



Corporate Headquarters
1500 North Mantua Street
P.O. Box 5193
Kent, OH 4240-5193
330-673-5685
Toll Free 1-800-828-8312
Fax: 330-673-0860

Western Region Office
5955 Capistrano Ave.
Atascadero, CA 93422
831-291-2245
Sabrina.huey@davey.com

ARBORIST REPORT AND TREE PROTECTION PLAN

151 Calderon Ave., Mountain View CA 94041

November 2024 - Updated July 2025





Arborist Report & Tree Protection Plan for
151 Calderon Ave.,
Mountain View, California 94041

Prepared for:

Berry Bowen
Villa Homes
bbowen@villahomes.com
(404)-922-1562

November 2024 -Update July 2025

Prepared by:

Davey Resource Group
A Division of The Davey Tree Expert Company
1500 North Mantua Street
Kent, OH 44240

Contact:

Sabrina Huey
ISA Arborist #WE-14060A
TRAQ Qualified
www.daveyresourcegroup.com

Notice of Disclaimer

Inventory data provided by Davey Resource Group is based on visual recording at the time of inspection. Visual records do not include testing or analysis and do not include aerial or subterranean inspection. Davey Resource group is not responsible for discovery or identification of hidden or otherwise non-observable risks. Records may not remain accurate after inspection due to variable deterioration of inventoried material and site disturbance.

Davey Resource Group provides no warranty with respect to the fitness of the urban forest for any use or purpose whatsoever or for future outcomes of the inventoried trees.

Contents

Summary	3
Introduction	3
Background	3
Assignment	4
Limits of the Assignment	4
Purpose and Use of Report	4
Observations	4
Methods	4
Site Observations	4
Root Zone Calculations	5
Conclusion and Recommendations	6
Appendix A – Location Map	8
Appendix B – Tree Photos	12
Appendix C – Tables	27
Table 1. Tree Inventory and Root Zones	27
Table 2. Condition Assessment November 2024 - Updated May 2025	28
Table 3. Tree Appraisal Values	30
Appendix D – Tree Appraisal Calculation Methodology	31

Summary

In October 2024, Davey Resource Group (DRG) was contracted by Berry Bowen of Villa Homes to conduct a tree inventory and develop a tree protection plan for the trees in the area of impact on the property at 151 Calderon Ave. in Mountain View, CA. The request was made to assess the current condition of the trees and establish a protection plan based on the findings. In May and July 2025, DRG was contracted to conduct another site visit due to a change of plans.

On November 8, 2024, an International Society of Arboriculture (ISA) Certified Arborist (Sabrina Huey, #WE-14060A) from Davey Resource Group evaluated seventeen (17) trees on the property. On May 16, 2025, an ISA-certified Arborist from Davey Resource Group conducted another evaluation of an additional eight (8) trees on the property. On July 17, 2025, an additional two (2) trees were evaluated. The majority of these trees may be impacted by the development. The trees were assessed by their location, size, current condition, health, structure, and form. The current site plan was used to estimate the construction footprint in relation to the critical root zones (CRZ) of the trees to help guide construction and reduce potential impacts on the trees. Current plans include the installation of six (6) 665 square foot ADUs. Tree information is summarized as follows:

- Twenty-seven (27) trees were assessed, consisting of six (6) species: camphor (*Cinnamomum camphora*), London plane (*Platanus x hispanica*), Southern magnolia (*Magnolia grandiflora*), privet (*Ligustrum lucidum*), coast redwood (*Sequoia sempervirens*), and coast live oak (*Quercus agrifolia*).
- Twenty-five (25) trees fall under the definition of Heritage tree status according to the [City of Mountain View Ordinance Chapter 32.23](#).
 - Eight (8) of these trees will need to be removed for the ADU installation, and a permit is required for the removal of these trees.
- Nineteen (19) trees may be retained; tree protection measures are provided in this report.
- The inventory encompasses all trees on the property within or adjacent to the project site, including trees that may be impacted by the proposed construction (any trees with construction occurring within the drip line).
- Twenty-two (22) trees were in fair condition, and five (5) trees were in poor condition.
- Tree heights ranged from 22 to 60 feet.
- Tree diameters at four and a half feet above grade/breast height (DBH) ranged from 7 to 61 inches.

This report focuses on tree protection recommendations for tree preservation and provides the CRZ's and SRZ's of trees to be retained for planning purposes. DRG has provided general site preservation recommendations based on the provided construction plans. Arborist monitoring of the trees during construction is required whenever work is performed within the drip line of retained trees, and trenching within the driplines must be done by hand, hydro excavation, or with pneumatic air spade excavation tools. The trees identified for preservation should be monitored by a Certified Arborist at the end of construction and ongoing as needed.

Introduction

Background

Current plans are for new construction at 151 Calderone Ave. in Mountain View of six new pre-fabricated detached units (ADUs) and their foundations. The proposed project has the potential to impact several trees on the property. All trees over 4 inches in trunk diameter on the property with construction or excavation occurring within five (5) feet of the drip line were assessed and evaluated for impacts, and to determine if any trees meet the criteria for Heritage tree status as defined by the City of Mountain View.

Assignment

The arborist visually assessed each tree on the site within or adjacent to the project area, and the required tree data were collected using a portable tablet device. Following data collection, specific tree preservation plan elements were calculated that identified each tree's critical and structural root zones (CRZ and SRZ) to better ensure survivability during the planned development. This report establishes the condition of the trees and canopy within the project area. The trees were also photo documented so that any changes in condition can be evaluated if needed. Tree appraisal values are also provided in this report.

Limits of the Assignment

Many factors can limit specific and accurate data when performing evaluations of trees, their conditions, and the potential for failure or response to site disturbances. No soil or tissue testing was performed. All observations were made from the ground on November 8, 2024, May 16, 2025, and on July 17, 2025, and no soil excavation to expose roots was performed. The most recent development plans were available to assist in determining potential construction impacts. The determinations and recommendations presented here are based on current data and conditions that existed at the time of the evaluation and cannot be a predictor of the ultimate outcome for the evaluated trees in the future. No physical inspection of the upper canopy, sounding, resistance drilling, or other technologies were used in the evaluation of the trees. The site plans that were referenced on-site were sent to the arborist dated October 25, 2024, titled Logistics plan (site 2). The newest plan set that was referenced on site was dated January 31, 2025, titled "Proposed Site Plan". The most updated plan set that were referenced in the report was dated May 30, 2025, titled "Proposed Site Plan".

