

# ARBORIST REPORT

TREE PROTECTION - BUILDING PROJECT



JULY 18, 2024

PREPARED FOR:  
JESSICA AND BLAKE THORNBERRY

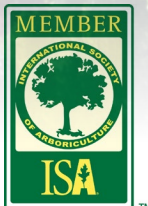
PROJECT ADDRESS:  
176 LOMA ALTA AVE • LOS GATOS • 95030



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EXHIBIT 9

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# Introduction

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## ARBORIST ASSIGNMENT

On April 30<sup>th</sup>, 2024, at the request of the architect, I agreed to write an Arborist Report for the building project at 176 Loma Alta Avenue. **We were consulted during the planning phase of the project and required they meet a 6x DBH minimum proposed basement setback from the recovering neighboring redwood trees (*Sequoia sempervirens*) to retain them. The design has placed the basement in accordance with our recommendations as illustrated on sheet A1.** After my visit to the site and review of the site plans, it was my understanding that the existing home was to be demolished. A new, two-story home with basement was to be built in its place. A detached garage was also planned behind the home. The assessments in this report were based off review of the following:

- Topographic Survey by Alpha Land Surveys, Inc. (dated 9/14/2023)
- Plan Set A-1 – A-6 by Jay Plett Architect (received 07/12/2024)
  - Including Site Plan, Floor Plan, and Elevations
- Civil Plans C1.1 – C4.1 by C2G / Civil Consultants Group (dated 06/18/2024)
  - Including Site Plan, Demolition Plan, Erosion Control Plan, and Details

I identified 10 Protected trees for inclusion in this report. **No trees were requested for removal as part of the project.**

Observations and recommendations made in this report relate to the tree protection and preservation mandates outlined in the Town of Los Gatos *Tree Protection Requirements for Planning Applications* (published 7/1/17 by the Community Development Department). As required, I have included appraisals for all protected trees potentially affected by development activities.

## USES OF THIS REPORT

This report was written to serve as a resource for the property owner, designer, and builder. I have provided instructions for protecting trees before, during, and after construction. You will also find information on Town requirements as outlined in Town of Los Gatos *Tree Protection Requirements for Planning Applications* (published 7/1/17 by the Community Development Department).

**Per the Town's Tree Regulations, the inventory, pruning specifications and tree protection zone details outlined in this report are to be copied onto a plan sheet to become part of the final plan set, then to serve as the project's Tree Preservation Plan, and titled as such.**

## LIMITATIONS

Trees assessed were limited to the scope of work identified in the assignment. I have estimated the trunk diameters of trees with barriers to access or visibility (such as those on neighboring parcels or behind debris). Although general structure and health were assessed, formal Tree Risk Assessments were not conducted unless specified. Disease diagnostic work was not conducted unless specified. All assessments were the result of ground-based, visual inspections. No excavation or aerial inspections were performed. Recommendations beyond those related to the proposed construction were not within the scope of work.

My tree impact and preservation assessments were based on information provided in the plans I have reviewed to date, and conversations with the involved parties. I assumed that the guidelines and setbacks recommended in this report would be followed. Assessments, conclusions, and opinions shared in this report are not a guarantee of any specific outcome. If additional information (such as engineering or landscape plans) is provided for my review, these assessments would be subject to change.

# Deposit, Replacement Requirements

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## ARBORIST DEPOSIT

An arborist deposit account must be set up with the Planning Department to fund the peer review of this report. Following completion of the project, any funds remaining in the account will be refunded.

## REQUESTED TREE REMOVALS

**No trees were requested for removal as part of the project.**

## REPLACEMENT TREES

Trees approved for removal as part of this project must be replaced prior to final inspection by the Building Division. The Town Planning Department will determine the number and size of required replacement trees. **Any tree on site protected by Town Code would require replacement according to its appraised value if it is damaged beyond repair as a result of grading, excavation or construction activities**

The Town of Los Gatos strongly encourages replacement with native species. Most fruit and nut trees, palm trees, or “nuisance” species (see section 29.10.0970(2) of the Town Code) are generally not considered suitable replacement trees. Replacement requirements in the Hillside shall comply with the Hillside Development Standards and Guidelines Appendix A and section 29.10.0987 Special Provisions—Hillside.

If a tree or trees cannot be reasonably replanted on the subject property, the Town of Los Gatos may approve a full or partial in-lieu fee payment. Where the payment of in-lieu fees is approved, permits will not be issued until all in-lieu fees are paid in full. In-lieu fees would be determined the Planning Director.

Appraised values for all trees were calculated using the “*Trunk Formula Method*” as outlined in the *Council of Tree and Landscape Appraisers-Guide for Plant Appraisal, 10<sup>th</sup> Edition* and supplemented with the *Western Chapter ISA- Species Classification and Group Assignment Regional Supplement*.

