KIELTY
ARBORISTS SERVICES LLC
Certified Arborist WE#10724A TRAQ Qualified
P.O. Box 6187 San Mateo, CA 94403
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Revised April 18, 2024

Tower Investment LLC
785 Castro St. Suite A
Mountain View CA 94041

Site: 294 &296 Tyrella Avenue, Mountain View, CA

As requested on Thursday, December 28, 2023, Kielty Arborist Services LLC visited the above site for the purpose of inspecting and commenting on the trees. Construction is planned for this site and your concern as to the future health and safety of the trees has prompted this visit.

Method:
All inspections were made from the ground; the trees were not climbed for this inspection. The trees in question were located on a map provided by you. The trees were then measured for diameter at 54 inches above natural grade (DBH or diameter at breast height). The trees were given a condition rating for form and vitality. The trees' condition rating is based on 50 percent vitality and 50 percent form, using the following scale.

1	-	29	Very Poor
30	-	49	Poor
50	-	69	Fair
70	-	89	Good
90	-	100	Excellent

The height of the trees was measured using a Nikon Forestry 550 Hypsometer. The spread was paced off. Comments and recommendations for future maintenance are provided.

Survey Key:
DBH-Diameter at breast height (54" above grade)
CON- Condition rating
HT/SP- Tree height/canopy spread in ft.
H- Indicates a "heritage tree"
R- Indicates proposed tree removal
T- Indicates tree to be transplanted

Survey:

Tree#	Species	DBH	CON	HT/SP	
1**H**	Spanish dagger *(Yucca gloriosa)*	6"x5	45	15/10	Fair vigor, poor form, multileader at base, underneath utilities, leaders removed in past.
2	Spanish dagger *(Yucca gloriosa)*	7"x2	45	15/10	Fair vigor, poor form, multileader at base, underneath utilities, leaders removed in past.
3	Bottle brush *(Callistemon viminalis)*	5.3	45	10/10	Poor vigor, poor form, suppressed by #4.
4**H/R**	Monterey pine *(Pinus radiata)*	23.8	50	40/20	Fair vigor, fair form, slight lean, recommended to clean crown, short-lived tree, ivy to 10 feet.
5**H/R**	Monterey pine *(Pinus radiata)*	17.3	50	45/20	Fair vigor, fair form, recommended to clean crown, short-lived tree, ivy to 10 feet.
6**H/R**	Monterey pine *(Pinus radiata)*	23.8	50	40/25	Fair vigor, fair form, recommended to clean crown, short-lived tree, ivy to 10 feet.
7**H/R**	Coast live oak *(Quercus agrifolia)*	42.6	60	40/40	Good vigor, fair to poor form, codominant at 4 feet with the seam in crotch, metal post from the fence is imbedded in the trunk, not maintained.
8**H/R**	Coast live oak *(Quercus agrifolia)*	24.9	60	35/25	Good vigor, fair form, suppressed by #7 and #9, not maintained.
9**H/R**	Coast live oak *(Quercus agrifolia)*	26.3	60	30/25	Good vigor, fair form, codominant at 3 feet with good crotch formation, heavy to the west, not maintained.
10***H**	Redwood *(Sequoia sempervirens)*	40est	90	80/35	Good vigor, good form.
11**T**	Cordyline *(Cordyline australis)*	2.5	50	15/4	Fair vigor, fair form.
12**T**	Cordyline *(Cordyline australis)*	5.6	50	15/6	Fair vigor, fair form.
13**T**	Cordyline *(Cordyline australis)*	3.2	50	15/4	Fair vigor, fair form.

Survey:

Tree#	Species	DBH	CON	HT/SP	
14**T**	Cordyline *(Cordyline australis)*	4.0	50	18/4	Fair vigor, fair form.
15**T**	Cordyline *(Cordyline australis)*	4.0	50	10/4	Fair vigor, fair form.
16	Lemon scented gum *(Corymbia citriodora)*	8.9	45	30/20	Fair to poor vigor, poor form, underneath utilities, ivy to 12 feet, topped in past.
17**H**	Coast live oak *(Quercus agrifolia)*	6.0	70	15/12	Fair vigor, fair form, young.