Purpose and Use of Report

The purpose of this report is to provide a summary inventory of all trees within the project area of impact, including an assessment of the current condition and health, as well as providing a tree protection plan for all evaluated trees/canopies that may be impacted by construction plans. The findings in this report can be used to make informed decisions on design planning and to guide long-term care of the trees. This report and detailed tree protection plan can also be submitted to the City of Mountain View for permitting purposes if necessary.

Observations

Methods

Only a visual inspection was used to develop the findings, conclusions, and recommendations found in this report. Data collection included measuring the trunk diameter of significant trees at approximately 54 inches above grade (DBH), height estimation, a visual assessment of tree condition, structure, and health, and a photographic record. A rating percentage (0-100%) was assigned for each tree's health, structure, and form, and the lowest percentage was used as the overall tree condition.

Site Observations

The project site is located in the City of Mountain View at an apartment complex. There are multiple buildings throughout the property, with two existing pools, an existing tennis court, picnic tables, and a basketball court. The site has existing parking lots throughout the property. The project site is located near parking spaces, and the area is generally flat. The location is west of Hwy 85 and north of Hwy 237. The parcel is privately owned with existing structures and landscape trees throughout the property. The land is mostly level and appears to have an irrigation

system installed. All trees in proximity to the project site that may be affected and impacted by the construction were assessed.

Tree Observations

Twenty-seven (27) trees were assessed within the project area, comprising six (6) species: camphor (*Cinnamomum camphora*), London plane (*Platanus × hispanica*), southern magnolia (*Magnolia grandiflora*), privet (*Ligustrum lucidum*), coast redwood (*Sequoia sempervirens*), and coast live oak (*Quercus agrifolia*). The trees are all established, and tree condition ratings were: twenty-two (22) trees were in fair condition, and five (5) trees were in poor condition. Trunk diameters ranged from 7 inches to 61 inches. Tree heights ranged from 22 feet to 60 feet. Canopy spread ranged from 6 feet to 30 feet.

A map of tree locations can be found in Appendix A. Tree photographs can be found in Appendix B, and a complete Tree Inventory and Condition Assessment can be found in Appendix C.

Root Zone Calculations

The trunk diameters of trees are often used to determine the Critical Root Zone (CRZ). The CRZ is considered the ideal preservation area of a tree and is also referred to as the Tree Protection Zone (TPZ). It can be calculated by adding 1 foot of radius for every inch of trunk diameter measured at 4.5 feet from grade/breast height (DBH). For example, a tree with a DBH of 10 inches has a calculated CRZ radius of 10 feet from the trunk. The CRZ represents the typical rooting area required for tree health and survival. As this project is located in the City of Mountain View, this report uses the TPZ according to [Mountain View Municipal Code Chapter 32 Section 5.10](#) (listed in Table 1):

“The Tree Protection Zone (TPZ) for discretionary development projects is determined by the Project Arborist. The TPZ is typically calculated, at a minimum, to be the greater of:

- 6 feet, or
- Out to the dripline of the tree (the edge of the canopy), or
- Calculated by multiplying each tree’s diameter at 4.5 feet above existing grade (DBH) by a factor of one (1) to determine the diameter, in feet, of the area above and below ground to be protected. For example, a tree with trunk diameter of 20 inches would have TPZ fencing installed at least 10 feet from the trunk (diameter=20 feet, radius=10 feet).”

Some impacts (25% or less) within this zone are typically acceptable for average to good condition trees with basic mitigation/stress reduction measures. Construction activities should not occur within the TPZ of any tree to be retained. This includes but is not limited to the storage of materials, parking of vehicles, contaminating soil by washing out equipment (concrete, paint, etc.), or changing soil grade.

The Structural Root Zone (SRZ) was calculated using a commonly accepted method established by Dr. Kim Coder in *Construction Damage Assessments: Trees and Sites*.¹ In this method, the root plate size (i.e. pedestal roots, zone of rapid taper area, and roots under compression) and limit of disruption based upon tree DBH is considered as a minimum distance that any disruption should occur during construction. Significant risk of catastrophic tree failure exists if structural roots within this given radius are destroyed or severely damaged. The SRZ is the area where minimal or no disturbance should occur without arborist supervision. The TPZ and SRZ for the surveyed trees are listed in Appendix B, Table 1.

¹ Dr. Kim D. Coder, University of Georgia June 1996

Conclusion and Recommendations

Based on visual evaluations and the impacts of the proposed development, several trees will have high impacts, and removal of these trees is recommended. The remaining trees have the potential to be impacted but may be retained following tree protection measures laid out below.

