10.5° single stem, 20° multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spiltout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
645			22.8						22.8		coast redwood	Sequois sempervirens	70/12	40/35	39% poor	poor									x		
646	х		14.8	7.5					22.3		coast redwood	Sequoia sempervirens	50/10	45/20	27% very poor	poor	w								х	S-trunk form at certain heights.	
647			31.5						31.5		coast redwood	Sequoia sempervirens	75/25	80/80	80% good	good									x		
648			4.9						4.9		coast redwood	Sequoia sempervirens	25/5	30/30	30% poor	poor		s							x		
649			25.7						25.7		coast redwood	Sequoia sempervirens	65/12	50/50	50% fair	moderate									x		
650			22.4						22.4		coast redwood	Sequoia sempervirens	65/16	50/50	50% fair	moderate									x		
651			29.6						29.6		coast redwood	Sequoia sempervirens	70/20	60/40	55% fair	moderate									x		
652			15.9						15.9		coast redwood	Sequoia sempervirens	65/16	40/40	40% poor	poor									х		
653	х		16.0						16.0		coast redwood	Sequoia sempervirens	60/10	20/20	20% very poor	very poor									x		
654	х		20.5						20.5		coast redwood	Sequoia sempervirens	55/6	30/15	20% very poor	very poor									x		
655			25.0	10.0					35.0		coast redwood	Sequoia sempervirens	70/15	50/50	50% fair	poor to mod							3		х		
656			27.3						27.3		coast redwood	Sequaia sempervirens	75/15	60/40	50% fair	poor to mod							6		x		
657			19.8						19.8		coast redwood	Sequoia sempervirens	70/15	45/45	45% poor	poor	w								x		
658			30.8						30.8		coast redwood	Sequoia sempervirens	70/18	30/35	30% poor	poor							4 to 8		х		

Tree Tag #	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (142+3+4+5)	"Protected Tree" per City of Cupy and Cupy and Codination Ordinance (10.0" single stem, 20" multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-10% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
659		x		10.0						10.0		coast redwood	Seguois sempervirens	35/4	0/0	0% dead	dead									x		
660		х		23.0						23.0		coast redwood	Seguoia sempervirens	70/15	30/20	25% very poor	very poor									x	S-trunk form between 80 and 65 feet elevation.	
661				12.4						12.4		coast redwood	Sequoia sempervirens	30/8	50/30	35% poor	moderate							20		x		
662				17.7						17.7		coast redwood	Sequoia sempervirens	50/15	60/45	50% fair	moderate									x		
663				11.2						11.2		coast redwood	Sequoia sempervirens	50/10	55/50	50% fair	poor to mod									x		
664				11.0						11.0		coast redwood	Sequaia sempervirens	50/10	50/50	50% fair	poor									x		
665				20.4						20.4		coast redwood	Sequaia sempervirens	65/18	60/55	58% fair	moderate									x		
666				20.9						20.9		coast redwood	Seguoia sempervirens	70/25	40/50	45% poor	poor									x		
667				16.7						16.7		coast redwood	Seguoia sempervirens	65/18	40/50	45% poor	poor									x		
668				9.1						9.1		coast redwood	Seguaia sempervirens	40/7	30/35	35% poor	poor									x		
669				9.9						9.9		coast redwood	Seguaia sempervirens	40/7	30/30	30% poor	poor									x	This tree has a PG&E guy strap around its frunk which may eventually girdle the stem, possibly causing loss of stability within the stem cross section.	
670		x		10.7						10.7		coast redwood	Sequala sempervirens	40/6	20/20	20% very poor	very poor									x		
671		x		7.1						7.1		coast redwood	Sequala sempervirens	30/6	25/25	25% very poor	very poor									x		
672				14.9						14.9		coast redwood	Sequaia sempervirens	50/12	40/40	40% poor	poor									x		

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (142+3+4+5)	*Protected Tree" per City of Cupuro Ordinario Ordinario Ordinario (10.0** single stem, 20** multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spiltout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems With Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
673				22.2						22.2		Shamel ash	Fraxinus uhdei	50/25	30/35	33% poor	poor									x		
674				24.2						24.2		Shamel ash	Fraxinus uhdei	55/25	35/40	36% poor	poor									×		
675		x		15.0						15.0		Shamel ash	Fraxinus uhdei	50/15	20/30	25% very poor	very poor						At all elevations.			x		
676				16.6						16.6		Shamel ash	Fraxinus uhdei	65/18	30/30	30% poor	very poor							Various elevations		x		
677		x		17.6						17.6		Shamel ash	Fraxinus uhdei	65/18	10/10	10% very poor	very poor						At all elevations.			х		
678				13.4						13.4		Shamel ash	Fraxinus uhdei	60/18	45/45	45% poor	poor to mod	E								х		
679				12.7						12.7		Shamel ash	Fraxinus uhdei	50/14	40/30	35% poor	poor	E					6			х		
680				15.6						15.6		Shamel ash	Fraxinus uhdei	60/25	50/35	40% poor	poor to mod	E								x		
681				17.3						17.3		Shamel ash	Fraxinus uhdei	65/25	45/45	45% poor	moderate	E								x		
682				14.2						14.2		Shamel ash	Fraxinus uhdei	50/25	45/30	35% poor	poor to mod	E						9		x		
683		x		18.7						18.7		Shamel ash	Fraxinus uhdei	65/30	25/10	15% very poor	very poor	E	E				5 to 6			х	Possible destabilized root plate. High risk tree. Remove.	
684		x		12.2						12.2		Shamel ash	Fraxinus uhdei	50/20	15/15	15% very poor	very poor									x		
685		х		10.5						10.5		Shamel ash	Fraxinus uhdei	45/20	15/15	15% very poor	very poor	E	E							х		
686				4.0						4.0		coast redwood	Sequoia sempervirens	15/6	50/50	50% fair	moderate									×		

Tree Tag #	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Fail ure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupy confliction of Cuper Intro Ordinance (10.0" single stem, 20" multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
687				11.4						11.4		Shamel ash	Fraxinus uhdei	45/25	40/35	37% poor	poor to mod	E	E							x		
688				4.5						4.5		coast redwood	Sequoia sempervirens	20/8	70/70	70% good	moderate									х		
689		×		15.9						15.9		Shamel ash	Fraxinus uhdei	65/20	10/10	10% very poor	very poor	E	E							x		
690				4.9						4.9		coast redwood	Sequals sempervirens	18/6	70/70	70% good	moderate									x		
691		×		10.8						10.8		Shamel ash	Fraxinus uhdei	35/25	15/15	15% very poor	very poor	E			x					x		
692				22.5						22.5		Shamel ash	Fraxinus uhdei	75/35	65/50	58% fair	mod to good	E	E							х		
693				28.0						28.0		Shamel ash	Fraxinus uhdei	70/40	65/50	57% fair	mod to good	E	E					9		x		
694				21.3						21.3		Shamel ash	Fraxinus uhdei	70/35	40/40	40% poor	poor							18		x		
695				28.3						28.3		Shamel ash	Fraxinus uhdei	70/35	60/50	55% fair	moderate	E	E							x	Roots severed with decay, on west side of root system.	
696				23.9						23.9		Shamel ash	Fraxinus uhdei	75/30	50/50	50% fair	poor to mod	E								x		
697				25.3						25.3		Shamel ash	Fraxinus uhdei	75/30	45/35	43% poor	poor to mod	E				GR		11		×		
698				8.2						8.2		coast redwood	Sequoia sempervirens	28/10	55/60	55% fair	poor to mod									х		
699		x		8.4						8.4		coast redwood	Sequoia sempervirens	28/10	0/0	0% dead	dead									х		
700		x		7.5						7.5		coast redwood	Sequais sempervirens	28/10	0/0	0% dead	dead									х		

Tree Tag#	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupuro Ordinance (10.0* single stem, 20.* multi, various specified mative and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Cendition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems With Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
701				8.2						8.2		coast redwood	Seguoia sampervirens	25/7	40/40	40% poor	poor									x		
702		х		8.1						8.1		coast redwood	Sequoia sempervirens	26/7	10/10	10% very poor	very poor									x		
703				20.3						20.3		coast redwood	Sequoia sempervirens	40/20	40/40	40% poor	poor to mod									×		
704		х		11.3						11.3		coast redwood	Sequoia sempervirens	30/8	0/0	0% dead	dead									x		
705		х		10.3						10.3		coast redwood	Sequoia sempervirens	30/4	5/5	5% very poor	very poor									×		
706		х		11.0						11.0		coast redwood	Sequoia sempervirens	30/8	10/10	10% very poor	very poor						1			x		
707		х		5.8						5.8		coast redwood	Sequoia sempervirens	25/6	10/10	10% very poor	very poor									x		
708				11.5						11.5		coast redwood	Sequoia sempervirens	30/8	40/40	40% poor	poor									x		
709		х		4.2						4.2		coast redwood	Sequoia sempervirens	20/4	0/0	0% dead	dead									х		
710				12.3						12.3		coast redwood	Sequoia sempervirens	35/8	40/40	40% poor										×		
711		х		11.3						11.3		coast redwood	Sequoia sempervirens	40/4	10/10	10% very poor	very poor									x		
712				8.4						8.4		coast redwood	Sequoia sempervirens	30/8	30/30	30% poor	poor									×		
713				11.4						11.4		coast redwood	Sequoia sempervirens	35/6	40/40	40% poor	poor									x		
714		х		7.3						7.3		coast redwood	Sequoia sempervirens	30/8	15/15	15% very poor	very poor									×		