Indicates trees on neighboring properties. **H Indicates "Heritage" tree on site by city ordinance (protected). **R** indicates a tree to be "Removed". **T** indicates a tree to be "Transplanted".*

Summary:

The trees on site are a mix of imported trees. No apparent maintenance to the trees on site has taken place for an unknown length of time. Some trees on site are to be retained. Spanish dagger trees #1 and #2 are proposed to remain, although they are located within the public utility easement. Bottlebrush tree #3 is also proposed to remain. Trenching will need to take place near the Spanish dagger trees and bottle brush for the planned utilities. All excavation when underneath the dripline of trees #1-3 is required to be done by hand under the direct supervision of the project arborist. Utility lines are recommended to be tunneled underneath and beside roots where possible to avoid the need to cut tree roots. Any roots for any reason to be cut measuring 2" in diameter or larger must first be shown to the project arborist. Roots to be cut must be cut cleanly using a hand saw or loppers. Impacts are expected to be minor for the trees. Irrigation is recommended as a mitigation measure. The trees are recommended to be irrigated every other week during the dry season using 10 gallons of water per tree.

Showing pines #4-6

Trees #4-6 consist of Monterey pine trees. These trees are proposed for removal to facilitate the construction of the units and a storm drain line. The proposed storm drain line and building locations would require excavation at a very close proximity to the trees and impacts would be expected to be high. It should be known that Monterey pine trees in the landscape are short lived trees. Monterey pine trees throughout the Bay Area have been suffering from the prolonged period of drought. Monterey pine trees are a poor species selection. Pine trees #4-6 fall within the city of Mountain View's criteria for tree removal states the following:

1. The condition of the tree with respect to ***age of the tree*** *relative to the life span of that particular species, disease, infestation,* ***general health****, damage, public nuisance, danger of falling,* ***proximity to existing or proposed structures****, and* ***interference with utility services****.*

2. ***The necessity of the removal of the heritage tree in order to construct improvements and/ or allow reasonable and conforming use of the property compared to other similarly situated properties.***

In alignment with our commitment to sustainable urban development and tree preservation, a detailed assessment was conducted to evaluate the feasibility of retaining Trees #4H, #5H, and #6H within the proposed construction plan. The evaluation was grounded in the principles of arboricultural science and urban planning, with a focus on the long-term health and viability of these trees. Trees #4H, #5H, and #6H were also evaluated for transplanting. All three Monterrey pine trees are only in fair condition. The deep tap root and widespread lateral root structure render them poor candidates for transplanting. It is highly likely the root system will be damaged during extraction, greatly decreasing survivability after transplantation. Deterioration in the canopy structure will occur as a result of damage to the root system, creating future hazards.

Tree #4H: To ensure the preservation of Tree #4H, it is necessary to adjust the building footprint and the area of the lot occupied by the building, resulting in a reduction of 382 square feet. This modification is based on the establishment of a tree protection zone, meticulously calculated to provide a critical root zone that extends to ten times the diameter at breast height (DBH) of the tree. This protective measure is crucial to safeguard the root system, which is vital for the tree's stability and health.

Tree #5H: Similarly, for the preservation of Tree #5H, a reduction of 260 square feet in the building's footprint and the area of the lot is required. This adjustment ensures the establishment of a tree protection zone encompassing a critical root zone of ten times the tree's DBH. This consideration is fundamental in preventing root damage and stress, thereby contributing to the tree's overall well-being.

Tree #6H: Preserving Tree #6H necessitates a more substantial reduction in the building's footprint and occupied area, amounting to 687 square feet. This area corresponds to a tree protection zone tailored to accommodate a critical root zone of ten times the tree's DBH. Such a protective zone is essential to maintain the integrity of the tree's root system, which is indispensable for its nourishment and structural support.

Showing metal post

Coast live oak trees #7-9 are in fair condition. Coast live oak tree #7 is codominant at 4 feet with a poor crotch formation. A seam is visible from the poor union that runs down to the base of the tree. This tree has also grown around a large metal post that supports the property fence. No maintenance has taken place to this tree for an unknown length of time. Coast live oak tree #8 is heavily suppressed by oak trees #7 and #9. Coast live oak tree #9 is heavy to the west. At this time, Coast Live Oaks # 7, #8, and #9 are all proposed for removal. The storm drain line and proposed building would require excavation on three sides of the oak tree's root zones. High impacts would be expected and would likely impact the tree's structural stability. Removal and replacement are recommended.

1. The condition of the tree with respect to age of the tree relative to the life span of that particular species, disease, infestation, general health, damage, public nuisance, danger of falling, proximity to existing or proposed structures, and interference with utility services.

2. The necessity of the removal of the heritage tree in order to construct improvements and/ or allow reasonable and conforming use of the property compared to other similarly situated properties.