- Trees #1-2 were previously recorded based on the previous plans. Work is not to occur in this area, but tree protection fencing should still be installed to keep heavy machinery out of the root zones. The trees are expected to have no to low impacts. The tree protection fencing should have the trees grouped together along their driplines.
- Trees #3-5 are in the footprint or within 2 feet of the proposed ADUs. Impacts to the trees will be high. Removal of the trees is required. Permits are required for the removal of all three trees.
- Tree #6 is about 4 ft. from the proposed trenching. Impacts are expected to be high. Removal of the tree is recommended and a permit is required for the removal of the tree.
- Tree #7 is in the footprint of the proposed ADUs. Removal of the tree is required. A permit is required for the removal of the tree.
- Tree #8 is 8 and 12 feet from the proposed ADUs. Impacts to the tree are expected to be moderate. Tree protection fencing should be installed along the SRZ. This tree should be considered for removal regardless of construction. The tree is in overall poor condition. The tree has been lion-tailed, and the canopy has been excessively raised. If the client chooses to remove the tree, then a permit is required.
- Trees #9-10 are about 8 ft. from the utility paths. Impacts are expected to be low to moderate. Tree protection fencing should be installed to the furthest extent of the canopy of the tree and can only be moved when work is to occur within the TPZ. Due to the sensitive nature of working within the CRZ of trees to be retained, any excavation or grading within the TPZ must be performed with hand tools and supervised by a Certified Arborist to monitor and document any tree impacts. Any significant roots (roots 2 inches in diameter or larger) encountered should be cut cleanly and photo documented. If severed roots increase failure risk beyond the property owner's tolerance, the Arborist may recommend tree removal, and a permit would be required for the removal of these trees.
- Tree #11 is within 2 ft. of the proposed ADU and along the path of the utility lines. Impacts are expected to be high. Removal of the tree is recommended. A permit is required for the removal of the tree.
- Tree #12 was previously recorded based on the previous plans. As long as the basketball court is planned to be retained, then work is not to occur in this area, but tree protection fencing should still be installed at least 10 ft. from the fence to keep heavy machinery out of the root zone. If machinery must be under the canopy, plywood should be set on the ground, and machinery should remain on it to reduce soil compaction in the root zone. Impacts are expected to be low.
- Tree #13 is in fair condition and is about 6 ft. from the water tie-in and about 14 ft. from the proposed trenching. Impacts are expected to be low to moderate. Tree protection fencing should be installed to the furthest extent of the existing island where the tree is located.
- Trees #14-16 are trees in fair condition. The trees are located within planters along one of the existing pools. The trees are about 2 ft. from the proposed trenching. Exploratory trenching with hand tools should be done to determine the root quantity and size in the area for the trenching. Alternatively, the trench should be bored at 3 ft. or more below grade beneath the canopies; this would avoid impacting the structural roots. Impacts are expected to be moderate to high. Tree protection fencing should be installed to the furthest extent of the existing planter where the trees are located.
- Tree #17 was previously recorded based on the previous plans. Work is not to occur in this area.
- Trees #18-19 are in the footprint or within 2 feet of the proposed ADUs. Impacts to the tree will be high. Removal of the trees is required. Permits are required for the removal of both trees.
- Tree #20 is growing along the creekside of the Stevens Creek Rail. The tree is about 6 ft. from the fence, and the proposed ADU is about 2 ft. from the fence. Impacts are expected to be moderate. Since there is an existing fence, tree protection fencing should be installed along the dripline of the tree using orange snow fencing, and a 4-inch deep layer of wood chips should be placed within the fencing.
- Trees #21-25 were previously recorded based on the previous plans. Work is not to occur in these areas.

- Trees #26-27 are about 6 ft. from the utility paths. Impacts are expected to be moderate. Tree protection fencing should be installed to the furthest extent of the canopy of the tree and can only be moved when work is to occur within the TPZ. Exploratory trenching with hand tools should be done to determine the root quantity and size in the area for the trenching. Alternatively, the trench should be bored at 3 ft. or more below grade beneath the canopies; this would avoid impacting the structural roots. Due to the sensitive nature of working within the CRZ of trees to be retained, any excavation or grading within the TPZ must be performed with hand tools and supervised by a Certified Arborist to monitor and document any tree impacts. Any significant roots (roots 2 inches in diameter or larger) encountered should be cut cleanly and photo documented. If severed roots increase failure risk beyond the property owner's tolerance, the Arborist may recommend tree removal, and a permit would be required for the removal of these trees.

Additional tree preservation guidelines are as follows:

- TPZ fencing should be 6 feet in height, constructed of chain link fencing. The fencing may be moved within the dripline if directed by the on-site or City Arborist but cannot be moved to within 4 feet of the trunk. Fence posts should be 2-inch in diameter, galvanized, and installed 2 feet below grade. Posts may be movable (pier block) rather than below grade and may not be spaced more than 10 feet apart. Signs must be posted stating: "TREE PROTECTION FENCE - DO NOT MOVE OR REMOVE WITHOUT APPROVAL FROM CITY/PROJECT ARBORIST. NO STORING OF MATERIALS OR MACHINERY." The fence may not be moved without authorization from the planning and building director. Since this site has an existing chain link fence installed any grading within the existing fence should have an arborist on site to monitor for impacts.
- TPZ fencing must be in place before any equipment is on-site and must remain in place for the entirety of the project and only be removed, temporarily or otherwise, with the approval of a Certified Arborist while activities are directly supervised and replaced immediately after.
- Monitoring of the tree protection specifications by an ISA Certified Arborist or ASCA Registered Consulting Arborist is recommended at monthly intervals.
- No material shall be stored, nor concrete basins washed, or any chemical materials or paint stored within the TPZ of trees, and no construction chemicals or paint should be released into landscaped areas, as these can be toxic to trees and contaminate soil.
- After construction is complete, the property owner should monitor the trees for at least one year and contact a Certified Arborist to inspect if any lean, limb die-back, leaf drop, or foliage discoloration develops.