## Impacts on Protected Trees

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### TREE INVENTORY

This tree preservation plan includes an attached inventory of all “protected trees” with canopies within 30 feet of the work area, which included the path of ingress and egress.

A protected tree in Los Gatos for zoning approvals included most species measuring four inches (4”) or greater in diameter at breast height (DBH) as defined by Town Code, Division 2. Certain native trees, such as oaks over 24 inches in diameter qualify as “large protected” trees. All other species over 48 inches qualify as “large protected.” Fruit are nut trees less than 18 inches are exempt from protection, as are certain nuisance species (refer to Town Code Sec. 29.10.0960).

The Tree Inventory table in this report includes each tree’s number (as shown on the TPZ map and as tagged in the field), measurements, condition, level of impact (due to proximity to work), tolerance to construction, and overall suitability for retainment. The inventory also includes the appraised cost of each tree using the Trunk Formula Technique.

### IMPACTS OF PROPOSED WORK

After review of the site plans, it was my understanding that the existing home was to be demolished. A new, two-story home with basement was to be built in its place. The foundation of the first floor of the house was to be piers with beams above grade. A detached garage was also planned behind the home. A storm drain was also planned around the perimeter of the

property. Anticipated impacts of the trees around the building site ranged from “very low” to “moderate” depending on the resilience of the tree and its proximity to the work. Anticipated impacts to trees were as follows:

- **Tree #74 (15.5” southern magnolia, *Magnolia grandiflora* Street tree):** This Street tree would be anticipated to be “moderately” impacted by the proposed front walkway to the house. **Please see “Special Tree Protection Measures” section of this report for guidelines on working within 6x DBH of this tree.**
- **Tree #75 (neighboring cherry laurel, *Prunus laurocerasus*), Tree #87 (neighboring olive, *Olea euorpaea*), Tree #88 (neighboring coast live oak, *Quercus agrifolia*), and Tree #89 (Chinese pistache, *Pistacia chinensis* Street tree):** These neighboring and Street trees would be expected to incur “low” impacts from the proposed work (no more than 10% root loss).
- **Tree #76 (20” neighboring Chinese elm, *Ulmus parvifolia*):** This neighboring tree would be expected to incur a “moderate” impact from the proposed storm drain and house (10% - 25% root loss). **Please see “Special Tree Protection Measures” section of this report for guidelines on working within 6x DBH of this tree.**
- **Trees #77 and #78 (neighboring redwoods):** These trees would be expected to incur a “moderate” impact (10% - 25% root loss) from the pier foundation for the first floor and basement cut. **Please see “Special Tree Protection Measures” section of this report for guidelines on working within 6x DBH of this tree.**
- **Tree #85 (26” neighboring redwood):** This neighboring tree would be expected to sustain “moderate” impacts from the excavation for the proposed garage (10% - 25% root loss). **Please see “Special Tree Protection Measures” section of this report for guidelines on working within 6x DBH of this tree.**
- **Trees #86 (4” purple-leaf plum, *Prunus cerasifera*):** This tree would not be expected to be impacted by the project (0% - 5% root loss). It would only need to be protected from materials storage and movement throughout the site.



The anticipated impact of construction due to proximity to work was summarized using a rating system on the Tree Inventory (see Glossary for definitions of ratings). General species tolerance to construction, and condition of the trees (health, form, and structure), was also noted on the Inventory. These factors, as well as tree age, soil characteristics, and species desirability, all factored into an individual tree's suitability rating, as summarized on the Inventory. Suitability of trees to be retained was rated as "high," "moderate," or "low."

## Tree Protection Recommendations

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### PRE-CONSTRUCTION

#### Prune Branches

I recommend that each tree that is designated to remain shall be pruned as necessary to provide clearance for development, while maintaining a natural appearance. All tree pruning (or removal) activities shall be performed prior to the beginning of any demolition or development.

Pruning should be specified in writing adhering to ANSI A300 Pruning Standards and performed according to Best Management Practices endorsed by the International Society of Arboriculture. **Pruning must be performed by a licensed and insured tree contractor and supervised by an ISA-certified arborist or an ASCA-Registered Consulting Arborist.**

#### Establish Tree Protection Zones (TPZ)

##### ***TPZ Locations:***

Tree protection zones (TPZ) are areas of a temporary fenced tree enclosures that restrict activity during construction. They are established and inspected prior to the start of work. **No soil disturbance is permitted unless approved and supervised by the Project Arborist.** The

recommended tree protection zones (TPZ) were shown on the attached map. See attachment titled "TPZ I" for a diagram of generic, best-practice TPZ fencing specifications. If TPZ fencing is not practical due to proximity to work, TPZ trunk wrap may be approved instead (see attached specification if applicable).