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	Protected Tree" per City of Cupe of Cupe Tree of Cupe Tre	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Rafings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2016 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
715				19.5						19.5		coast redwood	Sequoia sempervirens	50/15	45/45	45% poor	poor									x		
716		x		4.3						4.3		coast redwood	Seguoia sempervirens	17/5	0/0	0% dead	dead									х		
717		x		10.1						10.1		coast redwood	Sequoia sempervirens	30/7	20/20	20% very poor	very poor									х		
718		x		7.0						7.0		coast redwood	Sequois sempervirens	20/4	O/O	0% dead	dead									x		
719		x		11.4						11.4		coast redwood	Sequoia sempervirens	40/15	O/O	0% dead	dead									x		
720		x		9.1						9.1		coast redwood	Sequoia sempervirens	50/7	O/O	0% dead	dead									x		
721		x		15.3						15.3		coast redwood	Sequoia sempervirens	50/12	10/10	10% very poor	very poor									x		
722		x		11.5						11.5		coast redwood	Sequois sempervirens	50/10	20/20	20% very poor	very poor									х		
723				21.0						21.0		Monterey pine	Pinus radiata	55/20	50/40	48% poor	moderate	E	E							x		
724		x		13.9						13.9		coast redwood	Sequoia sempervirens	50/9	15/15	15% very poor	very poor									x		
725				22.0						22.0		Monterey pine	Pinus radiata	55/25	35/40	38% poor	poor									x		
726		x		20.9						20.9		Monterey pine	Pinus radiata	50/25	30/25	28% very poor	very poor	SE	SE							x		
727				13.5						13.5		coast redwood	Sequoia sempervirens	50/12	40/25	30% poor	poor									x		
728		x		12.8						12.8		coast redwood	Sequais sempervirens	45/10	10/15	13% very poor	very poor	E								х		

Tree Tag #	Current Site Plan Author Recommends	Author recommends Removal Due to Very Poor Condition or Elevated Risk of Fallure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupy configuration of Cuperfullo Oddinance (10.0" single stem, 20" multi, various specified native ond non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Cendition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems Will Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
729				9.0						9.0		coast redwood	Sequois sempervirens	40/5	60/30	45% poor	moderate									x		
730				14.0						14.0		coast redwood	Sequoia sempervirens	50/9	50/50	50% fair	moderate									х	Difficult to assess visually.	
731		x		14.7						14.7		Shamel ash	Fraxinus uhdei	55/25	25/25	25% very poor	very poor	E	E							х		
732		x		24.3						24.3		Shamel ash	Fraxinus uhdei	55/25	25/25	25% very poor	very poor	E				GR		7		х		
733				19.2						19.2		Shamel ash	Fraxinus uhdei	55/30	40/35	38% poor	poor	E					1 foot (car impact)			х		
734				17.1						17.1		Shamel ash	Fraxinus uhdei	45/30	35/35	35% poor	poor									х	Circling roots. Roots damaged on grade.	
735		х		17.5						17.5		Shamel ash	Fraxinus uhdei	55/25	20/20	20% very poor	very poor	E					1 foot (car impact)			х		
736		x		19.1						19.1		Shamel ash	Fraxinus uhdei	45/35	25/25	25% very poor	very poor						Various elevations.			х		
737				20.7						20.7		Shamel ash	Fraxinus uhdei	55/30	30/40	35% poor	poor	E						20		x	Roots severed and damaged on grade.	
738				21.7						21.7		Shamel ash	Fraxinus uhdei	50/30	40/40	40% poor	poor	s				GR				х		
739				23.7						23.7		Shamel ash	Fraxinus uhdei	65/30	25/25	25% very poor	very poor	E								х		
740				26.0						26.0		Shamel ash	Fraxinus uhdei	45/35	65/50	56% fair	good				х	GR			х	х		
741				24.5						24.5		Shamel ash	Fraxinus uhdei	50/30	40/40	40% poor	poor				x				х	x		
742				27.2						27.2		Shamel ash	Fraxinus uhdei	50/30	50/40	48% poor	moderate							Various elevations	x	х		

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Fallure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupuro Ordinance (10.0" single stem, 20" multi, various specified mative and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spiltout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems With Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
743				30.1						30.1		Shamel ash	Fraxinus uhdei	50/40	60/45	50% fair	moderate								x	x		
744				25.2						25.2		Shamel ash	Fraxinus uhdei	55/30	50/40	45% poor	moderate				х				х	х	Roots pruned near mainstem.	
745				14.2						14.2		Shamel ash	Fraxinus uhdei	30/20	35/30	35% poor	poor				х		9		х	x		
746				24.1						24.1		Shamel ash	Fraxinus uhdei	50/25	60/50	55% fair	moderate	E			х					x		
747				18.6						18.6		Shamel ash	Fraxinus uhdei	60/25	60/30	38% poor	moderate	E				GR		various elevations		x		
748				21.7						21.7		Shamel ash	Fraxinus uhdei	55/30	50/45	49% poor	moderate	E				GR serious condition.				x		
749				16.0						16.0		Shamel ash	Fraxinus uhdei	50/20	30/30	30% poor	poor	E			х					x		
750				17.3						17.3		Shamel ash	Fraxinus uhdei	50/25	40/40	40% poor	poor	E								х		
751				15.8						15.8		Shamel ash	Fraxinus uhdei	55/25	25/25	25% very poor	poor	E	E							x	Circling roots.	
752				18.5						18.5		Shamel ash	Fraxinus uhdei	55/30	55/45	50% fair	moderate	E	E				8			x		
753				19.8						19.8		Shamel ash	Fraxinus uhdei	50/30	50/45	49% poor	poor	E	E							x		
754				21.8						21.8		Shamel ash	Fraxinus uhdei	65/25	55/40	45% poor	moderate	E	E		х	GR				х		
755				20.1						20.1		Shamel ash	Fraxinus uhdei	55/25	60/50	55% fair	moderate	E								х		
756				18.1						18.1		Shamel ash	Fraxinus uhdei	60/30	50/45	49% poor	poor to mod	E	E			GR	6			х		

Tree Tag #	Current Site Plan Author Recommends Bennesi Dies to Very Boor	Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupy confliction of Cuper Intro Ordinance (10.0" single stem, 20" multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spiltout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soll Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
757				16.8						16.8		Shamel ash	Fraxinus uhdei	60/25	40/40	40% poor	poor							8		х		
758		х		19.3						19.3		Shamel ash	Fraxinus uhdei	55/30	25/25	25% very poor	very poor	E	E							х		
759				18.2						18.2		Shamel ash	Fraxinus uhdei	60/30	35/35	35% poor	poor	Ē	E							х		
760				20.8						20.8		Shamel ash	Fraxinus uhdei	60/35	40/30	35% poor	poor	E	E							х		
761				15.4						15.4		Shamel ash	Fraxinus uhdei	50/30	60/35	40% poor	moderate	E	E					8		х		
762				17.1						17.1		Shamel ash	Fraxinus uhdei	50/35	35/35	35% poor						GR				х		
763		x		23.5						23.5		Shamel ash	Fraxinus uhdei	65/35	15/15	15% very poor	very poor	E						9		х		
764		x		13.6						13.6		Shamel ash	Fraxinus uhdei	50/20	10/10	10% very poor	very poor	E								х		
765				16.0						16.0		Shamel ash	Fraxinus uhdei	50/25	30/30	30% poor	poor	E	E							х		
766				18.5						18.5		Shamel ash	Fraxinus uhdei	50/30	40/40	40% poor	poor	E	E			GR				х		
767				18.8						18.8		Shamel ash	Fraxinus uhdei	60/30	35/45	40% poor	poor	E	E							х		
768		x		14.5						14.5		Shamel ash	Fraxinus uhdei	55/30	20/20	20% very poor	very poor	E	E							×	Roots damaged on grade.	
769				23.8						23.8		Shamel ash	Fraxinus uhdei	65/35	55/35	40% poor	moderate	E	E			serious girdling root		15		х		
770				16.3						16.3		Shamel ash	Fraxinus uhdei	55/25	30/30	30% poor	poor	E						10		х		

Tree Tag # To be Removed Per Current Site Plan Author Recommends	Removal Due to very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.) Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupper of Cupper Into Ordinance (10.0" single stem, 20" multi, various specified mafve, and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
771			16.1					16.1		Shamel ash	Fraxinus uhdei	55/30	80/45	55% fair	moderate	E								x		
772			33.6					33.6		coast redwood	Sequois sempervirens	75/20	70/70	70% good	moderate									x		
773			16.4					16.4		coast redwood	Sequoia sempervirens	60/13	60/60	60% fair	moderate									x		
774			18.5					18.5		coast redwood	Sequois sempervirens	60/15	75/60	67% fair	moderate									x		
775			10.7					10.7		coast redwood	Sequaia sempervirens	30/6	60/50	55% fair	moderate									x		
776			34.2					34.2		coast redwood	Sequoia sempervirens	75/25	70/70	70% good	moderate									x		
777			7.8					7.8		coast redwood	Sequoia sempervirens	25/6	55/35	40% poor	moderate	w	w							x		
778			28.8					28.8		coast redwood	Sequoia sempervirens	75/25	70/70	70% good	moderate									х		
779			16.8					16.8		coast redwood	Seguoia sempervirens	50/13	85/55	60% fair	moderate									x		
780			7.0					7.0		coast redwood	Sequoia sempervirens	35/6	55/35	45% poor	moderate									x		
781			21.6					21.6		coast redwood	Sequoia sempervirens	65/15	60/40	47% poor	moderate							15		x		
782			32.1					32.1		coast redwood	Sequoia sempervirens	35/20	70/70	70% good	moderate									x		
783			26.0					26.0		coast redwood	Sequaia sempervirens	85/20	70/70	70% good	moderate									x		
784			16.1					16.1		coast redwood	Sequoia sempervirens	75/15	70/65	70% good	moderate									x		

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 64" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupuro Ordinance (10.0" single stem, 20" multi, various specified mative and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
785				21.9						21.9		coast redwood	Seguoia sempervirens	75/15	70/70	70% good	moderate									х		
786				13.0						13.0		coast redwood	Sequoia sempervirens	50/8	50/35	40% poor	poor	w								х		
787				17.8						17.8		coast redwood	Sequoia sempervirens	65/10	60/35	40% poor	poor	w								х		
788				20.1						20.1		coast redwood	Sequoia sempervirens	90/15	60/60	80% fair	poor to mod									х		
789				23.4						23.4		coast redwood	Sequaia sempervirens	80/15	75/70	73% good	moderate		E							х		
790				19.5						19.5		coast redwood	Seguoia sempervirens	80/18	75/75	75% good	moderate									х		
791				17.1	15.1					32.2		coast redwood	Sequaia sempervirens	70/20	70/60	65% fair								2		х		
792				28.2						28.2		coast redwood	Sequaia sempervirens	90/20	70/70	70% good	moderate									x		
793				21.9						21.9		coast redwood	Seguoia sempervirens	70/15	65/60	62% fair	moderate									x		
794				22.0						22.0		coast redwood	Seguaia sempervirens	50/15	60/40	47% poor	moderate						0 to 2			x	Apical stem splitout	
795				24.0						24.0		coast redwood	Seguaia sempervirens	85/20	70/70	70% good	moderate									x		
796				45.5						45.5		coast redwood	Sequaia sempervirens	90/30	75/75	75% good	good									x		
797				14.8						14.8		coast redwood	Sequoia sempervirens	50/8	50/40	47% poor	moderate									x	Supressed in shade	
798				12.6						12.6		coast redwood	Sequala sempervirens	60/12	60/40	48% poor	poor		E					20		x		