Appendix A – Location Map

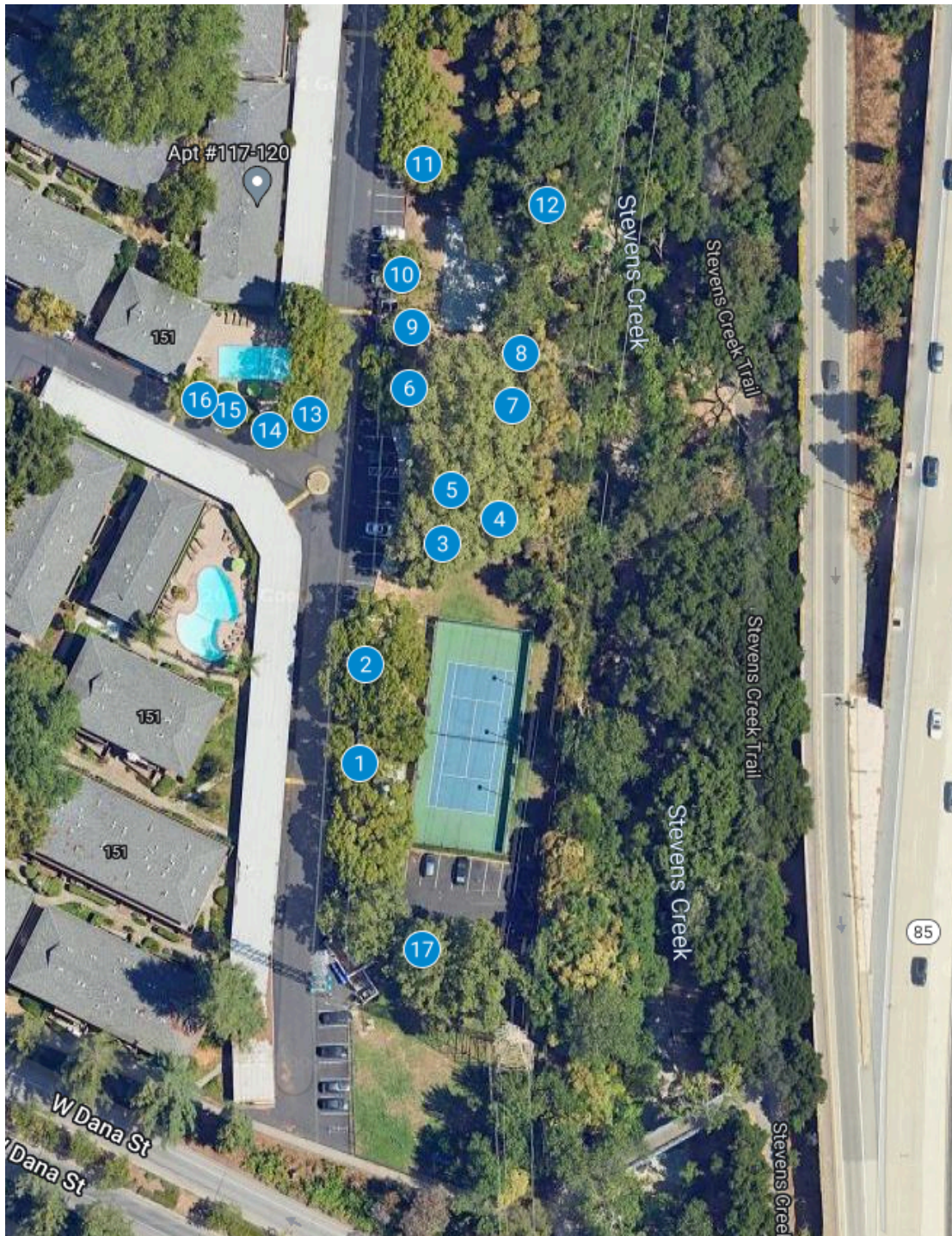


Image 1. Aerial view of the project site and tree locations from the first site visit.

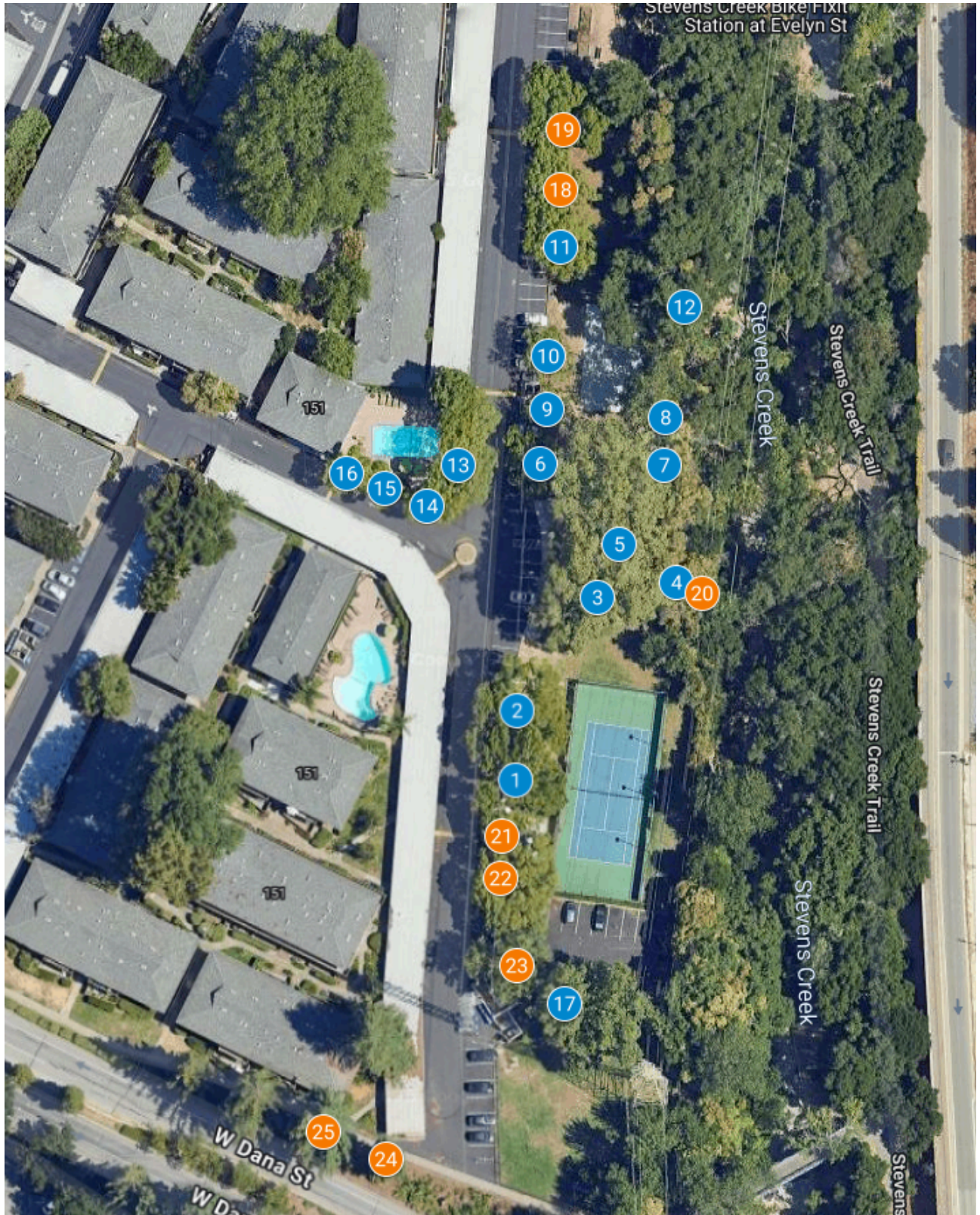


Image 2. Aerial view of the project site and tree locations from the second site visit. The first site visit is in blue and the second site visit is in orange.