**Please see attached "TPZ Map" for recommended fencing locations.** Recommended protection for trees is as follows:

- **Tree #74 (15.5" southern magnolia Street tree):** Establish standard TPZ fencing radius to 15 feet or the greatest extent possible as limited by the planting strip. Place fence posts into the ground along the existing hardscape.
- **Trees #75 and #76 (neighboring cherry laurel and elm):** These neighboring trees may be protected as a group within the same perimeter. Establish standard TPZ fencing along the property line to 20 feet, or to the greatest extent possible as limited by the work.
- **Trees #77 and #78 (neighboring redwoods):** Establish standard TPZ fencing with a radius of 25 feet, or to the greatest extent possible as limited by the proposed work. TPZ fencing may need to be adjusted during the demolition of the driveway. Restore TPZ fencing to original location promptly upon completion.
- **Trees #85 and #87 (neighboring redwood and olive):** These neighboring trees would be protected adequately by the existing wooden fence at the property line. Due to the location of the work, an additional chain link fence at this location would not be practical.
- **Tree #86 (4" purple-leaf plum, *Prunus cerasifera*):** Establish standard TPZ fencing with a radius of 5 feet.
- **Tree #89 (8.5" Chinese pistache Street tree):** Establish standard TPZ fencing radius to 10 feet or the greatest extent possible as limited by the planting strip. Place fence posts into the ground along the existing hardscape.

## Los Gatos Tree Protection Fencing Requirements:

### *Sec. 29.10.1005 - Protection of trees during construction.*

1. **Size and materials:** Six (6) foot high chain link fencing, mounted on two-inch diameter galvanized iron posts, shall be driven into the ground to a depth of at least two (2) feet at no more than ten-foot spacing. For paving area that will not be demolished and when stipulated in a tree preservation plan, posts may be supported by a concrete base.
2. **Area type to be fenced:** Type I: Enclosure with chain link fencing of either the entire dripline area or at the tree protection zone (TPZ), when specified by a certified or consulting arborist. Type II: Enclosure for street trees located in a planter strip: chain link fence around the entire planter strip to the outer branches. Type III: Protection for a tree located in a small planter cutout only (such as downtown): orange plastic fencing shall be wrapped around the trunk from the ground to the first branch with two-inch wooden boards bound securely on the outside. Caution shall be used to avoid damaging any bark or branches.
3. **Duration of Type I, II, III fencing:** Fencing shall be erected before demolition, grading or construction permits are issued and remain in place until the work is completed. Contractor shall first obtain the approval of the project arborist on record prior to removing a tree protection fence.
4. **Warning sign:** Each tree fence shall have prominently displayed an eight and one-half-inch by eleven-inch sign stating: "Warning—Tree Protection Zone—This fence shall not be removed and is subject to penalty according to Town Code 29.10.1025." Text on the signs should be in both English and Spanish.

### *All persons, shall comply with the following precautions:*

1. Prior to the commencement of construction, install the fence at the dripline, or tree protection zone (TPZ) when specified in an approved arborist report, around any tree and/or vegetation to be retained which could be affected by the construction and prohibit any storage of construction materials or other materials, equipment cleaning, or parking of vehicles within the TPZ. The dripline shall not be altered in any way so as to increase the encroachment of the construction.

2. Prohibit all construction activities within the TPZ, including but not limited to: excavation, grading, drainage and leveling within the dripline of the tree unless approved by the Director.
3. Prohibit disposal or depositing of oil, gasoline, chemicals or other harmful materials within the dripline of or in drainage channels, swales or areas that may lead to the dripline of a protected tree.
4. Prohibit the attachment of wires, signs or ropes to any protected tree.
5. Design utility services and irrigation lines to be located outside of the dripline when feasible.
6. Retain the services of a certified or consulting arborist who shall serve as the project arborist for periodic monitoring of the project site and the health of those trees to be preserved. The project arborist shall be present whenever activities occur which may pose a potential threat to the health of the trees to be preserved and shall document all site visits.
7. The Director and project arborist shall be notified of any damage that occurs to a protected tree during construction so that proper treatment may be administered.

## Prevent Root Damage

**Anywhere workers and vehicles will be traveling over bare ground within fifteen feet of a tree's dripline should have material applied over the ground to disperse the load.** This may be done by applying a six to 12-inch layer of wood chip mulch to the area. As an alternative method that would not require mulch removal, the contractor could place plywood (>3/4-inch-thick) or road mats over a four-inch layer of mulch. Mulch should be spread manually so as not cause compaction or damage.