Tree Tag #	Current Site Plan Author Recommends	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Fallure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupy confliction of Cuper Intro Ordinance (10.0" single stem, 20" multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems Will Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
799				22.6						22.6		coast redwood	Seguoia sempervirens	80/13	70/70	70% good	moderate									x		
800				21.8						21.8		coast redwood	Sequoia sempervirens	65/13	65/65	65% fair	moderate									x		
801				17.3						17.3		coast redwood	Seguoia sempervirens	55/9	50/50	50% fair	poor	w	w							x		
802				32.5						32.5		coast redwood	Sequals sempervirens	90/25	50/50	50% fair	poor									x	Difficult to assess visually.	
803				15.0						15.0		coast redwood	Sequais sempervirens	60/9	30/30	30% poor	poor									x		
804				32.4						32.4		coast redwood	Sequoia sempervirens	90/18	60/60	60% fair	poor to mod									x		
805				13.0						13.0		coast redwood	Sequais sempervirens	50/5	40/40	40% poor	poor									x	S-trunk form	
806				16.8						16.8		coast redwood	Sequais sempervirens	50/10	60/55	58% fair	moderate									x		
807				12.1						12.1		coast redwood	Sequais sempervirens	60/12	50/55	53% fair	poor to mod									x		
808				24.5						24.5		coast redwood	Sequoia sempervirens	90/20	40/30	33% poor	poor							55		x		
809				11.0						11.0		coast redwood	Sequoia sempervirens	55/15	60/50	55% fair	poor to mod									x		
810		x		15.0						15.0		coast redwood	Sequoia sempervirens	75/8	10/10	10% very poor	very poor									x		
811				5.6						5.6		coast redwood	Sequoia sempervirens	30/6	40/30	35% poor	poor									x		
812		x		23.2						23.2		coast redwood	Sequoia sempervirens	80/20	0/0	0% dead	dead									x	S - trunk form.	

Tree Tag#	To be Removed Per Current Site Plan Author Recommends Removal Due to Very Poor Condition or Elevated Risk	of Failure Project Team Desires to	Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree* per City of Cuputor Ordinares (10.0* single stem, 20* multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems With Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
813	x			13.3						13.3		coast redwood	Sequoia sempervirens	70/16	10/10	10% very poor	very poor									х		
814	х			24.4						24.4		coast redwood	Sequoia sempervirens	85/20	0/0	0% dead	dead									х		
815	x			9.0						9.0		coast redwood	Sequoia sempervirens	40/5	0/0	0% dead	dead									x		
816				16.5						16.5		coast redwood	Sequoia sempervirens	80/12	50/50	50% fair	poor									х		
817				11.9						11.9		coast redwood	Sequaia sempervirens	35/6	50/40	43% poor	poor									x		
818				25.4						25.4		coast redwood	Sequoia sempervirens	80/18	60/60	60% fair	moderate									х		
819				12.4						12.4		coast redwood	Sequois sempervirens	65/13	50/40	45% poor	poor									х		
820				26.3						26.3		coast redwood	Sequais sempervirens	90/25	55/60	58% fair	poor to mod									х		
821	х			4.6						4.6		coast redwood	Sequoia sempervirens	30/3	0/0	0% dead	dead									х		
822				23.4						23.4		coast redwood	Sequoia sempervirens	90/20	50/50	50% fair	poor							18		x		
823				17.9						17.9		coast redwood	Sequoia sempervirens	100/15	50/35	40% poor	poor							70		x		
824				29.3						29.3		coast redwood	Sequaia sempervirens	100/20	40/40	40% poor	poor to mod							25		х		
825				7.8						7.8		coast redwood	Sequaia sempervirens	30/8	40/20	29% very poor	poor									х		
826				11.1						11.1		coast redwood	Sequaia sempervirens	35/12	60/50	50% fair	poor to mod	E								х	Bow form trunk.	

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupuro Ordinario Ordinario Ordinario (10.0** single stem, 20** multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
827		х		10.7						10.7		coast redwood	Seguoia sempervirens	35/10	O/O	0% dead	dead									х	Bow form trunk.	
828				11.7						11.7		coast redwood	Sequoia sempervirens	50/8	30/30	30% poor	poor							20		х		
829				27.2						27.2		coast redwood	Sequoia sempervirens	95/25	70/70	70% good	moderate									х		
830				15.2						15.2		coast redwood	Sequoia sempervirens	40/16	45/30	37% poor	poor to mod							20		х		
831				11.0						11.0		coast redwood	Sequoia sempervirens	40/8	30/40	37% poor	poor		SW							х		
832				13.0						13.0		coast redwood	Sequaia sempervirens	45/11	60/55	59% fair	moderate									х		
833				26.6						26.6		coast redwood	Sequaia sempervirens	70/30	70/85	69% fair	moderate							30		х		
834		х		5.8						5.8		coast redwood	Sequoia sempervirens	30/5	20/20	20% very poor	very poor		SE							х		
835				15.8	11.0					26.8		coast redwood	Sequoia sempervirens	85/18	60/50	55% fair	poor to mod							2		х		
836		x		9.8						9.8		coast redwood	Sequais sempervirens	30/12	25/25	25% very poor	very poor		s							х		
837				15.2						15.2		coast redwood	Sequoia sempervirens	45/10	50/40	45% poor	poor to mod	w	NW							х		
838				23.9						23.9		coast redwood	Sequoia sempervirens	85/20	45/45	45% poor	poor									х		
839				26.1						28.1		coast redwood	Sequaia sempervirens	90/25	60/60	60% fair	moderate									х		
840				10.8	9.0					19.8		coast redwood	Sequaia sempervirens	60/8	35/35	35% poor	poor							20		х		

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of City of Cuptor Oxflamere (10.0* single stem, 20* multi, various specified mative and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-10% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems Will Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
841				21.2						21.2		coast redwood	Seguoia sempervirens	80/13	60/50	53% fair	poor to mod									x	Sweep form trunk. Apical meristem appears gone.	
842				27.2	8.5					35.7		coast redwood	Sequoia sempervirens	90/15	70/70	70% good	moderate									x		
843	x	x		10.8						10.8		coast redwood	Sequoia sempervirens	55/4	10/10	10% very poor	very poor							15		×		
844				16.4						16.4		coast redwood	Sequoia sempervirens	80/20	60/40	50% fair	poor to mod									×		
845				28.2						28.2		coast redwood	Sequois sempervirens	90/25	70/70	70% good	moderate									x		
846				14.7						14.7		coast redwood	Sequoia sempervirens	45/8	50/45	48% poor	poor to mod									x		
847				11.5	9.5					21.0		coast redwood	Sequoia sempervirens	45/10	50/50	50% fair	poor to mod									x		
848				23.9						23.9		coast redwood	Seguaia sempervirens	90/20	50/50	50% fair	poor to mod									x		
849				20.5						20.5		coast redwood	Seguaia sempervirens	80/18	60/50	55% fair	poor to mod									x		
850				18.3						18.3		coast redwood	Sequoia sempervirens	80/15	55/50	54% fair	poor to mod		E							x		
851				24.5						24.5		coast redwood	Sequoia sempervirens	95/25	65/50	60% fair	moderate									x	Sweep form trunk.	
852				12.5	6.9					19.4		coast redwood	Sequoia sempervirens	55/18	60/50	50% fair	poor to mod							1		x		
853		×		11.8	7.8					19.6		coast redwood	Sequais sempervirens	35/18	15/15	15% very poor	very poor							2		×		
854				18.5						18.5		coast redwood	Sequala sempervirens	70/18	40/35	38% poor	poor							30		х		

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (142+3+44-5)	Protected Tree" per City of Cupy and Cupy and Cupy and Cordination (10.0° single stem, 20" multi, various specified native and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100%, each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
855				15.1						15.1		coast redwood	Seguoia sempervirens	70/18	56/50	53% fair	poor to mod									×		
856				10.1						10.1		coast redwood	Sequoia sempervirens	45/9	40/35	40% poor	poor									×		
857				21.1						21.1		coast redwood	Sequoia sempervirens	85/25	55/50	50% fair	poor to mod									×		
858				19.5						19.5		coast redwood	Sequoia sempervirens	85/20	60/50	55% fair	moderate									×		
859				9.8						9.8		coast redwood	Sequoia sempervirens	50/10	40/35	38% poor	poor									×	Supressed in shade	
860				22.2						22.2		coast redwood	Sequoia sempervirens	85/20	60/60	60% fair	moderate									×		
861				25.0						25.0		coast redwood	Sequoia sempervirens	90/30	60/60	60% fair	moderate									×		
862				20.6						20.6		coast redwood	Sequoia sempervirens	80/25	60/60	60% fair	moderate									x		
863				31.5						31.5		coast redwood	Sequoia sempervirens	90/20	75/75	75% good	good									×		
864				23.8						23.8		coast redwood	Sequoia sempervirens	95/15	70/65	68% fair	moderate									×		
865				24.0						24.0		coast redwood	Sequoia sempervirens	90/15	60/40	47% poor	moderate	w								×	S-trunk form. Abnormal trunk cross section that is cankered.	
866				31.0	13.3					44.3		coast redwood	Sequoia sempervirens	95/28	60/50	55% fair	moderate	w						3		×		
867				6.5						6.5		coast redwood	Sequala sempervirens	30/6	65/45	55% fair	moderate									×	Supressed in shade	
868				16.3						16.3		coast redwood	Sequoia sempervirens	50/18	70/70	70% good	moderate									x		