In the course of this project's development, considerable effort was dedicated to integrating the existing trees into the design framework. Despite these endeavors, it became evident that accommodating the trees within the project's design was impractical due to the confluence of several critical factors: the project's density requirements, the imposed height limitations, and stringent fire separation criteria.

An initial proposal considered the option of onsite transplantation for these trees. However, upon thorough site evaluation, it was concluded that no viable relocation areas existed within the project boundaries. This determination was influenced by the same constraints that impacted the original design considerations.

Subsequently, extensive research and planning were undertaken to explore the feasibility of offsite transplantation (trees #4H, #5H, #6H, #7H, #8H, #9H). This process involved assessing various logistical and economic factors, including the potential costs associated with transportation, the availability of suitable relocation sites, the financial implications of removing and reinstalling overhead utility lines, and an evaluation of the trees' health and structural form. Unfortunately, these investigations revealed that offsite transplantation was not a financially viable or practical solution, primarily due to prohibitive transportation costs and the limited availability of appropriate relocation sites, compounded by the trees' moderate condition and structural form. The size and age of both the thee pine and three oak trees render them incompatible with transplantation. The extensive root structures will prove impossible to extract without impacts. These damaged root sections will translate into deterioration in the canopy structure over time, creating lasting hazardous conditions under the tree canopy for an extended duration past transplantation.

It is with a profound sense of responsibility and regret that we acknowledge the necessity of tree removal in this context. The decision was not taken lightly and only arrived at after exhaustive exploration of all feasible alternatives.

Regarding the specific trees in question:
To ensure the preservation of Tree #7H, a reduction of 1,631 square feet in the building footprint and occupied area would be required. This adjustment is based on establishing a tree protection zone that accommodates a critical root zone, extending to ten times the tree's diameter at breast height (DBH).

For Tree #8H, a similar approach necessitates a reduction of 550 square feet in the building's footprint and occupied area, again adhering to the critical root zone requirement of ten times the tree's DBH.

The preservation of Tree #9H would require a reduction of 663 square feet in the building's footprint and occupied area, determined by the same critical root zone criteria.

Neighbors' redwood tree #10 is in excellent condition. All excavations in close proximity to this tree will need to be supervised by the site arborist. All buildings are located far enough from this tree that no impacts are expected. Hardscapes and landscaping are closer to this tree than the buildings. All excavation when within 30 feet of this tree should be done by hand in combination with an air spade in order to expose all roots and leave them damage-free for the site arborist to view. If rooting is heavy in required base rock areas, then structural soil shall be used as structural soil can be packed around roots in the base rock areas and compacted to engineering standards. This will eliminate the need to cut roots in the required base rock area, thus lowering impacts to the tree. If any roots encountered over 2 inches in diameter are to be cut the site arborist must view the roots before cutting.

Cordyline trees #11-15 are to be transplanted. These trees are not of a protected size. It is recommended to have a tree moving contractor that specializes in this type of work do the transplanting. The following Tree Transplanting notes will help to increase the chance of tree survival during and after the transplanting process:
Timing and Location:Optimal timing is late fall or early spring during the dormant season. Choose a new site with similar conditions and set up irrigation.

Prepare New Hole: Dig a hole before transplanting with suitable dimensions.

Root Pruning: Trim roots and measure the drip line for the root ball size.

Mark and Dig: Mark the north side, then dig around and under the tree.

Wrap and Transport: Wrap the root ball in burlap, and transport it quickly to the new location.

Planting: Set the tree at the same depth in the new hole, backfill, and water generously. Set up irrigation to ensure consistent moisture.

Aftercare: Monitor for stress and prune as needed. Apply slow-release fertilizer in Protect from extreme conditions. By paying attention to timing, location, and proper irrigation, you enhance the chances of a successful tree transplant, and consulting a tree-moving contractor ensures a smooth process.

The lemon scented gum tree #16 is to remain. Coast Live Oak tree #17H is to remain. The following tree protection plan will help to reduce impacts to retained trees.

Tree Protection Plan:
Tree protection zones should be installed and maintained throughout the entire length of the project. Fencing for tree protection should be 6' tall, metal chain link material supported by metal 2" diameter poles, pounded into the ground to a depth of no less than 2'. The location for the protective fencing should be as close to the dripline of desired trees as possible, while still allowing room for construction to safely continue. No equipment or materials shall be stored or cleaned inside the protection zones. Areas outside the protection fence, but still beneath the tree's driplines, where foot traffic is expected to be heavy, should be mulched with 4-6" of chipper chips and covered with plywood. The spreading of chips will help to reduce compaction and improve soil structure.