## DURING CONSTRUCTION

### Special Tree Protection Measures - Trees #74, 76 - #78, and #85

- 1) **Demolition of existing hardscape (Trees #77 and #78)** should be performed in a manner that avoids tearing roots: Using the smallest effective machinery, break up pieces of the concrete and lift pieces up and away from trees. Cut roots embedded in paving rather than tearing them (see instructions on root cuts).
- 2) **Excavation guidelines for installation of drilled footings/piers (porch and foundation) – Trees #77 and #78:** When excavating or boring underneath the canopy, or within 18 feet of the trunk of Tree #77 and 12 feet of Tree #78, use hand tools within the top 36” of the soil leaving woody roots undamaged. Under the supervision of the Project Arborist or Town Arborist, roots encountered should be cut cleanly with a sharp, clean sawblade perpendicular to the direction of growth (a “square cut”). The cut should be made where the bark of the root is undamaged and intact. If roots of over two inches (2”) are found, the Project Arborist may recommend moving the location of the footing.
- 3) **Excavation guidelines for installation of underground drainage feature (Tree #76):** Do not trench within 10 feet of Tree #76 if possible. Consider using boring (tunneling) machines set up outside the dripline of the tree. If trenching is necessary, use hand tools or vacuum soil extraction in the top 36 inches of soil. **Leave woody roots of one inch or larger undamaged with bark intact.** The pipes can then be pushed through the trench or tunnel, beneath the roots. Gravel may be filled around live roots. Most roots are found within the top 24 inches of soil.
- 4) **Hardscaping (walkway) – Tree #74:** When excavating within eight feet (8’) of this tree, use hand tools. Leave roots encountered undisturbed if possible. Excavation depth for installation of new landscape materials within 8 feet of tree should be no more than four inches (4”) into existing soil grade. Do not compact native soil under paving materials. If roots must be cut, please see section titled “Root Pruning.” No paving materials or any excavation or grading within three feet (3’) of trunks.

- 5) **Excavation guidelines for installation of new foundation (Tree #85):** *Use hand tools only* when excavating within 13 feet of the trunk of this tree within the top 36 inches of soil depth. If roots of one-inch diameter or larger must be cut, they should be cut cleanly with a sharp, clean sawblade perpendicular to the direction of growth (a “square cut”). The cut should be made where the bark of the root is undamaged and intact. **Root pruning should be supervised by the Project Arborist.**

## Root Pruning

Roots often extend farther beyond the tree than people realize. Even outside of the fencing protecting the critical root zone, there are roots that are important to the wellbeing of the tree. Builders may notice torn roots after digging or trenching. If this happens, exposed ends should be cut cleanly.

However, the best way to cut roots is to cut them cleanly *before* they are torn by excavating equipment. This way, roots may be exposed by gentle excavation methods and then cut selectively. Alternatively, a tool specifically designed to cut roots may be used to cut through the soil on the tree-side of the excavation line prior to digging so that roots are not torn. **Any root pruning must be supervised by the project arborist.**

## Irrigation

Water moderately and highly impacted trees during the construction phase (in this case, all retained trees). As a rule of thumb, provide one to two inches per month. Water slowly so that it penetrates 18 inches into the soil, to the depth of tree roots. For native oaks (#7 and #8), do not water during the warm dry season (June – September) as this activates oak root fungus. Instead, make sure that the soil is sufficiently insulated with mulch (where possible). Remember that unsevered tree roots typically extend three to five times the distance of the canopy.

## Arborist Supervision

**According to Town Code 29.10.1025, “the Director and project arborist shall be notified of any damage that occurs to a protected tree during construction so that proper treatment**

**may be administered.”** The project arborist will also be needed for “periodic monitoring of the project site and the health of those trees to be preserved. The project arborist shall be present whenever activities occur which may pose a potential threat to the health of the trees to be preserved and shall document all site visits.”

## POST-CONSTRUCTION

*Ensure any mitigation measures to ensure long-term survival including but not limited to:*

### Continued Tree Care

*Provide adequate and appropriate irrigation.* As a rule of thumb, provide 1- 2 inches of water per month. Water slowly so that it penetrates 18 inches into the soil, to the depth of the tree roots. Native oaks usually should not be provided supplemental water during the warm, dry season (June – September) as this activates oak root fungus. Therefore, native oaks should only be watered October – May when rain has been scarce.

*Mulch* insulates the soil, reduces weeds, reduces compaction, and promotes myriad benefits to soil life and tree health. Apply four inches of wood chips (or other mulch) to the surface of the soil around trees, extending at least to the dripline when possible. Take care not to pile mulch against the trunk.

*Do not fertilize* unless a specific nutrient deficiency has been identified and a specific plan prescribed by the project arborist (or a consulting arborist).

### Post-Construction Monitoring

Monitor trees for changes in condition. Check trees at least once per month for the first year post-construction. Expert monitoring should be done at least every 6 months or if trees show signs of stress. Signs of stress include unseasonably sparse canopy, leaf drop, early fall color, browning of needles, and shoot die-back. Stressed trees are also more vulnerable to certain disease and pest infestations. Call the Project Arborist, or a consulting arborist if these, or other concerning changes occur in tree health.