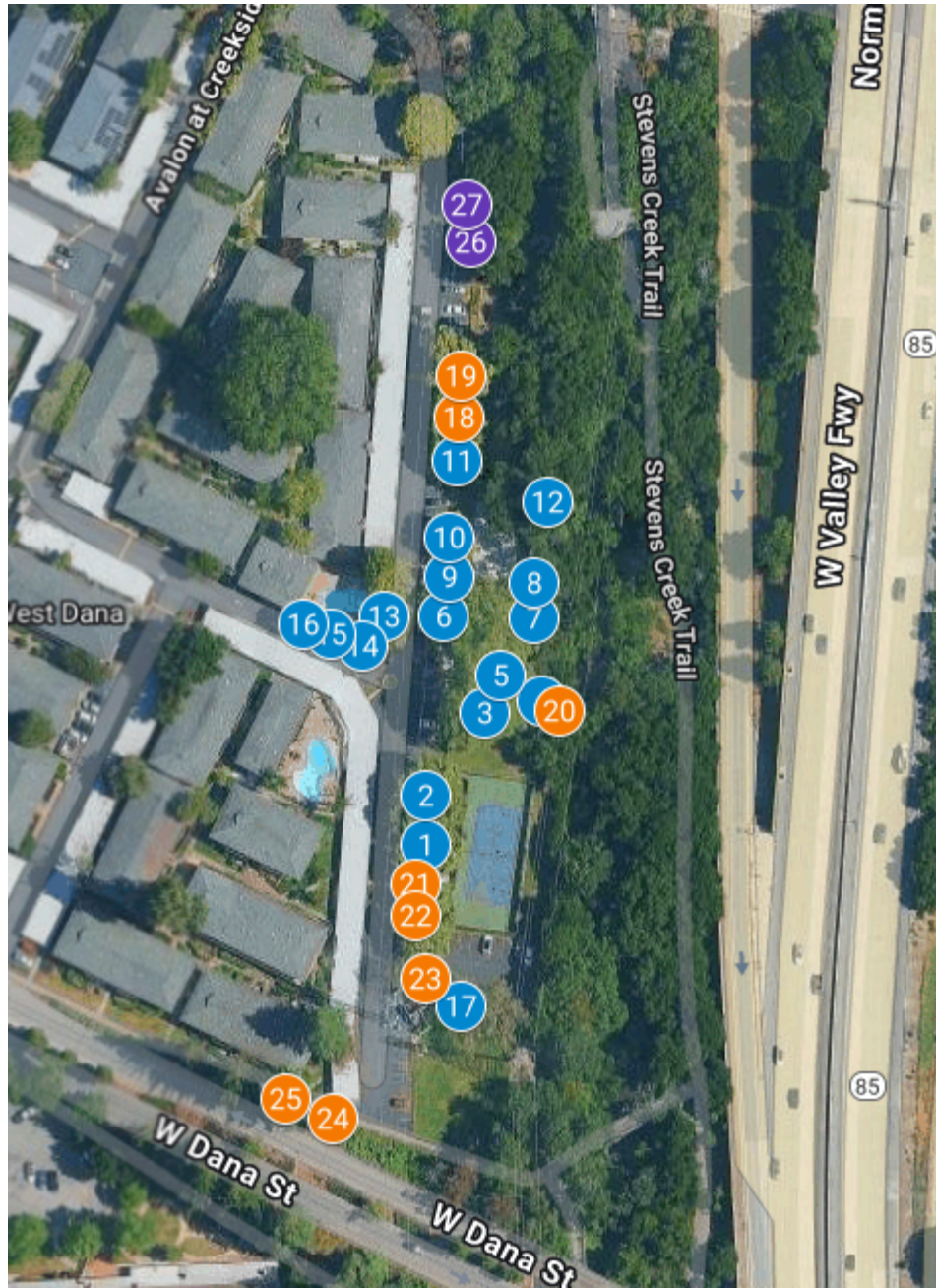


Image 3. Aerial view of the project site and tree locations from the third site visit. The first site visit is in blue and the second site visit is in orange, and the third site visit is in purple.



Image 4. Close up aerial view of the project site of trees #1-2, 17, 21-25.