Tree Tag # To be Removed Per	Current Site Plan Author Recommends Removal Due to Very Poor Condition or Elevated Risk	of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupuro Ordinarce (10.0" single stem, 20" multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-10% each)	Overall Cendition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems Will Sover Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
869				16.0						16.0		coast redwood	Seguoia sampervirens	75/15	70/60	68% fair	moderate									х		
870				27.6						27.6		coast redwood	Sequoia sempervirens	85/20	75/75	75% good	good									х		
871				25.8						25.8		coast redwood	Seguoia sempervirens	95/25	75/75	75% good	good									х		
872				23.7	15.6					39.3		coast redwood	Sequoia sempervirens	50/20	65/55	60% fair	moderate	E						2				
873	×			13.9						13.9		coast redwood	Sequoia sempervirens	65/12	25/25	25% very poor	poor											
874				10.5						10.5		coast redwood	Sequoia sempervirens	30/9	35/30	30% poor	poor											
875				14.1						14.1		coast redwood	Sequaia sempervirens	45/10	40/40	40% poor	poor											
876 Alt	Lot (START "ALTERNAT WEST" SUI	OF TE LOT RVEY)		31.0						31.0		coast redwood	Sequoia sempervirens	75/18	70/70	70% good	moderate											
877 Alt	Lot st*			23.7						23.7		coast redwood	Sequaia sempervirens	65/18	65/80	63% fair	poor to mod									х		
878 Alt	Lot st"			19.2						19.2		coast redwood	Sequoia sempervirens	75/15	65/60	63% fair	poor to mod									х		
879 Alt	Lot st"			22.8						22.8		coast redwood	Seguoia sempervirens	75/18	65/85	65% fair	moderate									х		
880 Alt	Lot st"			20.5						20.5		coast redwood	Sequoia sempervirens	75/18	65/55	60% fair	moderate									x		
881 Alt	Lot st"			20.8	11.9					32.7		coast redwood	Sequoia sempervirens	75/18	60/50	58% fair	moderate							3		x		
882 Alt	Lot st"			33.3						33.3		coast redwood	Sequoia sempervirens	65/20	60/60	60% fair	moderate									х		

Tree Tag # To be Removed Per	Current Site Plan	Author Recommends Removal Dus to Very Poor Condition or Elevated Risk of Fall are	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupy confliction of Cuper Intro Ordinance (10.0" single stem, 20" multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-10% each)	Over all Cendition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His tori cal Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems With Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
883 Alt.				11.4						11.4		coast redwood	Seguoia sempervirens	30/8	30/35	33% poor	poor									×		
884 Alt.	Lot est"			31.5						31.5		coast redwood	Seguoia sempervirens	90/18	60/60	60% fair	poor to mod	w								x		
885 Alt.	Lot est*			32.1						32.1		coast redwood	Sequoia sempervirens	95/25	75/75	75% good	moderate									×		
886 Alt.	Lot est*			9.8						9.8		coast redwood	Sequoia sempervirens	45/6	30/30	30% poor	poor									×		
887 Alt.	Lot est*			25.5						25.5		coast redwood	Sequoia sempervirens	75/18	65/65	65% fair	poor to mod									×		
888 Alt.	Lot est*			29.0						29.0		coast redwood	Sequoia sempervirens	85/25	60/55	59% fair	poor to mod									х		
889 Alt.	Lot est*	?		15.3						15.3		coast redwood	Sequoia sempervirens	45/9	25/25	25% very poor	poor									х		
890 Alt.	Lot est"	x		16.9						16.9		coast redwood	Sequoia sempervirens	50/12	0/0	0% dead										x		
891 Alt.	Lot est"	x		29.5						29.5		coast redwood	Sequoia sempervirens	65/25	O/O	0% dead										×		
892 Alt.	Lot est*	x		8.6						8.6		coast redwood	Sequoia sempervirens	30/8	O/O	0% dead										×		
893 Alt.	Lot est*			26.4						26.4		coast redwood	Sequoia sempervirens	75/20	70/70	70% good	moderate									×		
894 Alt.	Lot est*			18.3						18.3		coast redwood	Sequois sempervirens	65/12	40/30	35% poor	moderate									x	Boryspheris fungal infection noted as canker progression along trunk. Monitor progression over time.	
895 Alt.	Lot est*			29.4						29.4		Italian stone pine	Pinus pines	45/30	85/75	79% good	good	E	E									
896 Alt.	Lot est*			26.2						26.2		Italian stone pine	Pinus pinea	45/25	80/30	50% fair	good	E	E					18				

Tree Tag #	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Fail ure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupy of Cupy not Cupy and Cupy not Cup and Cupy number, various specified native apecies a species	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100%, each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Daficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
897 A	It. Lot Vest*			9.6						9.6		coast redwood	Seguoia sempervirens	25/12	65/60	64% fair	moderate									x		
898 A	It. Lot Vest*			17.8						17.8		coast redwood	Seguoia sempervirens	45/15	60/60	60% fair	poor to mod									х		
899 A	It. Lot Vest*			11.4						11.4		coast redwood	Sequoia sempervirens	45/15	60/40	50% fair	moderate									х	Sweep-form trunk.	
900 🐧	It. Lot Vest*			19.7						19.7		coast redwood	Seguoia sempervirens	60/16	35/35	35% poor	poor									х		
901 A	It. Lot Vest*			4.1						4.1		coast redwood	Sequoia sempervirens	30/6	35/35	35% poor	moderate									х		
902 A	It. Lot Vest*			9.5						9.5		coast redwood	Sequoia sempervirens	35/12	65/45	50% fair	moderate									x	Mainstern splitout:	
903 A	It. Lot Vest*			14.7						14.7		coast redwood	Sequoia sempervirens	45/15	65/65	65% fair	moderate									х		
904 A	It. Lot Vest*			12.9						12.9		coast redwood	Seguoia sempervirens	65/15	70/70	70% good	moderate									x		
905	It. Lot Vest*			14.7						14.7		coast redwood	Sequoia sempervirens	55/20	65/70	68% fair	moderate									х		
906 A	It. Lot Vest*			19.3						19.3		coast redwood	Sequoia sempervirens	70/20	70/70	70% good	moderate									x		
907	It. Lot Vest*			16.0						16.0		coast redwood	Seguoia sempervirens	60/12	60/45	50% fair	poor	E								x		
A 80e	It. Lot Nest*			6.4						6.4		coast redwood	Sequoia sempervirens	25/10	70/40	50% fair	moderate	E								х		
909 🕺	It. Lot Nest*			27.0						27.0		coast redwood	Sequoia sempervirens	75/20	50/50	50% fair	poor									х		
910 A	It. Lot Vest*			22.9						22.9		coast redwood	Sequois sempervirens	75/18	65/65	65% fair	poor to mod									х		

Tree Tag # To be Removed Per	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cupy confliction of Cuper Intro Ordinance (10.0" single stem, 20" multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems With Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
911 Alt.				20.4						20.4		coast redwood	Seguoia sempervirens	75/20	70/70	70% good	moderate									x		
912 Alt.	Lot est"			25.5						25.5		coast redwood	Sequoia sempervirens	75/18	60/50	55% fair	poor to mod									x	S-form trunk.	
913 Alt.	Lot est"			20.2						20.2		coast redwood	Seguoia sempervirens	7/18	70/70	70% good	moderate									x		
914 Alt.	Lot est"			23.5						23.5		coast redwood	Seguoia sempervirens	70/18	50/60	54% fair	poor									х		
915 Alt.	Lot est"			14.8						14.8		coast redwood	Sequoia sempervirens	75/16	56/55	55% fair	poor									x		
916 Alt.	Lot est"			16.2	10.0					26.2		coast redwood	Sequoia sempervirens	55/16	75/70	70% good	moderate									x		
917 Alt.	Lot est"			14.5						14.5		coast redwood	Sequoia sempervirens	45/10	40/40	40% poor	poor									x		
918 Alt.	Lot est*			28.9						28.9		coast redwood	Seguoia sempervirens	80/15	40/40	40% poor	poor									×		
919 Alt.	Lot est"	х		17.2						17.2		coast redwood	Seguoia sempervirens	50/4	0/0	0% dead										х		
920 Alt.	Lot est"			24.4						24.4		coast redwood	Seguoia sempervirens	80/12	70/70	70% good	moderate	N								x		
921 Alt.	Lot est"			21.5						21.5		Italian stone pine	Pinus pinea	45/20	85/45	55% fair	good	E	E									
922 Alt.	Lot est"			17.8						17.8		Italian stone pine	Pinus pinea	45/18	70/35	40% poor	good	E	E									
923 Alt.	Lot est"	х		12.2	9.1					21.3		coast redwood	Sequoia sempervirens	50/4	0.10	0% dead										x		
924 Alt.	Lot est"			12.1						12.1		coast redwood	Sequoia sempervirens	70/10	60/50	55% fair	moderate	N								x		

Tree Tag #	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Fall ure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cuper College of Cuper Conference (10.0" single stem, 20" multi, various specified mative and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Cendition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
925 Alt	: Lot /est*			20.8						20.8		coast redwood	Sequoia sempervirens	65/14	65/65	65% fair	moderate									×		
928 Alt	Lot /est*			7.5						7.5		coast redwood	Sequoia sempervirens	35/6	60/40	50% fair	moderate	s								x		
927 Alt	Lot /est*			11.2						11.2		coast redwood	Sequoia sempervirens	45/8	50/40	47% poor	poor to mod	s								x		
928 Alt	: Lot /est*			18.7						18.7		coast redwood	Sequoia sempervirens	60/10	70/65	68% fair	moderate	s								x		
929 Alt	: Lot /est*			25.4						25.4		coast redwood	Sequoia sempervirens	75/20	70/70	70% good	moderate									x		
930 Alt	: Lot /est*			19.9						19.9		coast redwood	Sequoia sempervirens	75/18	70/70	70% good	moderate	E								x		
931 Alt	: Lot /est*			15.2						15.2		coast redwood	Sequoia sempervirens	65/18	60/60	80% fair	poor to mod	E								x		
932 Alt	Lot /est*	x		14.2						14.2		coast redwood	Sequoia sempervirens	55/8	5/5	5% very poor	very poor									×		
933 Alt	: Lot /est*	x		8.5						8.5		coast redwood	Sequoia sempervirens	30/5	0/0	0% dead										x		
934 Alt	Lot /est*			23.5						23.5		Monterey pine	Pinus radiata	55/25	60/45	50% fair	moderate	sw	SW							x		
935 Alt	. Lot /est*	x		13.2						13.2		coast redwood	Sequoia sempervirens	45/7	5/5	5% very poor	very poor		E							x		
936 Alf	. Lot /est*			29.2						29.2		coast redwood	Sequoia sempervirens	70/20	70/70	70% good	moderate									x	_	
937 All	. Lot /est*	х		6.0						6.0		coast redwood	Sequoia sempervirens	30/5	0/0	0% dead										x		
938 Alf	: Lot /est*	x		15.3						15.3		coast redwood	Sequoia sempervirens	60/10	20/20	20% very poor	very poor									x		