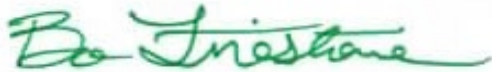
## Conclusion

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The proposed home building project at 176 Loma Alta Ave. appeared to be a valuable upgrade to the property. If the recommendations and protection measures in this report are followed, all trees identified for preservation would be expected to survive.

If any of the property owners, project team, or City reviewers have questions on this report, or require Project Arborist supervision or technical support, please do not hesitate to contact me at (408) 497-7158 or [busara@bofirestone.com](mailto:busara@bofirestone.com).

Signed,



Busara (Bo) Firestone | ISA Board Certified Master Arborist #WE-8525B | ASCA Registered Consulting Arborist RCA #758 | ISA Qualified Tree Risk Assessor | ASCA Tree and Plant Appraisal Qualification | Member – American Society of Consulting Arborists | Wildlife-trained Arborist



## Glossary

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**AGE:** Relative to tree lifespan; "Young" <1/3; "Mature" 1/3 - 2/3; "Overmature" >2/3

**APPRAISAL RESULT:** Replacement cost of a tree calculated using Trunk Formula Technique as described in Guide of Plant Appraisal, 10th Edition, Second Printing published 2019 by International Society of Arboriculture.

**BASIC REPRODUCTION COST:** Cost of replacing the cross-sectional area of the original tree by purchasing new trees. Based on unit tree replacement costs as given in the in "Species Classification and Group Assignment" published by The Western Chapter of the International Society of Arboriculture, 2004. All replacements costs based on largest commonly available tree size as 24" box with an average cost of \$172.73.

**CONDITION-**Ground based visual assessment of structural and physiological well-being:

"**Excellent**" = 81 - 100%; Good health and structure with significant size, location, or quality.

"**Good**" = 61-80%; Normal vigor, full canopy, no observable significant structural defects, many years of service life remaining.

"**Fair**" = 41-60%; Reduced vigor, significant structural defect(s), and/or other significant signs of stress

"**Poor**" = 21- 40%; In potentially irreversible decline, structure and aesthetics severely compromised

"**Very Poor**" = 6-20%; Nearly dead, or high risk of failure, negative contribution to the landscape

"**Dead/Unstable**" = 0 - 5%; No live canopy/buds or failure imminent

**DBH / DSH:** Diameter at 4.5' above grade.

**Mathematic DBH/DSH:** diameter of multitrunked tree, mathematically derived from the combined cross-sectional area of all trunks.

**EXTERNAL LIMITATIONS:** Subjective rating based on limitations to the growth and utility of the tree imposed by factors beyond the site that are out of the control of the property owner. (Example: laws or diseases prevalent in the area, climate change)

**FUNCTIONAL LIMITATIONS:** Subjective rating based on limitations to the growth and utility of the tree imposed by the site. (Example: small planting site, overhead utilities)

**HEIGHT:** Height of tree from ground to top of canopy.

**IDEAL TPZ RADIUS:** Minimum recommended tree protection radius to ensure healthy, sound trees. Based on species tolerance, age, and size (total combined stem area). Compromising the radius in a specific area may be acceptable as per arborist approval.

**IMPACT:** Anticipated impact to an individual tree including.....

**SEVERE** - In direct conflict, removal necessary if plans proceed (distance to root cuts/fill within 3X DBH or root loss of > 30% anticipated).

**HIGH** – Work planned within 6X DBH and/or anticipated root loss of 20% – 30%. Redesign to reduce impact should be explored and may be required by municipal reviewer. Retainment may be possible with monitoring or alternative building methods. Health and structure may worsen **even if** conditions for retainment are met.

**MODERATE** - Ideal TPZ encroached upon in limited areas. No work or very limited work within 6X TPZ. Anticipated root loss of 10% - 25%. Special building guidelines may be provided by Project Arborist. Although some symptoms of stress are possible, tree is not likely to decline due to construction related activities.

**LOW** - Anticipated root loss of less than 10%. Minor or no encroachment on ideal TPZ. Longevity uncompromised with standard protection.

**VERY LOW** - Ideal TPZ well exceeded. Potential impact only by ingress/egress. Anticipated root loss of 0% - 5%. Longevity uncompromised.

**NONE** - No anticipated impact to roots, soil environment, or above-ground parts

**SPREAD:** Distance between farthest branch tips.

**SUITABILITY ASSESSMENT:** An individual tree's suitability for preservation considering impacts, condition, maturity, species tolerance, site characteristics, and species desirability. (HIGH, MODERATE, or LOW)

**TOLERANCE:** General species tolerance to construction (GOOD, MODERATE, or POOR) as given in *Managing Trees During Construction, Second Edition*, by International Society of Arboriculture

**TREE STATUS:** "Protected "- when related to zoning approvals, most species, when the DBH is four inches or more (includes dead trees and fallen trees). "Large protected trees" – any Oak, California Buckeye, or Pacific Madrone, when the trunk DBH is 24 inches or more. Any other species when the DBH is 48 inches or more. Fruit trees exempt unless over 18". I used the mathematically derived diameter of total cross-sectional area of multi-trunk trees to determine if they qualified.