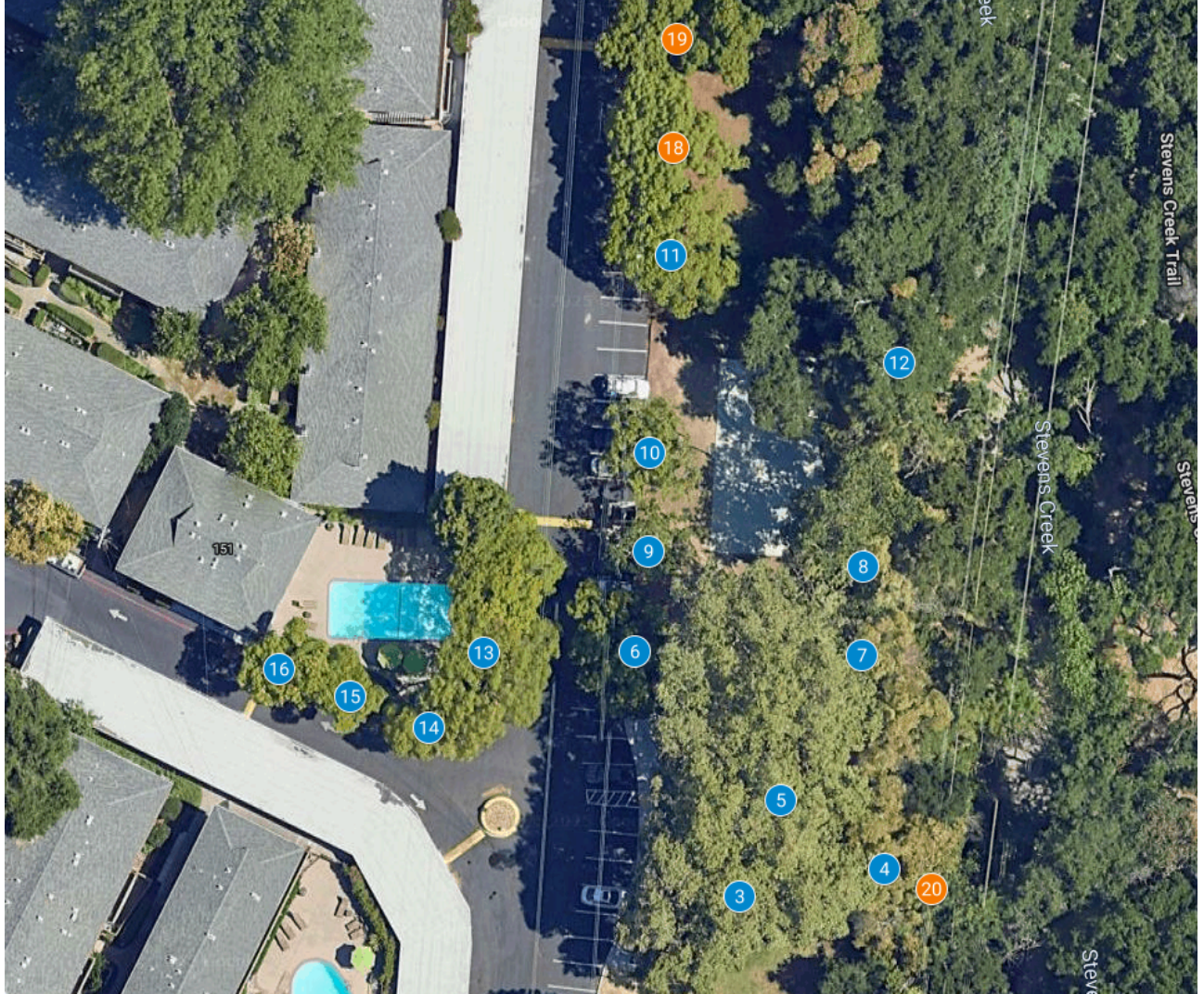


Image 5. Close up aerial view of the project site of trees #3-16, 18-20.

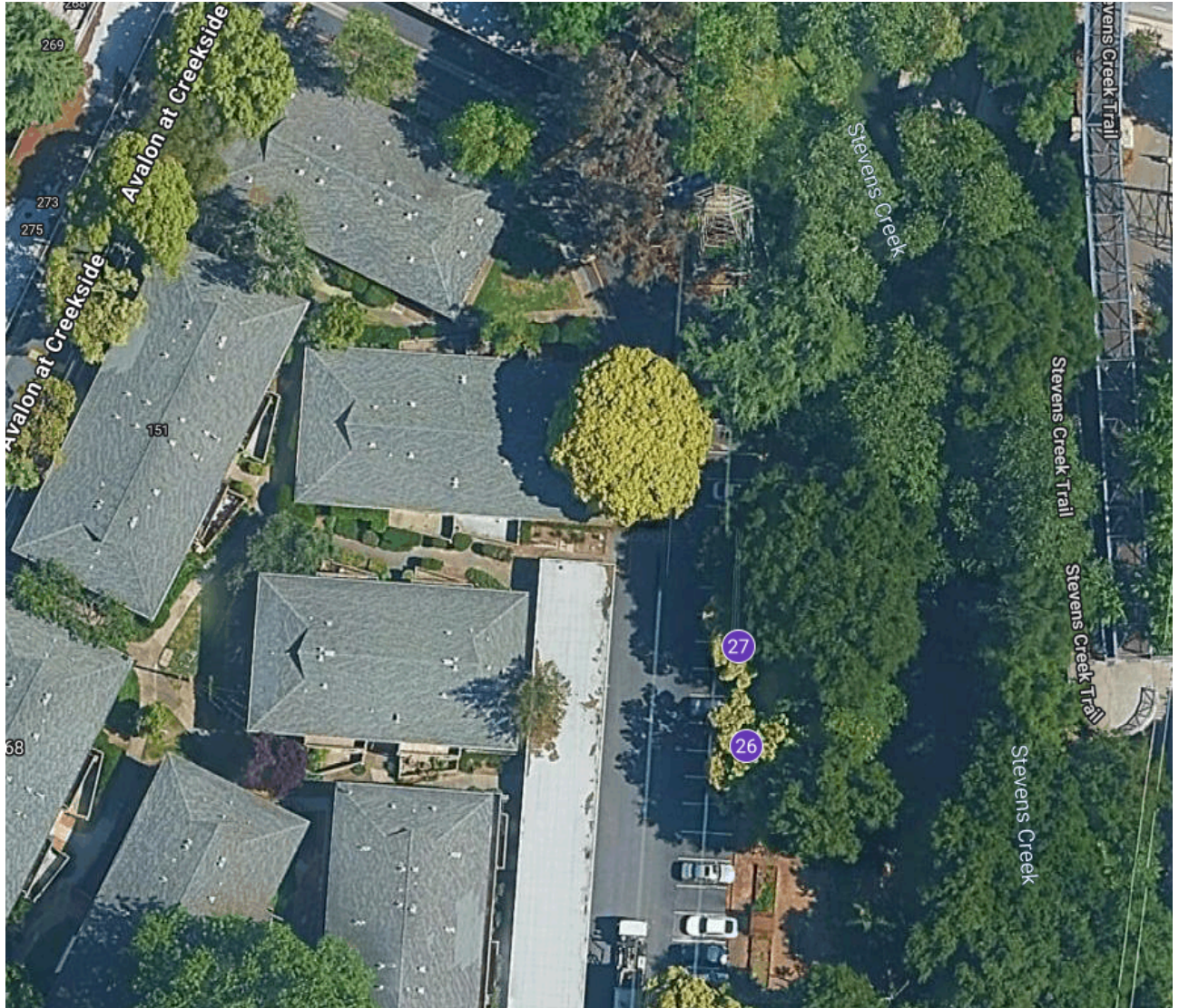


Image 6. Close up aerial view of the project site of trees #26-27.

Appendix B – Tree Photos

Additional photos available upon request



Photo 1. View of trees #3-5, all in fair condition.



Photo 2. Tree #12 is in fair condition and is a Heritage Tree.



Photo 3. A picture of trees #1-2, both of these trees are heritage trees. Both were previously recorded because of previous plans.



Photo 4. Close up on trunks of trees #3-5.