Tree Tag #	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Fall ure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Clupton Ordinance (10.0" single stem, 20" multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems Mis Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
939 A				4.3						4.3		Shamel ash	Fraxinus uhdei	25/9	85/85	85% good	good									x		
940 A	t. Lot Vest*			20.1						20.1		coast redwood	Seguoia sempervirens	65/12	40/50	45% poor	poor									х		
941 A	t. Lot Vest"			20.0						20.0		coast redwood	Sequoia sempervirens	75/15	70/70	70% good	moderate									х		
942 A	t. Lot Vest*	x		5.0						5.0		coast redwood	Sequoia sempervirens	65/13	0/0	0% dead										х		
943 A	t. Lot Vest*			22.6						22.6		coast redwood	Sequoia sempervirens	65/15	60/50	55% fair	poor to mod									х		
944 A	t. Lot Vest*			17.1						17.1		coast redwood	Sequoia sempervirens	60/13	70/70	70% good	moderate									x		
945 A	t. Lot Vest*			19.4						19.4		coast redwood	Sequoia sempervirens	65/15	70/65	68% fair	moderate									х	Sweep-form trunk.	
946 A	t. Lot Vest"			17.0						17.0		coast redwood	Sequoia sempervirens	65/12	30/30	30% poor	poor									x		
947	t. Lot Vest*			7.8						7.8		coast redwood	Sequoia sempervirens	30/5	30/30	30% poor	poor									х		
948 A	t. Lot Vest*			23.0						23.0		Monterey pine	Pinus radiata	15/2	0/0	0% dead (STUMP)										x		
949 A	t. Lot Vest*	x		12.2						12.2		coast redwood	Sequoia sempervirens	50/5	0/0	0% dead										x		
950 A	t. Lot Vest"			16.6						16.6		coast redwood	Sequoia sempervirens	60/18	75/75	75% good	moderate									х		
951 A	t. Lot Vest*			24.5						24.5		Italian stone pine	Pinus pinea	15/2	0/0	0% dead										х		
952 A	t. Lot Vest*			19.5						19.5		Italian stone pine	Pinus pines	30/20	60/30	40% poor	good	E	E								Severe lean.	

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Fail ure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupuro Ordinario Ordinario Ordinario (10.0** single stem, 20** multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems Mis Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Daffait ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
953 A	It. Lot West*			22.7						22.7		coast redwood	Seguoia sempervirens	50/15	50/45	47% poor	poor to mod									x		
954 A	It. Lot West*	x		8.7						8.7		coast redwood	Seguaia sempervirens	25/5	5/5	5% very poor	very poor									х		
955 A	It. Lot West*	?		17.7						17.7		coast redwood	Sequoia sempervirens	40/18	25/25	25% very poor	very poor									х		
956 A	It. Lot Nest*			25.9						25.9		coast redwood	Seguoia sempervirens	65/20	50/50	50% fair	poor to mod									х		
967 A	It. Lot Nest*			14.0	13.8					27.8		coast redwood	Sequoia sempervirens	55/13	30/30	30% poor	poor							2		х		
958 A	It. Lot West*	?		6.4						6.4		coast redwood	Sequoia sempervirens	40/4	5/5	5% very poor	very poor									х		
959 A	It. Lot West*			21.4						21.4		coast redwood	Sequoia sempervirens	65/18	45/45	45% poor	poor									х		
960 A	It. Lot West*			5.5						5.5		Shamel ash	Fraxinus uhdei	25/10	85/60	65% fair	good	s	s							x		
961 🧍	It. Lot West*			21.5						21.5		coast redwood	Seguoia sempervirens	60/18	30/30	30% poor										х		
962 A	It. Lot West*			14.3						14.3		coast redwood	Sequoia sempervirens	35/14	30/30	30% poor										х		
963 A	It. Lot West*			4.0						4.0		California pepper tree	Schinus molle	17/7	75/75	75% good	good											
964 A	It. Lot N'est*	х		17.9						17.9		coast redwood	Sequoia sempervirens	40/6	0/0	0% dead										х		
965 A	It. Lot N'est*			16.5						16.5		coast redwood	Sequoia sempervirens	55/15	30/30	30% poor										х		
966 A	It. Lot West*	?		18.8						18.8		coast redwood	Sequoia sempervirens	50/5	25/25	25% very poor	poor									х		

Tree Tag #	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupuro Ordinario Ordinario Ordinario (10.0** single stem, 20** multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems With Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
967 A	It. Lot West*			6.8	3.7					10.5		Shamel ash	Frexinus uhdei	35/14	85/70	75% good	good									x		
968 A	It. Lot West*	?		15.1						15.1		coast redwood	Sequoia sempervirens	35/4	0/0	0% dead										x		
969 A	It. Lot West*			5.6						5.6		Shamel ash	Fraxinus uhdei	35/12	75/75	75% good	good									х		
970 A	It. Lot Nest*	?		9.2						9.2		coast redwood	Sequoia sempervirens	40/8	5/5	5% very poor	very poor									х		
971 A	It. Lot West*	?		7.7						7.7		coast redwood	Sequois sempervirens	55/18	20/20	20% very poor	very poor									х		
972 A	It. Lot West*			22.2						22.2		coast redwood	Sequoia sempervirens	65/20	65/65	65% fair	moderate									х		
973 A	It. Lot West*			18.5						18.5		coast redwood	Sequoia sempervirens	65/20	40/40	40% poor	poor									х	Apical meristem has been split out.	
974 A	It. Lot West*			19.4						19.4		coast redwood	Sequoia sempervirens	65/20	75/75	75% good	moderate									х		
975 A	It. Lot West*			23.2						23.2		coast redwood	Sequoia sempervirens	65/16	65/65	65% fair	moderate	N								х		
976 A	It. Lot West*			10.6						10.6		coast redwood	Sequoia sempervirens	55/12	70/65	68% fair	moderate									х		
977 Ā	It. Lot West*			10.3						10.3		coast redwood	Sequoia sempervirens	55/12	65/65	65% fair	moderate									х		
978 A	It. Lot Nest*			28.6						28.6		coast redwood	Sequoia sempervirens	70/15	70/70	70% good	moderate									х		
979 A	It. Lot West*			23.8						23.8		coast redwood	Sequoia sempervirens	80/18	60/60	60% fair	poor to mod									х		
980 A	It. Lot Nest*			20.5						20.5		coast redwood	Sequoia sempervirens	70/18	60/60	60% fair	poor to mod									х		

Tree Tag #	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Fail ure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupuro Ordinario Ordinario Ordinario (10.0** single stem, 20** multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	His torical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems Will Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
981 A				20.9						20.9		coast redwood	Seguoia sempervirens	80/18	75/75	75% good	moderate									x		
982 A	t. Lot Vest"			20.0						20.0		coast redwood	Seguoia sempervirens	70/15	45/40	43% poor	poor									х		
983 A	t. Lot Vest"			16.2						16.2		coast redwood	Sequoia sempervirens	80/15	60/60	60% fair	poor to mod									х		
984 A	t. Lot Vest"			23.0						23.0		coast redwood	Seguoia sempervirens	70/18	65/65	65% fair	moderate		NW							х	Sweep-form trunk.	
985 A	t. Lot Vest*			28.8						28.8		coast redwood	Sequoia sempervirens	70/18	45/45	45% poor	poor									х		
986 A	t. Lot Vest*			22.0	16.7					38.7		coast redwood	Sequoia sempervirens	70/18	45/45	45% poor	poor									х		
987 A	t. Lot Vest*			19.2						19.2		coast redwood	Sequoia sempervirens	55/12	60/50	55% fair	poor to mod									х		
A 88e	t. Lot Vest"			26.7						26.7		coast redwood	Seguoia sempervirens	70/15	45/45	45% poor	poor									х		
989 🐧	t. Lot Vest"			10.2						10.2		coast redwood	Seguoia sempervirens	35/12	60/50	55% fair	moderate									х		
990 🐧	t. Lot Vest*			27.3						27.3		coast redwood	Sequoia sempervirens	80/16	60/60	60% fair	poor to mod									х		
991 🐧	t. Lot Vest"			25.0						25.0		coast redwood	Sequoia sempervirens	80/17	45/45	45% poor	poor									х		
992 A	t. Lot Vest*			29.5						29.5		coast redwood	Sequoia sempervirens	80/18	45/50	48% poor	poor to mod									х		
993 A	t. Lot Vest*			20.7						20.7		coast redwood	Sequoia sempervirens	75/12	30/30	30% poor	poor									х		
994 Å	t. Lot Vest*			33.3						33.3		coast redwood	Sequoia sempervirens	60/18	45/55	50% fair	poor to mod									x		

Tree Tag# To be Removed Per	Current Site Plan Author Recommends	Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" per City of Cuper of Cuper of Cuper Incomparate (10.0" single stem, 20" multi, various specified mative and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spillout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems Will Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
995 Alt.				16.1						16.1		coast redwood	Sequoia sempervirens	60/12	35/35	35% poor	poor									x	S-trunk form.	
996 Alt.	Lot est*			16.8						16.8		coast redwood	Seguoia sempervirens	65/16	55/55	55% fair	poor to mod									x		
997 Alt.	Lot est*			17.9						17.9		coast redwood	Sequoia sempervirens	65/14	60/60	60% fair	moderate							45		x		
998 Alt.	Lot st*			21.1						21.1		coast redwood	Sequoia sempervirens	65/15	65/65	65% fair	moderate									x	S-trunk form.	
999 Alt.	Lot st*			23.3						23.3		coast redwood	Sequoia sempervirens	65/18	60/60	60% fair	poor to mod									x		
1000 Alt.	Lot st*			12.0						12.0		coast redwood	Sequoia sempervirens	60/16	65/65	65% fair	moderate									x		
1001 Alt.	Lot est*			12.7						12.7		coast redwood	Sequoia sempervirens	50/13	55/50	54% fair	poor to mod									х		
1002 Alt. "We	Lot est"			16.8						16.8		coast redwood	Sequoia sempervirens	60/15	45/50	48% poor	poor									×		
1003 Alt. "We	Lot est"			12.4	12.0	11.5				35.9		coast redwood	Sequoia sempervirens	65/15	65/60	65% fair	moderate									×		
1004 Alt.	Lot est"			20.7						20.7		coast redwood	Sequoia sempervirens	70/16	40/40	40% poor	poor							15		×		
1005 Alt.	Lot est"			13.0						13.0		coast redwood	Seguoia sempervirens	35/14	50/45	48% poor	moderate									×		
1006 Alt.	Lot est*			26.7						26.7		coast redwood	Sequoia sempervirens	75/18	30/30	30% poor	poor									x		
1007 Alt.	Lot est"			16.8						16.8		coast redwood	Sequoia sempervirens	65/18	30/30	30% poor	poor									x		
1008 Alt.	Lot est*			18.9						18.9		coast redwood	Sequoia sempervirens	70/18	60/60	60% fair	poor to mod									x		
1009 Alt.	Lot est"	?		16.6						16.6		coast redwood	Sequoia sempervirens	55/18	10/10	10% very poor	very poor									x	Apical meristem is gone.	
1010 Alt.	Lot st*	?		17.7						17.7		coast redwood	Sequoia sempervirens	65/15	15/15	15% very poor	very poor									х		