## Sources

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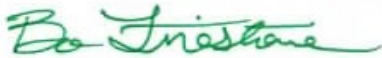
*Assessment*: International Society of Arboriculture, 2011. Print.

## CERTIFICATE OF APPRAISAL

I, Busara Rea Firestone, CERTIFY to the best of my knowledge and belief:

1. That the statements of fact contained in this plant appraisal are true and correct.
2. That the appraisal analysis, opinions, and conclusion are limited only by the reported assumption and limiting conditions, and that they are my personal, unbiased professional analysis, opinions, and conclusions.
3. That I have no present or prospective interest in the plants that are the subject of this appraisal, and that I have no personal interest or bias with respect to the parties involved.
4. That my compensation is not contingent upon a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.
5. That my analysis, opinions, and conclusions are developed, and this appraisal has been prepared, in conformity with the *Guide for Plant Appraisal (10<sup>th</sup> edition, 2000)* authored by the Council of Tree and Landscape Appraisers.
6. That the methods found in this appraisal are based on a request to determine the value of the plants considering reasonable factors of plant appraisal.
7. That my appraisal is based on the information known to me at this time. If more information is disclosed, I may have further opinions.

Signed,



Busara (Bo) Firestone

ISA Board-Certified Master Arborist #WE-8525B

07/18/2024



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THORNBERRY PROPERTY 07/18/2024

								TREE IMPACT ASSESSMENT								
Tag Number	Common Name	Botanical Name	DBH (inches)	math. DBH (inches)	Height (feet)	Spread (feet)	Tree Status	Condition	Age	Species Tolerance	TPZ X FCTR	Ideal TPZ Radius (ft)	Impact Level	Suitability Rating	Prescription	Appraised Value
74	Southern Magnolia	<i>Magnolia grandiflora</i>	15.5	15.5	20	20	Protected	FAIR	MATURE	MODERATE	12	16	MODERATE	MODERATE	PRESERVE	\$3,910
75	Cherry Laurel	<i>Prunus laruocerasus</i>	7, 6, 4.5	10	15	20	not protected	FAIR	MATURE	MODERATE	12	10	LOW	MODERATE	PRESERVE	\$2,760
76	Chinese Elm	<i>Ulmus parvifolia</i>	20	20	40	50	Protected	GOOD	MATURE	MODERATE	12	20	MODERATE	LOW	PRESERVE	\$16,600
77	Coast Redwood	<i>Sequoia sempervirens</i>	est. 36	36	85	30	Protected	POOR	MATURE	HIGH	8	24	MODERATE	LOW	PRESERVE	\$7,200
78	Coast Redwood	<i>Sequoia sempervirens</i>	est. 24	24	70	25	Protected	POOR	MATURE	HIGH	8	16	MODERATE	LOW	PRESERVE	\$3,210
85	Coast Redwood	<i>Sequoia sempervirens</i>	est. 26	26	55	25	Protected	GOOD	MATURE	HIGH	8	17	MODERATE	HIGH	PRESERVE	\$11,300
86	Purple-leaf Plum	<i>Prunus cerasifera</i>	4	4	20	10	not protected	GOOD	MATURE	MODERATE	12	4	VERY LOW	HIGH	PRESERVE	\$470
87	Olive	<i>Olea europaea</i>	est. 11, 7, (2) 5, 4, 3, 1	16	25	30	Protected	GOOD	MATURE	MODERATE	12	16	LOW	HIGH	PRESERVE	\$7,900
88	Coast Live Oak	<i>Quercus agrifolia</i>	est. 36	36	40	40	Large Protected	GOOD	MATURE	HIGH	8	24	LOW	HIGH	PRESERVE	\$36,200
89	Chinese Pistache	<i>Pistacia chinensis</i>	8.5	8.5	25	20	not protected	GOOD	MATURE	MODERATE	12	9	LOW	HIGH	PRESERVE	\$2,990
KEY:																
#	Neighboring or Town Street Tree															
															TOTAL APPRAISED VALUE	\$92,540
															VALUE OF TREES TO REMOVE	\$0
															VALUE OF TREES TO REMAIN	\$92,540