Root Cutting
Any roots to be cut shall be monitored and documented. Large roots (over 2" in diameter) or large masses of roots to be cut must be inspected by the site arborist. The site arborist, at this time, may recommend irrigation or fertilization of the root zone. All roots needing to be cut should be cut clean with a saw or lopper. Roots to be left exposed for a period of time should be covered with layers of burlap and kept moist. The over-dig for the foundation should be reduced a much as possible when roots are encountered.

Trenching
Trenching for irrigation, drainage, electrical or any other reason shall be done by hand when inside the dripline of a protected tree. Hand digging and the careful placement of pipes below or besides protected roots will significantly reduce root loss, thus reducing trauma to the tree. All trenches shall be backfilled with native materials and compacted to near its original level, as soon as possible. Trenches to be left open for a period of time (24 hours), will require the covering of all exposed roots with burlap and be kept moist. The trenches will also need to be covered with plywood to help protect the exposed roots.

Transplanting Specifications
Pre-Transplant Preparation: Before excavation, ensure adequate root pruning has been performed. This is crucial for promoting the development of a dense, compact root ball essential for transplant success. It is recommended to have a tree moving contractor that specializes in this type of work do the transplanting.

Excavation Procedure: Carefully excavate the tree, preserving as much of the root ball as possible. The root ball diameter should be at least ten times the diameter of the tree trunk measured at breast height to comply with ISA standards.

Transport and Storage: Once excavated, the tree should be securely wrapped and transported to a designated storage area. During storage, maintain adequate moisture levels and protect the root ball from extreme temperatures and wind. The storage period should be as brief as feasible to minimize stress on the tree.

Site Preparation: The new planting site must be prepared in accordance with the specifications on sheet L-5 of the Planting Plan & Schedule. This includes ensuring the planting hole is twice the width of the root ball and as deep as the root ball height.

Planting Technique: Place the tree in the center of the hole, ensuring it is upright and at the correct depth. Backfill the hole with native soil mixed with compost to aid in root establishment.

Post-Planting Care: Stabilize the tree with stakes if necessary and water thoroughly. Implement a regular watering schedule, especially during the initial growth period, to ensure adequate moisture levels for root establishment.

Compliance and Supervision
All activities must be supervised by a qualified project arborist to ensure adherence to industry best practices and compliance with relevant city codes. The use of permitted hand tools such as shovels, air knives, and rotary hammers with clay spade attachments is essential for maintaining precision and minimizing damage to the tree during the transplanting process.

Irrigation
Normal irrigation shall be maintained on this site at all times. During the warm season, April – November, I typically recommend some additional heavy irrigation, 2 times per month. Seasonal rainfall may reduce the need for additional irrigation. This type of irrigation should be started prior to any excavation. The irrigation will improve the vigor of the tree and the water content of the tree. The on-site arborist may make adjustments to the irrigation recommendations as needed.

The information included in this report is believed to be true and based on sound arboricultural principles and practices.