Tree Tag #	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupus of Cupus of Cupus no Ordinance (10.0* single stem, 20* multi, various specified makes and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
1011 AI		?		13.8						13.8		coast redwood	Seguoia sempervirens	65/15	25/25	25% very poor	very poor									х	Chain around trunk is girdling the tree, and must be removed ASAP in order to avoid the tree being structurally compromised.	
1012 AI	t. Lot Vest"			21.7						21.7		coast redwood	Seguoia sempervirens	70/18	60/60	60% fair	poor to mod									х		
1013 A	t. Lot Vest"			26.4						26.4		coast redwood	Seguoia sempervirens	75/18	30/30	30% poor	poor									x		
1014 A	t. Lot Vest"	?		15.1						15.1		coast redwood	Seguoia sempervirens	70/13	20/20	20% very poor	very poor									х		
1015 Al	t. Lot Vest"	?		18.4						18.4		coast redwood	Sequoia sempervirens	65/14	25/25	25% very poor	very poor									х		
1016 A	t. Lot Vest"			16.6						16.6		coast redwood	Sequoia sempervirens	70/16	40/35	38% poor	poor									х	Apical meristem deflected off from vertical.	
1017 A	t. Lot Vest"	?		13.1						13.1		coast redwood	Sequoia sempervirens	55/13	30/20	25% very poor	very poor									х		
1018 A	t. Lot Vest"			16.9						16.9		coast redwood	Sequoia sempervirens	55/16	30/20	25% very poor	poor									х		
1019 A	t. Lot Vest"			26.5						26.5		coast redwood	Sequoia sempervirens	75/18	65/75	70% good	moderate									х		
1020 Al	t. Lot Vest"	?		6.8						6.8		coast redwood	Seguoia sempervirens	20/4	30/20	25% very poor	poor									х		
1021 A	t. Lot Vest"			9.7						9.7		coast redwood	Sequoia sempervirens	35/12	75/55	65% fair	moderate									х		
1022 Al	t. Lot Vest"			21.0						21.0		coast redwood	Seguoia sempervirens	55/13	35/40	38% poor	poor									х		
1023 Al	t. Lot Vest"			24.9						24.9		coast redwood	Seguoia sempervirens	75/20	55/85	60% fair	poor to mod									х		
1024 AJ	t. Lot Vest"			17.7						17.7		coast redwood	Seguoia sempervirens	60/14	60/65	65% fair	moderate									х		
1025 Al	t. Lot Vest"			8.8						8.8		coast redwood	Seguoia sempervirens	35/10	60/45	53% fair	moderate									х		
1026 Al	t. Lot Vest"			16.5						16.5		coast redwood	Seguoia sempervirens	40/10	60/60	60% fair	moderate									х		
1027 Al	t. Lot Vest"			20.6						20.6		coast redwood	Seguoia sempervirens	65/14	70/70	70% good	moderate									х		

Tree Tag #	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupuro Ordinare (10.0* single stem, 20* multi, various specified mative and non-native specified	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
1028 Al				18.8						18.8		coast redwood	Seguoia sempervirens	60/14	55/45	50% fair	poor to mod									x		
1029 A	t. Lot Vest"	?		16.4						16.4		coast redwood	Sequoia sempervirens	60/10	20/20	20% very poor	very poor									x	Apical stem is dead.	
1030 A	t. Lot Vest"	?		17.5						17.5		coast redwood	Sequoia sempervirens	65/10	5/5	5% very poor	very poor									×		
1031 A	t. Lot Vest"	?		21.0						21.0		coast redwood	Sequoia sempervirens	65/10	5/5	5% very poor	very poor									×		
1032 AJ	t. Lot Vest"			29.7						29.7		coast redwood	Sequoia sempervirens	70/18	55/40	47% poor	poor to mod							40		x		
1033 A	t. Lot Vest"			18.5						18.5		coast redwood	Sequoia sempervirens	55/13	65/85	65% fair	moderate									x		
1034 A	t. Lot Vest"			24.8						24.8		coast redwood	Sequoia sempervirens	70/15	70/70	70% good	moderate									х		
1035 Al	t. Lot Vest"			17.0						17.0		coast redwood	Seguoia sempervirens	75/14	70/35	50% fair	moderate							9		х		
1036 Al	t. Lot Vest"			30.4						30.4		coast redwood	Seguoia sempervirens	85/25	75/75	75% good	good									x		
1037 AI	t. Lot Vest"			23.3						23.3		coast redwood	Seguoia sempervirens	80/15	70/80	66% fair	moderate									x		
1038 AI	t. Lot Vest"			22.0						22.0		coast redwood	Sequoia sempervirens	70/15	60/50	55% fair	poor to mod									x	Apical stem missing (blown out).	
1039 AI	t. Lot Vest"			25.9						25.9		coast redwood	Sequoia sempervirens	90/20	70/70	70% good	moderate									x		
1040 AI	t. Lot Vest"			45.4						45.4		coast redwood	Seguoia sempervirens	80/20	70/67	70% good	moderate		s							х		
1041 AI	t. Lot Vest"			29.1						29.1		coast redwood	Seguoia sempervirens	80/15	70/70	70% good	moderate									х		
1042 Al	t. Lot Vest"			17.5						17.5		coast redwood	Sequoia sempervirens	80/10	70/80	65% fair	moderate									х		
1043 AJ	t. Lot Vest"			36.5						36.5		coast redwood	Sequoia sempervirens	85/18	75/70	73% good	good									x		
1044 A	t. Lot Vest"	?		11.5						11.5		coast redwood	Seguoia sempervirens	60/7	20/20	20% very poor	very poor									х		

Tree Tag #	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (In.)	Trunk 2 (In.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (142+3+4+5)	*Protected Tree" per City of Cuputor Ordinares (10.0* single stem, 20.* multi, various specified native and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Ratings (0-10% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Burled Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Roof Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
1045 Alt				33.7						33.7		coast redwood	Sequoia sempervirens	90/13	70/60	63% fair	moderate	E								x		
1048 Alt	. Lot 'est"			27.8						27.8		coast redwood	Sequoia sempervirens	90/12	65/50	57% fair	moderate	E						70		х		
1047 Alt	. Lot lest"			21.0						21.0		coast redwood	Sequoia sempervirens	80/12	70/60	68% fair	moderate	E								х		
1048 Alt	. Lot lest*			17.2						17.2		coast redwood	Sequoia sempervirens	60/12	70/60	67% fair	moderate	E								х		
1049 Alt	Lot lest"			43.9						43.9		coast redwood	Sequoia sempervirens	90/18	70/70	70% good	good	E								x		
1050 Alt	. Lot 'est"			26.8						26.8		coast redwood	Sequoia sempervirens	80/12	70/60	68% fair	good	w								x		
1051 Alt	. Lot lest"			27.4						27.4		coast redwood	Sequoia sempervirens	90/12	70/60	70% good	good	w								x		
1052 Alt	. Lot 'est"			23.6						23.6		coast redwood	Sequoia sempervirens	80/12	70/60	64% fair	good	w								x		
1053 Alt	. Lot lest"			23.2						23.2		coast redwood	Sequoia sempervirens	80/12	70/50	64% fair	good	s								x	Located on steep slope. Possible stability issues?	
1054 Alt	. Lot lest*			24.6						24.6		coast redwood	Sequoia sempervirens	80/10	70/50	65% fair	good	s								x	Located on steep slope. Possible stability issues?	
1055 Alt	. Lot lest"			27.8						27.8		coast redwood	Sequoia sempervirens	80/13	70/50	67% fair	good	s								x	Located on steep slope. Possible stability issues?	
1056 Alt	. Lot 'est"			25.9						25.9		coast redwood	Sequoia sempervirens	80/12	55/60	57% fair	poor to mod									х		
1057 Alt	. Lot lest"			27.0						27.0		coast redwood	Sequoia sempervirens	75/15	70/70	70% good	good									х		
1058 Alt	Lot 'est"			28.7						28.7		coast redwood	Sequoia sempervirens	75/18	70/70	70% good	good									х	S-trunk at 4-feet elevation.	
1059 Alt	. Lot 'est"			29.3	22.0					51.3		coast redwood	Sequoia sempervirens	80/18	70/60	68% fair	moderate to good							2		x		
1060 Alt	. Lot 'est"	х		7.6						7.6		white alder	Alnus rhombifolia	18/7	30/10	20% very poor	poor				х		lower trunk			х		
1061 Alt	Lot lest*			19.6						19.6		coast redwood	Sequoia sempervirens	60/12	70/55	63% fair	good	w								х	S-trunk form between zero and 15 feet.	