Photo 5. A full picture of tree #9 in poor condition.



Photo 6. A view of trees #7-8 in fair and poor condition.



Photo 7. A full view of tree #6 in fair condition.



Photo 8. A full view of tree #10 in fair condition. The tree is scheduled for removal, and a permit is required.



Photo 9. A full view of tree #11 in fair condition.



Photo 10. A view of tree #13 and tie-in for the water line.



Photo 11. A view of trees #15-16 in fair condition, about 2 ft. from the proposed trenching.



Photo 12. A view of tree #17 in fair condition, the tree was previously recorded due to previous plans.



Photo 13. A view of trees 24-25 along the edge of the walkway, the trees were previously recorded due to previous plans.



Photo 14. A view of trees 3-5, 7-8. Most of the ADUs are proposed to be located in this area.



Photo 15. A view of trees #11, 18-19. The rest of the ADUs are proposed to go in this area.



Photo 16. A view of tree #27 with the utility line about 6 ft away from the tree.

Appendix C – Tables

Table 1. Tree Inventory and Root Zones

Tree #	Stems	DBH (in.)	Common Name	Botanical Name	Ht (ft)	Canopy (ft)	SRZ (Radius in ft)	CRZ (Radius in ft)
1	1	34	Camphor	<i>Cinnamomum camphora</i>	35	22	10	34
2	1	61	Camphor	<i>Cinnamomum camphora</i>	50	28	13	61
3	1	21	London plane	<i>Platanus × hispanica</i>	40	20	9	21
4	1	36	London plane	<i>Platanus × hispanica</i>	50	28	10	36
5	1	18	London plane	<i>Platanus × hispanica</i>	50	20	8	18
6	1	31	Camphor	<i>Cinnamomum camphora</i>	30	18	10	31
7	1	40	London plane	<i>Platanus × hispanica</i>	50	30	11	40
8	1	16	London plane	<i>Platanus × hispanica</i>	40	6	8	16
9	1	12	Southern magnolia	<i>Magnolia grandiflora</i>	30	12	7	12
10	1	28	Camphor	<i>Cinnamomum camphora</i>	30	12	10	28
11	1	22	Camphor	<i>Cinnamomum camphora</i>	35	18	9	22
12	1	34	Coastal live oak	<i>Quercus agrifolia</i>	35	30	10	34
13	1	28	Camphor	<i>Cinnamomum camphora</i>	35	16	10	28
14	1	13	Camphor	<i>Cinnamomum camphora</i>	22	6	7	13
15	1	15	Camphor	<i>Cinnamomum camphora</i>	28	10	8	15
16	1	16	Camphor	<i>Cinnamomum camphora</i>	28	10	8	16
17	1	18	London plane	<i>Platanus × hispanica</i>	40	18	8	18
18	1	23	Camphor	<i>Cinnamomum camphora</i>	35	20	10	23
19	2	23, 24	Camphor	<i>Cinnamomum camphora</i>	35	26	15	33
20	1	7	Privet	<i>Ligustrum lucidum</i>	30	10	3	7
21	1	35	Camphor	<i>Cinnamomum camphora</i>	35	18	16	35
22	1	35	Camphor	<i>Cinnamomum camphora</i>	40	26	16	35
23	1	17	London plane	<i>Platanus × hispanica</i>	40	18	8	17
24	1	30	Coast redwood	<i>Sequoia sempervirens</i>	60	14	14	30
25	1	28	Coast redwood	<i>Sequoia sempervirens</i>	60	18	13	28
26	1	15.5	Camphor	<i>Cinnamomum camphora</i>	25	10	8	16
27	1	18	Camphor	<i>Cinnamomum camphora</i>	30	8	8	18

Table 2. Condition Assessment November 2024 - Updated July 2025

80-100% - Good; 51-79% - Fair; 30-50% - Poor; 1-29% - Critical; 0 - Dead

Tree #	Common Name	Health (%)	Structure (%)	Form (%)	Heritage Tree (Y/N)	Proposed for Removal (Y/N)	Notes
1	Camphor	75	60	40	Y	N	One sided from the shading of other trees. Lean. The tree was previously recorded and should not be affected by construction. (Tag 206)
2	Camphor	60	60	60	Y	N	Previously topped, large deadwood throughout the canopy. The tree was previously recorded and should not be affected by construction. (tag 205)
3	London plane	60	55	60	Y	Y	One sided from shading, lean. The tree is 2 ft from adu, along the path of utility trenching. (293)
4	London plane	60	60	60	Y	Y	The tree is about 2-4 ft away from the ADU and away from the path of the utility lines. (291)
5	London plane	55	60	60	Y	Y	Large deadwood through the canopy. The tree is in the footprint of the proposed ADUs. (202)
6	Camphor	75	75	60	Y	Y	Small deadwood throughout the canopy, The tree is about 4 ft away from the utility lines. (197)
7	London plane	60	60	60	Y	Y	In the footprint of the proposed ADUs.
8	London plane	40	40	40	Y	N	Lion tailed, small canopy, deadwood throughout the canopy, and raised canopy. The tree is about 8 and 12 ft away from the proposed ADUs. (198)
9	Southern magnolia	50	60	60	N	N	Signs of stress, dark staining on the trunk. The tree is about 8 ft away from the utility lines. (196)
10	Camphor	75	60	60	Y	N	Unbalanced, deadwood at top of tree. The tree is about 8 ft away from the utility lines. (195)
11	Camphor	75	60	60	Y	Y	The tree is next to the proposed ADU, and along the path of the utility lines. (193)
12	Coastal live oak	80	60	60	Y	N	The tree was previously recorded and should not be affected by construction as long as the basketball court remains. Topped for power lines.
13	Camphor	75	60	60	Y	N	14 ft from trenching, 6 ft from water tie in. (106)
14	Camphor	55	60	60	N	N	2 ft from electrical trenching. (107)
15	Camphor	75	60	60	Y	N	2 ft from electrical trenching. (108)