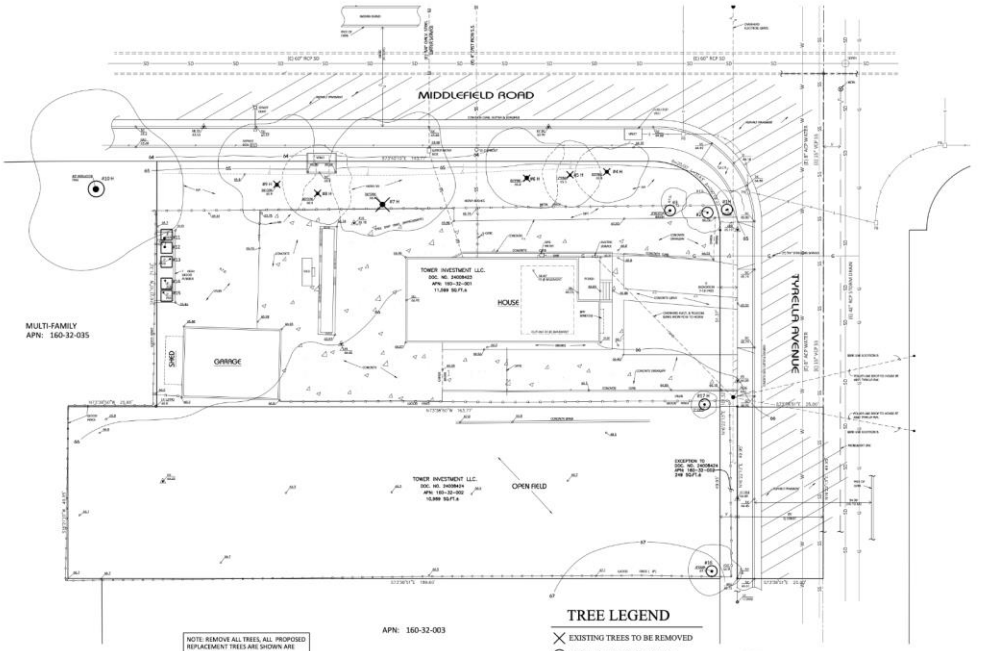
Sincerely,

David Beckham

Signature of Consultant
David Beckham
Certified Arborist
WE#10724A TRAQ Qualified
Dec 29, 2023

TREE DISPOSITION SUMMARY TABLE

Tree#	Species	DBH	CON
1H	Spanish dagger (*Yucca gloriosa*)	6"x5	45
2	Spanish dagger (*Yucca gloriosa*)	7"x2	45
3	Bottle brush (*Callistemon viminalis*)	3.3	65
4H/R	Monterey pine (*Pinus radiata*)	23.8	50
5H/R	Monterey pine (*Pinus radiata*)	17.3	50
6H/R	Monterey pine (*Pinus radiata*)	23.8	50
7H/R	Coast live oak (*Quercus agrifolia*)	42.6	60
8H/R	Coast live oak (*Quercus agrifolia*)	24.9	60
9H/R	Coast live oak (*Quercus agrifolia*)	26.3	60
10*H	Redwood (*Sequoia sempervirens*)	60est	90
11T	Cordyline (*Cordyline australis*)	2.5	50
12T	Cordyline (*Cordyline australis*)	5.6	50
13T	Cordyline (*Cordyline australis*)	3.2	50
14T	Cordyline (*Cordyline australis*)	4.0	50
15T	Cordyline (*Cordyline australis*)	4.0	50
16	Lemon scented gum (*Corymbia citriodora*)	8.9	45
17H	Coast live oak (*Quercus agrifolia*)	6.0	70



TREE LEGEND

- X EXISTING TREES TO BE REMOVED
- ○ EXISTING TREES TO REMAIN
- □ EXISTING TREES TO BE TRANSPLANTED
- H HERITAGE TREES
- R REMOVE
- T TRANSPLANT
- * TREE ON NEIGHBORING PROPERTY