Tree Tag #	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 64" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupuro Ordinance (10.0* single stem, 20* multi, various specified mative and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems with Severe Bark Inclusion(s) (Note Helght)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
1062 Alt				9.9						9.9		coast redwood	Sequoia sempervirens	45/9	70/85	70% good	good	s								×		
1063 Alt	. Lot 'est"			19.4						19.4		coast redwood	Sequoia sempervirens	60/12	70/85	68% fair	moderate to good									x		
1064 Alt	. Lot 'est"			12.2						12.2		Shamel ash	Fraxinus uhdei	35/30	50/50	50% fair	poor to mod	w								x		
1065 Alt	. Lot 'est"			12.0						12.0		Shamel ash	Fraxinus uhdei	35/25	80/60	67% fair	good	sw	sw							x		
1066 Alt	. Lot 'est"			32.2						32.2		Italian stone pine	Pinus pinea	30/40	75/45	58% fair	good	s						4			Requires endweight reduction pruning. Note trunk measured at narrow point below standard height.	
1067 All	. Lot 'est"			25.7						25.7		Italian stone pine	Pinus pinea	25/35	65/40	52% fair	moderate	s	s					6			Requires endweight reduction pruning. Note trunk measured at narrow point below standard height.	
1068 Alt	. Lot 'est"			24.6						24.6		Italian stone pine	Pinus pinea	30/35	75/80	66% fair	good			12							Requires endweight reduction pruning. Note trunk measured at narrow point below standard height.	
1069 Alt	. Lot 'est"			24.2						24.2		Italian stone pine	Pinus pinea	30/35	75/80	68% fair	good	N		18							Requires endweight reduction pruning. Note trunk measured at narrow point below standard height.	
1070 Alt	. Lot lest"	х		15.4						15.4		Monterey pine	Pinus radiata	20/20	30/20	25% very poor	poor	s					1			х		
1071 Alt	. Lot 'est"			9.0						9.0		honey locust	Gleditsia triacanthos	25/18	35/40	37% poor	poor									х		
1072 Alt	. Lot 'est"			8.3						8.3		honey locust	Gleditsia triacanthos	25/15	40/25	33% poor	poor	w								х		
1073 Alt	. Lot 'est"			8.9						8.9		honey locust	Gleditsia triacanthos	25/20	40/40	40% poor	poor									х		
1074 Alt	. Lot 'est"			8.2						8.2		honey locust	Gleditsia triacanthos	25/20	40/40	40% poor	poor									х		
1075 Alt	. Lot 'est"	х		7.6						7.6		evergreen pear	Pyrus kawakamii	16/13	25/25	25% very poor	very poor	w								х	Fireblight infection	
1076 Alt	. Lot 'est"	х		8.8						8.8		evergreen pear	Pyrus kawakamii	20/20	25/25	25% very poor	very poor		s							х	Fireblight infection	
1077 Alt	. Lot 'est"			12.9						12.9		evergreen pear	Pyrus kawakamii	30/30	30/40	35% poor	moderate									х	Fireblight infection	
1078 All	. Lot 'est"			9.2						9.2		honey locust	Gleditsia triacanthos	22/25	65/80	63% fair	moderate									x		

Tree Tag #	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cupuro Ordinance (10.0* single stem, 20* multi, various specified mative and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-10% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spiliout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codominant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
1079 Alt				6.7						6.7		honey locust	Gleditsia triacanthos	18/15	65/55	60% fair	moderate									×		
1080 Alt	. Lot 'est"			8.5						8.5		honey locust	Gleditsia triacanthos	25/20	65/60	63% fair	moderate									x		
1081 Alt	. Lot 'est"			19.8						19.8		Italian stone pine	Pinus pinea	30/40	80/70	75% good	good		E								Will need endweight reduction pruning if retained.	
1082 Alt	. Lot 'est"			32.8						32.8		Italian stone pine	Pinus pinea	35/30	80/60	67% fair	good	s						15			Will need endweight reduction pruning if retained. Note: measured at 2 feet elevation.	
1083 Alt	. Lot 'est"			22.1						22.1		Italian stone pine	Pinus pinea	30/30	80/65	69% fair	good	N	N								Will need endweight reduction pruning if retained.	
1084 Alt	. Lot 'est"			23.9						23.9		Italian stone pine	Pinus pinea	25/25	75/45	55% fair	good	s						4			Note: measured at 3 feet elevation.	
1085 Alt	. Lot 'est"			18.4						18.4		Italian stone pine	Pinus pinea	28/30	80/50	65% fair	good	s						4			Note: measured at 3 feet elevation.	
1086 Alt	. Lot 'est"			17.6						17.6		Italian stone pine	Pinus pinea	30/25	80/65	75% good	good										S-trunk form.	
1087 Alt	. Lot 'est"			4.4						4.4		(dead standing tree)	(dead standing tree)	13/4	0/0	0% dead										х		
1088 Alt	. Lot 'est"			7.0	7.0	6.5				20.5		coast redwood	Sequoia sempervirens	25/10	80/80	80% good	good									х		
1089 Alt	. Lot 'est"			7.5						7.5		coast redwood	Sequoia sempervirens	25/10	80/80	80% good	good									х		
1090 Alt	. Lot 'est"			4.5						4.5		coast redwood	Sequoia sempervirens	18/8	80/80	80% good	good									х		
1091 Alt	. Lot 'est"			12.5						12.5		coast redwood	Sequoia sempervirens	30/10	70/70	70% good	good									х		
1092 Alt	. Lot 'est"			4.7	4.1					8.8		coast redwood	Sequoia sempervirens	20/13	80/80	80% good	good									х		
1093 Alt	. Lot 'est"			5.7	5.3					11.0		coast redwood	Sequoia sempervirens	25/12	80/80	80% good	good									х		
1094 Alt	. Lot 'est"			13.4						13.4		coast redwood	Sequoia sempervirens	30/11	70/60	66% fair	moderate									х		
1095 Alt	. Lot 'est"	×		42.0						42.0		Italian stone pine	Pinus pinea	25/30	80/0	20% very poor	good										Trunk diameter estimated. Tree has failed structurally, and is lying on the ground.	

Tree Tag # To be Removed Per	Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (In.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (142+3+4+5)	*Protected Tree" per City of Cupus of Cupus of Cupus no Ordinance (10.0** single stem, 20** multi, various specified mative and non-native specifies)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Ratings (0-100% each)	Over all Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Burled Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems Will Sovere Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, prumed, declining, irrigation regime, etc.)
1096 Alt	Lot est*			31.8						31.8		Italian stone pine	Pinus pinea	25/25	80/55	64% fair	good	N	N								Trunk measured at 2 feet elevation.	
1097 Alt	Lot est"	х		13.2						13.2		tulip tree	Liriodendron tulipifera	30/12	25/25	25% very poor	very poor									х		
1098 Alt	Lot est*	?		12.6						12.6		tulip tree	Liriodendron tulipifera	25/10	40/30	30% poor	poor									х		
1099 Alt	Lot est"			27.9						27.9		Italian stone pine	Pinus pinea	35/45	85/55	70% good	good	sw	sw	20							Needs endweight reduction pruning.	
1100 Alt	Lot est*			26.0						26.0		Italian stone pine	Pinus pinea	20/35	0/0	0% dead											Trunk diameter estimated. Tree has failed structurally, and is lying on the ground as dead wood.	
1101 Alt	Lot est*	?		18.9						18.9		Italian stone pine	Pinus pinea	40/30	80/50	50% fair	good	NW	NW								described the second of the se	
1102 Alt	Lot est*	?		38.3						38.3		Italian stone pine	Pinus pinea	40/28	80/47	50% fair	good	sw	SW								Same as 'notes' for tree #1101. Trunk diameter measured at 1 foot elevation.	
1103 Alt	Lot est*	x		24.7						24.7		Italian stone pine	Pinus pinea	30/25	60/0	10% very poor	good	s	s								Same as 'notes' for tree #1101. Trunk diameter measured at 2 feet elevation.	
1104 Alt	Lot est*	x		28.0						28.0		Italian stone pine	Pinus pinea	20/20	0/0	0% dead											Same as 'notes' for tree #1101. Trunk diameter measured at 2 feet elevation.	
1105 Alt	Lot est"			5.0	4.5					9.5		river red gum	Eucalytpus camaldulensis	30/10	90/45	60% fair	good							1		х	Recommend remove one of two codominant mainstems at the fork at 1 foot elevation.	
1106				8.0						8.0		souithern magnolia	Magnolia grandiflora	20/16	50/50	50% fair	poor to mod									х	Roots damaged on grade from mowing activities.	
1107				6.8						6.8		souithern magnolia	Magnolia grandiflora	20/16	50/50	50% fair	poor to mod									х	Roots damaged on grade from mowing activities.	
1108				9.0						9.0		souithern magnolia	Magnolia grandiflora	23/20	55/55	55% fair	poor to mod									х	Roots damaged on grade from mowing activities.	
1109	K			41.8						41.8		Shamel ash	Fraxinus uhdei	65/60	80/60	73% good	good		E							х	Roots damaged from recent curb replacement activities.	
1110	ĸ			10.5						10.5		Shamel ash	Fraxinus uhdei	35/20	30/30	30% poor	poor	w			×	gr		6		х	Roots damaged from recent curb replacement activities.	
1111	ĸ			14.7						14.7		Shamel ash	Fraxinus uhdei	40/20	30/30	30% poor	poor	E			x	gr		10		х	Roots damaged from recent curb replacement activities.	
1112	ĸ			26.6						26.6		Shamel ash	Fraxinus uhdei	65/35	60/60	60% fair	moderate	SW				gr				x	Roots damaged from recent curb replacement activities.	