16	Camphor	75	60	60	Y	N	2 ft from electrical trenching. (109)
17	London plane	60	60	60	Y	N	The tree was previously recorded and should not be affected by construction. (211)
18	Camphor	60	60	60	Y	Y	The tree is in the path of the utilities and next to the proposed ADUs.
19	Camphor	60	40	60	Y	Y	Co-dominate stems. The tree is 2 ft away from the proposed ADUs and in the path of the utilities.
20	Privet	60	60	60	N	N	The tree is growing in the unmaintained Steven Creek Trail. The tree is 6 ft away from the fence, and the ADU is 2 ft away from the fence.
21	Camphor	60	55	60	Y	N	The tree was previously recorded and should not be affected by construction. (207)
22	Camphor	60	60	60	Y	N	The tree was previously recorded and should not be affected by construction. (208)
23	London plane	60	60	60	Y	N	The tree was previously recorded and should not be affected by construction. (209)
24	Coast redwood	60	60	60	Y	N	Trees growing along the path of the Steven Creek Trail on the other side of the sidewalk. The tree was previously recorded and should not be affected by construction.
25	Coast redwood	60	60	60	Y	N	Trees growing along the path of the Steven Creek Trail on the other side of the sidewalk. The tree was previously recorded and should not be affected by construction.
26	Camphor	60	40	60	Y	N	The tree has a poor form due to overcrowding from the trail. The utility line is 6 ft away from the base of the tree.
27	Camphor	60	60	60	Y	N	The utility line is 6 ft away from the base of the tree. The tree may have been previously trimmed for the power lines.

Table 3. Tree Appraisal Values*

Tree #	Common name	DBH (in)	Trunk Cross Sectional Area (sq in)	Condition	External Limitations (%)	Functional Limitations (%)	Total Functional Replacement Cost (\$)	Rounded Functional Replacement Cost (\$)
1	Camphor	34	907	Poor (40%)	70	80	\$17,227.22	\$17,000.00
2	Camphor	61	2,921	Fair (60%)	70	80	\$83,178.11	\$83,000.00
3	London plane	21	346	Fair (55%)	80	80	\$10,321.87	\$10,300.00
4	London plane	36	1,017	Fair (60%)	80	90	\$37,234.40	\$37,200.00
5	London plane	18	254	Fair (55%)	80	90	\$8,625.18	\$8,600.00
6	Camphor	31	754	Fair (60%)	80	80	\$24,538.18	\$24,500.00
7	London plane	40	1,256	Fair (60%)	80	90	\$45,984.67	\$46,000.00
8	London plane	16	201	Poor (40%)	80	90	\$4,906.01	\$4,900.00
9	Southern magnolia	12	113	Poor (50%)	80	80	\$3,064.56	\$3,100.00
10	Camphor	28	615	Fair (60%)	80	80	\$25,014.56	\$20,000.00
11	Camphor	22	380	Fair (60%)	80	80	\$12,366.72	\$12,300.00
12	Coastal live oak	34	907	Fair (60%)	60	60	\$16,603.54	\$16,600.00
13	Camphor	28	615	Fair (60%)	80	70	\$17,512.74	\$17,500.00
14	Camphor	13	133	Fair (55%)	80	60	\$2,975.74	\$3,000.00
15	Camphor	15	177	Fair (60%)	80	60	\$4,320.22	\$4,300.00

16	Camphor	16	201	Fair (60%)	80	60	\$4,906.01	\$4,900.00
17	London plane	18	254	Fair (60%)	80	60	\$6,199.63	\$6,200.00
18	Camphor	23	415	Fair (60%)	70	80	\$11,817.54	\$11,800.00
19	Camphor	23, 24	1,734	Poor (40%)	70	80	\$32,918.26	\$32,900.00
20	Privet	7	38	Fair (60%)	60	60	\$695.63	\$700.00
21	Camphor	35	962	Fair (55%)	70	80	\$25,111.09	\$25,100.00
22	Camphor	35	962	Fair (60%)	70	80	\$27,393.91	\$27,400.00
23	London plane	17	227	Fair (60%)	80	60	\$5,540.62	\$5,600.00
24	Coastal redwood	30	707	Fair (60%)	60	60	\$12,942.34	\$13,000.00
25	Coastal redwood	28	615	Fair (60%)	60	60	\$11,258.19	\$11,300.00
26	Camphor	15.5	189	Poor (40%)	60	80	\$3,075.41	\$3,100.00
27	Camphor	18	254	Fair (60%)	70	80	\$7,232.90	\$7,200.00

* All values are calculated using the Trunk Formula Method as described in the 10th edition of the *Guide for Plant Appraisal* by the Council of Tree and Landscape Appraisers.

Appendix D – Tree Appraisal Calculation Methodology

The valuation of the assessed trees for the site was calculated using the trunk formula method described in the 10th edition of the *Guide for Plant Appraisal* by the Council of Tree and Landscape Appraisers. The basic formula is as follows:

$$\text{Unit Tree Cost} \times \text{Condition Rating (\%)} \times \text{Functional Limitations (\%)} \times \text{External Limitations (\%)}$$

The basic tree cost is the sum of the installed tree cost and the cost of the difference between the adjusted trunk area and the replacement tree size (appraised tree size increase multiplied by unit tree cost). Size was measured as trunk cross-sectional area (square inches), calculated by $3.14 \times R^2$; where a circular cross-section was assumed.

The condition rating was based on field observations already described. The functional limitation and external limitation ratings were based on field and aerial imagery observations. The basic functional replacement tree cost was then calculated by multiplying the functional replacement tree cross-section area by the unit tree cost. The depreciated functional replacement tree (calculated using the basic functional replacement cost, the overall condition rating (%), the functional limitations rating (%), and the external limitations rating (%).

EX: Tree #1 - 34" DBH:

Basic Cost:

Cross sectional area: $(3.14 \times 17 \times 17)$

Unit cost: \$84.75.00/in²

Basic Cost: \$76,907.24

Depreciated Cost:

Condition: 40%

External Limitations: 70%

Functional Limitations: 80%

Total Depreciated Cost: $(\$76,907.24 \times 0.40 \times 0.70 \times 0.80) = \$17,227.22$, rounded to \$17,000.00

Largest Commonly Available Nursery Tree (LCANT) Data	
LCANT Size (in. diam @ 12" above grade)	1.5
LCANT Cross-Sectional Area (sq in)	1.77
LCANT Cost \$	\$150.00
Unit Tree Cost (\$/sq in)	\$84.75