Thornberry Property 07/18/2024

No.	Common Name	Botanical Name	DBH (inches)	Crosssectional Area (sq. in.)	Basic Reproduction Cost	DEPRECIATING FACTORS					Appraisal Result
						Condition Rating	Functional limitations	Notes	External Limitations	Notes2	
74	Southern Magnolia	<i>Magnolia grandiflora</i>	15.5	189	\$12,414	50%	70%	near pavement and street	90%	Street tree	\$3,910
75	Cherry Laurel	<i>Prunus laruocerasus</i>	7, 6, 4.5	79	\$8,766	50%	70%	near pavement	90%	property line	\$2,760
76	Chinese Elm	<i>Ulmus parvifolia</i>	20	314	\$35,063	75%	70%	near house	90%	property line	\$16,600
77	Coast Redwood	<i>Sequoia sempervirens</i>	est. 36	1018	\$53,573	25%	60%	near driveway, drought-sensitive	90%	property line	\$7,200
78	Coast Redwood	<i>Sequoia sempervirens</i>	est. 24	452	\$23,810	25%	60%	near driveway and fence, drought-sensitive	90%	property line	\$3,210
85	Coast Redwood	<i>Sequoia sempervirens</i>	est. 26	531	\$27,944	75%	60%	near house, fence, pavement, drought-sensitive	90%	property line	\$11,300
86	Purple-leaf Plum	<i>Prunus cerasifera</i>	4	13	\$1,403	75%	50%	short-lived species	90%	property line	\$470
87	Olive	<i>Olea europaea</i>	est. 11, 7, (2) 5, 4, 3, 1	201	\$13,228	75%	80%	near fence	100%	none	\$7,900
88	Coast Live Oak	<i>Quercus agrifolia</i>	est. 36	1018	\$66,966	75%	80%	minor limitatons	90%	property line	\$36,200
89	Chinese Pistache	<i>Pistacia chinensis</i>	8.5	57	\$6,333	75%	70%	near pavement and street	90%	Street tree	\$2,990
										TOTAL	\$92,540

**TERMS:**

DBH: Diameter of tree trunk(s) measured at 4.5' above grade on high side,

CROSSSECTIONAL AREA: combined area of all trunks

BASIC REPRODUCTION COST: Cost of replacing the cross-sectional area of the original tree by purchasing new trees. Based on unit tree replacement costs as given in the "Species Classification and Group Assignment" published by The Western Chapter of the International Society of Arboriculture, 2004. Replacement costs based on the largest commonly available tree size as a 24-inch box with a wholesale cost of \$250.

FUNCTIONAL LIMITATIONS: Factors associated with the interaction of the tree with its planting site that will affect plant growth, condition, or utility within the foreseeable future. (Example: small planting site, crowding, species suitability)

EXTERNAL LIMITATIONS: Subjective rating based on limitations to the growth and utility of the tree imposed by factors beyond the site that are out of the control of the property owner. (Example: laws or diseases prevalent in the area, climate change)

APPRAISAL RESULT: Cost of tree calculated using Trunk Formula Technique as described in Guide of Plant Appraisal, 10th Edition, Second Printing published 2019 by International Society of Arboriculture.

CONDITION-Ground based visual assessment of structural and physiological well-being:Ⓜ

"Excellent" = 81 - 100%; Good health and structure with significant size, location or quality.

"Good"Ⓜ 61-80%; Normal vigor, full canopy, no observable significant structural defects, many years of service life remaining.

"Fair" = 41-60%; Reduced vigor, significant structural defect(s), and/or other significant signs of stress

"Poor"Ⓜ 21- 40% = In potentially irreversible decline, structure and aesthetics severely compromised

"Very Poor" 6-20% = Nearly dead, or high risk of failure, negative contribution to the landscape