Tree Tag#	To be Removed Per Current Site Plan	Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.) Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.) Adjusted Trunk Diame ter Inches @ 54" A.G. (1+2+3+4+5)	*Protected Tree" per City of Cuperino Ordinance (10.0* single stem, 20* mutil, writous specified mathy eard non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Very Poor, Poor, Mod, Good, Exc.)	Lopsided Canopy (Direction Noted)	Trunk Lean (Direction Noted)	Historical Stem Spilitout Evidence (Note Elevation)	Topped or Severely Pruned in Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Stem Decay (Note Elevation)	Codomi nant Mainstems with Severe Bark Inclusion(s) (Note Height)	Root Extension Restricted in Planter	Soil Moisture Deficit ("Drought Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
1113	x			33.5				33.5		Shamel ash	Fraxinus uhdei	70/70	65/55	60% fair	moderate			35		gr				х	High risk situation: Split "hanger" limb noted at 35 feet elevation on north side of canopy needs to be removed. High risk!	
1114				19.2				19.2		Shamel ash	Fraxinus uhdei	35/35	85/65	75% good	good	s	s		x					х		
1115		(monitor the girdling root situation)		22.9				22.9		Shamel ash	Fraxinus uhdei	35/35	80/30	45% poor	good	E	E			serious girdling root				x	Roots damaged on grade. Note severe girdling root situation.	
1116				24.2				24.2		Shamel ash	Fraxinus uhdei	40/40	80/55	65% fair	good				x	gr				х	Roots damaged on grade from mowing activities.	
1117				24.7				24.7		Shamel ash	Fraxinus uhdei	45/40	40/30	35% poor	poor		E				throughout canopy			х	Roots damaged on grade from mowing activities.	
1118				23.0				23.0		Shamel ash	Fraxinus uhdei	55/40	60/50	55% fair	moderate	w	w		x					x	Roots damaged on grade from mowing activities.	
1119		×		18.6				18.6		Shamel ash	Fraxinus uhdei	45/20	15/15	15% very poor	very poor				x	gr					Roots damaged on grade from mowing activities. Recommend remove tree due to very poor overall condition.	
1120				26.7				26.7		Shamel ash	Fraxinus uhdei	50/40	75/65	70% good	good	N	E		x					х	Roots damaged on grade from mowing activities.	
1121				19.7				19.7		Shamel ash	Fraxinus uhdei	50/35	80/65	76% good	good	w	w		x					х	Roots damaged on grade from mowing activities.	
1122				21.4				21.4		Shamel ash	Fraxinus uhdei	60/35	40/40	40% poor	poor	w			x		0 to 2			х	Roots damaged on grade from mowing activities. Vehicle collision caused damage to trunk between zero and 2 feet elevation.	
1123				18.5				18.5		Shamel ash	Fraxinus uhdei	55/30	65/55	58% fair	moderate	w			х	gr				х	Roots damaged on grade from mowing activities. Root plate upper surfaces are exposed.	
1124				15.5				15.5		Shamel ash	Fraxinus uhdei	30/18	40/30	35% poor	poor	w			х	gr				х	Roots damaged on grade from mowing activities. Root plate upper surfaces are exposed.	
1125 Notes:				13.8				13.8		Shamel ash	Fraxinus uhdei	40/20	50/30	40% poor	moderate	w	s		×	serious girdling root				х	Roots damaged on grade from mowing. Note severe girdling root situation.	

1. On-site survey trees include all existing specimens of tree species with at least one (1) mainstem measuring greater than or equal to 4 inches diameter at 4.5 feet above grade.

2. Trees were tagged with professional grade round-shaped aluminum tags numbering "1" through "999". For alternate lot west, and for N. Wolfe Road median trees, the tag run went over #999, which is the cutoff point for round tags. Tags numbering #1,000 and above are racetrack-shaped.

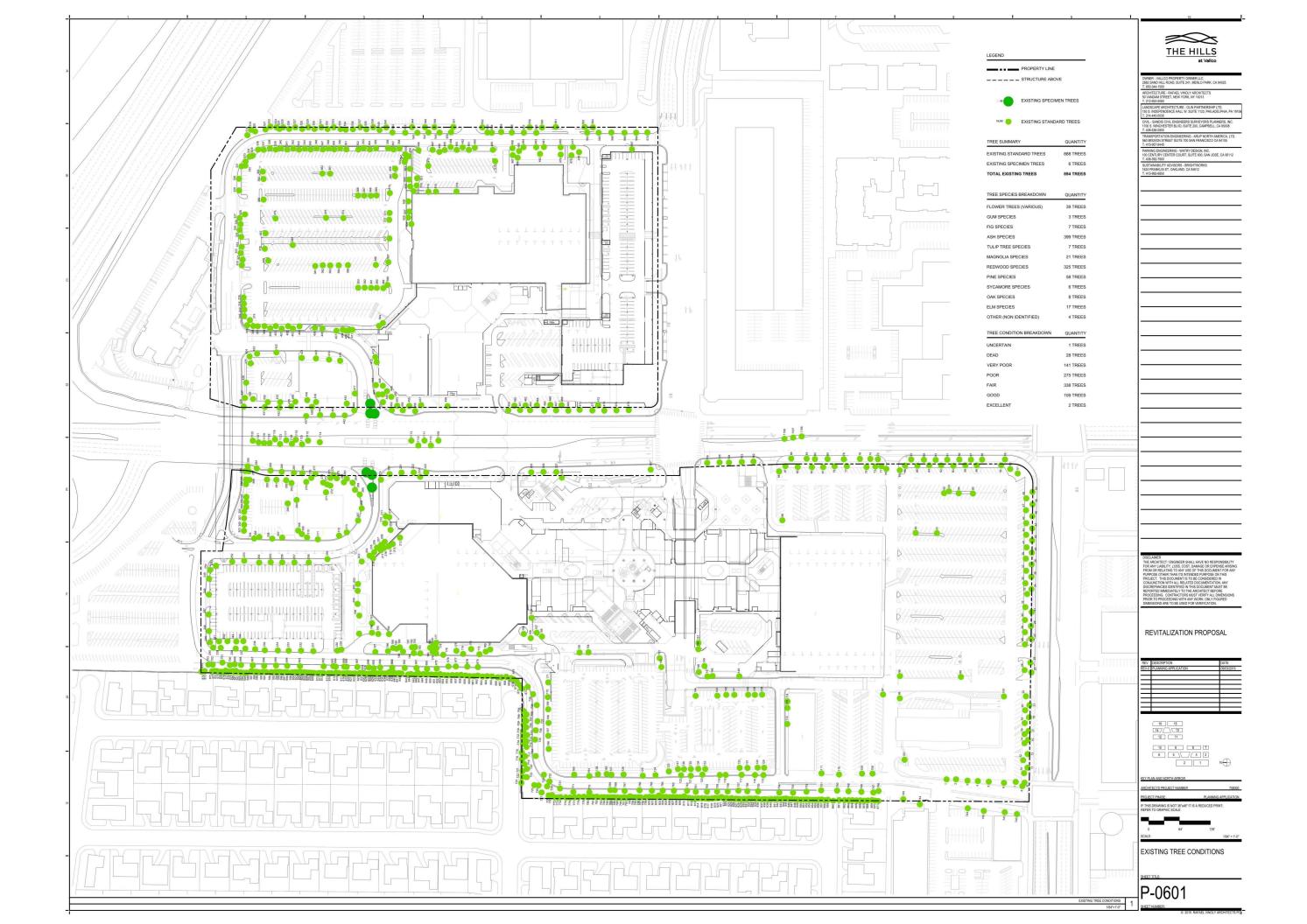
3. Heights of some trees were measured using a Nikon 550 Forestry Pro hypsometer. Diameters of all trees were measured at 4.5 feet or at a narrow point, using a forestry D-tape that converts circumference to an average diameter.

R2F. Root protection zone fence, chan link, with 2" dameter iron posts driven As' into the ground, 6 to 8 feet on center max. spacing.

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Sequoia sempervirens Coast Redwood¹

Edward F. Gilman and Dennis G. Watson²

INTRODUCTION

Sequoia sempervirens, the Coast Redwoods of California, are the tallest trees in the world (Fig. 1). They can vary greatly when grown from seed, but varieties are available now which have been vegetatively propagated and they retain true characteristics. Redwoods grow three to five feet per year and are remarkably pest-free. They live to be many hundreds of years old; some live to several thousand years. Bark is particularly beautiful, turning a bright orange on older trees. It may grow poorly in zones 9 and 10 in Florida.

GENERAL INFORMATION

Scientific name: Sequoia sempervirens

Pronunciation: see-KWOY-uh sem-per-VYE-renz

Common name(s): Coast Redwood

Family: *Taxodiaceae*

USDA hardiness zones: 7 through 10A (Fig. 2)

Origin: native to North America

Uses: screen; specimen; no proven urban tolerance **Availability:** grown in small quantities by a small

number of nurseries

DESCRIPTION

Height: 60 to 120 feet **Spread:** 25 to 35 feet

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more

or less identical crown forms Crown shape: pyramidal Crown density: moderate

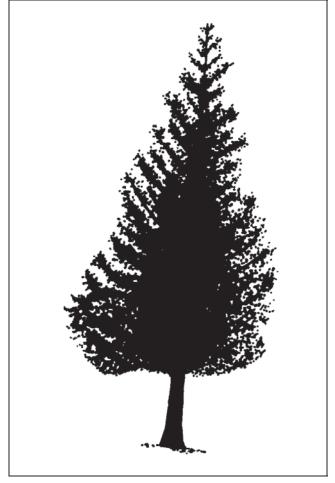


Figure 1. Mature Coast Redwood.

Growth rate: medium

Texture: fine

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Figure 2. Shaded area represents potential planting range.

Foliage

Leaf arrangement: alternate; spiral

Leaf type: simple Leaf margin: entire

Leaf shape: needle-like (filiform)

Leaf venation: none, or difficult to see; parallel **Leaf type and persistence:** evergreen; needle leaf

evergreen

Leaf blade length: less than 2 inches

Leaf color: green

Fall color: no fall color change Fall characteristic: not showy

Flower

Flower characteristics: inconspicuous and not

showy

Fruit

Fruit shape: oval; round Fruit length: .5 to 1 inch Fruit covering: dry or hard

Fruit color: brown

Fruit characteristics: does not attract wildlife; inconspicuous and not showy; no significant litter problem

Trunk and Branches

Trunk/bark/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; should be grown with a

single leader; very showy trunk; no thorns

Pruning requirement: needs little pruning to develop

a strong structure **Breakage:** resistant

Current year twig color: brown; green Current year twig thickness: medium; thin

Wood specific gravity: 0.35

Culture

Light requirement: tree grows in part shade/part sun;

tree grows in full sun

Soil tolerances: clay; loam; sand; slightly alkaline;

acidic; occasionally wet; well-drained **Drought tolerance:** moderate

Other

Roots: surface roots are usually not a problem **Winter interest:** tree has winter interest due to unusual form, nice persistent fruits, showy winter

trunk, or winter flowers

Outstanding tree: not particularly outstanding Invasive potential: little, if any, potential at this time

Ozone sensitivity: tolerant

Verticillium wilt susceptibility: not known to be

susceptible

Pest resistance: long-term health usually not

affected by pests

USE AND MANAGEMENT

Redwood maintains a pyramidal form and dark green foliage throughout the year. Planted in a row 15 to 20 feet apart they make a nice screen. In areas outside California and the Northwest, it is probably best used occasionally as a novelty specimen.

Redwood is tolerant of flooding, making best growth along stream banks and flood plains. Irrigation helps maintain a vigorous tree in other sites. Allow plenty of soil space for proper development.

Propagation is possible from seed and through vegetative propagation.

Pests

Few insects were noted for Sequoia species.

Diseases

No diseases are of major concern.

Sequoia sempervirens is resistant to oak root fungus.