"Dead/Unstable" 0 - 5% = No live canopy/buds or failure imminent

# TREE PROTECTION ZONE MAP

176 LOMA ALTA, LOS GATOS, CA

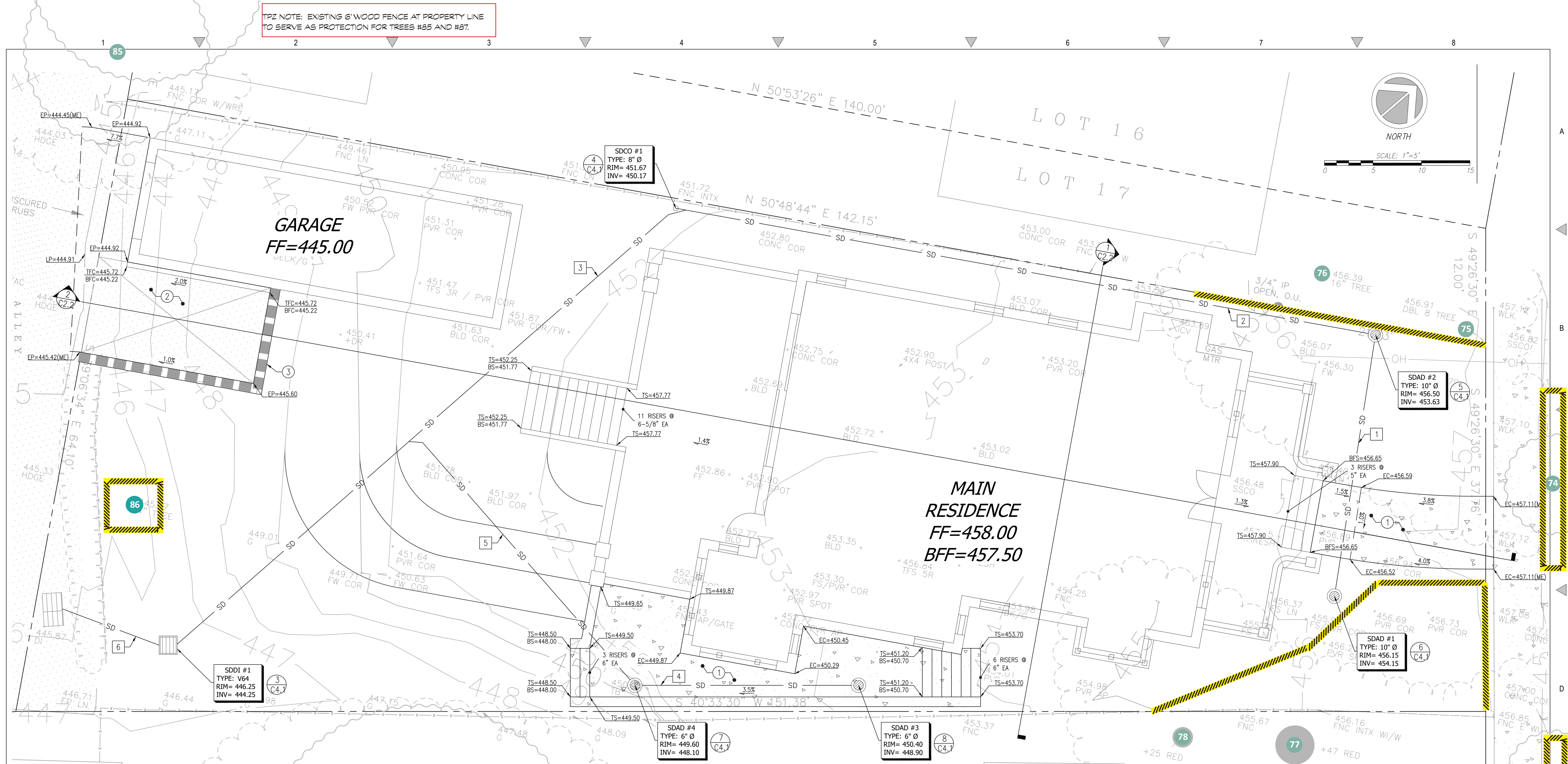


DATE:  
07/18/24

TPZ ELEMENTS DRAWN:  
B. FIRESTONE  
ISA BOARD CERTIFIED  
MASTER ARBORIST  
#WE-8525B

BASE MAP: SITE PLAN C2.1  
by C2G CIVIL CONSULTANTS  
GROUP  
(06/18/2024)

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TPZ NOTE: EXISTING 6" WOOD FENCE AT PROPERTY LINE TO SERVE AS PROTECTION FOR TREES #85 AND #87.

TPZ NOTE: EXISTING 6" WOOD FENCE AT PROPERTY LINE TO SERVE AS PROTECTION FOR TREE #88.

TPZ NOTE: TPZ FENCING MAY NEED TO BE ADJUSTED DURING DEMOLITION OF EXISTING DRIVEWAY. PROMPTLY RESTORE TPZ FENCING TO ORIGINAL LOCATION UPON COMPLETION.

As required by the Town of Los Gatos:

Pruning or root pruning must be supervised by an ISA-certified arborist or an ASCA-Registered Arborist. See Section 28.10.1010 of the Town Code for specifications to determine if a pruning permit is required.

Tree protection fencing requirements:

- Six-foot high chain link fencing mounted on two-inch diameter galvanized iron posts shall be driven into the ground at least two-feet deep at no more than ten-foot spacing. When stipulated, for existing paving areas that will not be demolished, posts may be supported by concrete base.
- Posted eight and one-half-inch by eleven-inch sign on each tree fence stating: "Warning - Tree Protection Zone - This fence shall not be removed and is subject to penalty according to Town Code 28.10.1025"
- Labeled photographs of the installed fencing shall be emailed to the project planner prior to issuance of permits.
- Tree protection fencing is required to remain in place throughout construction. Any protected tree on-site will require replacement according to its appraised value if it is damaged beyond repair as a result of construction.

TPZ MAP LEGEND:

	TREE TO REMAIN
	TREE ON NEIGHBORS' PROPERTY / CITY STREET TREE
	TREE PROTECTION FENCING