TOPOGRAPHIC SURVEY
Existing Conditions And Tree Removal

294 & 296 TYRELLA AVE
OAK CREEK TERRACE

Berry and Associates
Civil Engineer

TOWER

TOPOGRAPHIC SURVEY
(EXISTING CONDITIONS & TREE REMOVAL)
REV 4: 12-15-2023
785 CASTRO STREET
MOUNTAIN VIEW, CA 94041
C-2

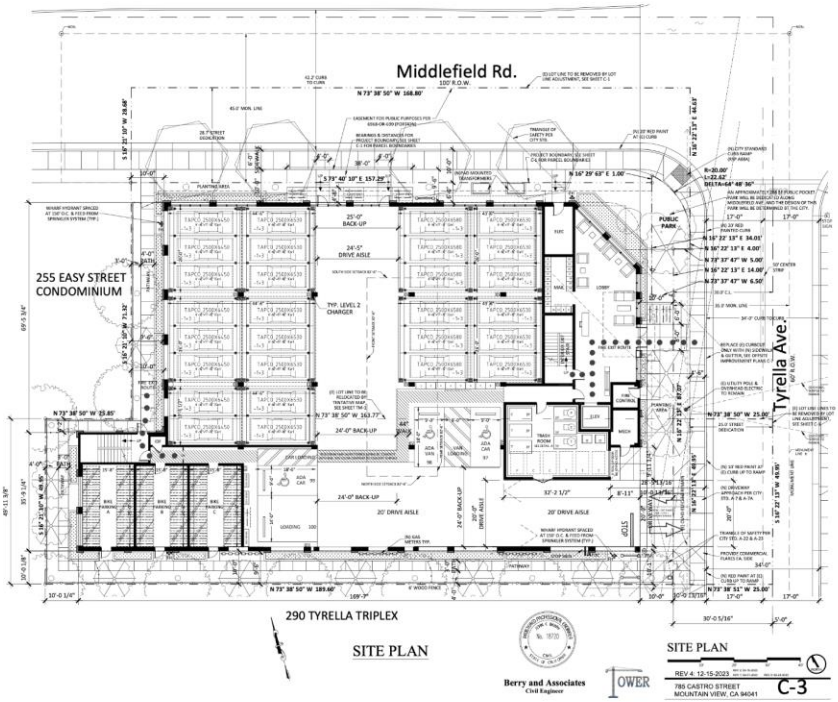
SITE PLAN NOTES

1. FOR EASEMENTS, LOT DIMENSIONS, AND LOT SIZES, SEE SHEET C-1.
2. BUILDING RETROFIT: USE IS PRIMARILY RESIDENTIAL, SEE SHEET A.0.5 FOR OCCUPANCY LOSS BY FLOOR.
3. SEE SHEET A.0.0 FOR NEIGHBORHOOD CONTEXT.
4. A ONE BUILDING OF APPROXIMATELY 1,500,354 SF.
5. THE SUBDIVISION APPROACH BEING USED FOR THIS PROJECT IS A TENTATIVE MAP. FOR PROPOSED EASEMENTS, LOT DIMENSIONS, AND LOT SIZES, SEE SHEET TM-1 TENTATIVE MAP.
6. SEE OFFSITE IMPROVEMENT PLAN ON SHEET C-7 FOR PROPOSED ENCUMBRANCES ACROSS THE PROPERTY LINE. SEE TENTATIVE MAP SHEET TM-1 FOR PROPOSED EASEMENTS.
7. "NO PARKING ANYTIME" SIGNAGE WILL BE PROVIDED ALONG ENTIRE FRONTAGE OF BOTH MIDDLEFIELD ROAD AND TYRELLA AVENUE.

LEGEND

- PROJECT BOUNDARY
- LOT LINE
- VERTICAL CURB & GUTTER
- VERTICAL CURB
- PERIMETER FENCE
- RAIN GARDEN BIO-RETENTION BASIN
- FH WHARF HYDRANT
- FDC FIRE DEPARTMENT CONNECTION
- PIV POST INDICATOR VALVE
- (E) TREE TO REMAIN

294 & 296 TYRELLA AVE
OAK CREEK TERRACE



SITE PLAN

Berry and Associates
Civil Engineer

TOWER

SITE PLAN
REV 4: 12-15-2023
785 CASTRO STREET
MOUNTAIN VIEW, CA 94041
C-3

ASSUMPTIONS AND LIMITING CONDITIONS

- **Legal Descriptions and Titles:** The consultant/arborist assumes the accuracy of any legal description and titles provided. No responsibility is assumed for any legal due diligence. The consultant/arborist shall not be held liable for any discrepancies or issues arising from incorrect legal descriptions or faulty titles.
- **Compliance with Laws and Regulations:** The property is assumed to be in compliance with all applicable codes, ordinances, statutes, or other government regulations. The consultant/arborist is not responsible for identifying or rectifying any non-compliance.
- **Reliability of Information:** Though diligent efforts have been made to obtain and verify information, the consultant/arborist is not responsible for inaccuracies or incomplete data provided by external sources. The client accepts full responsibility for any decisions or actions taken based on this data.
- **Testimony or Court Attendance:** The consultant/arborist has no obligation to provide testimony or attend court regarding this report unless mutually agreed upon through separate written agreements, which may incur additional fees.
- **Report Integrity:** Unauthorized alteration, loss, or reproduction of this report renders it invalid. The consultant/arborist shall not be liable for any interpretations or conclusions made from altered reports.
- **Restricted Publication and Use:** This report is exclusively for the use of the original client. Any other use or dissemination, without prior written consent from the consultant/arborist, is strictly prohibited.
- **Non-disclosure to Public Media:** The client is prohibited from using any content of this report, including the consultant/arborist's identity, in any public communication without prior written consent.
- **Opinion-based Report:** The report represents the independent, professional judgment of the consultant/arborist. The fee is not contingent upon any pre-determined outcomes, values, or events.
- **Visual Aids Limitation:** Visual aids are for illustrative purposes and should not be considered precise representations. They are not substitutes for formal engineering, architectural, or survey reports.
- **Inspection Limitations:** The consultant/arborist's inspection is limited to visible and accessible components. Non-invasive methods are used. There is no warranty or guarantee that problems will not develop in the future.

ARBORIST DISCLOSURE STATEMENT

Arborists specialize in the assessment and care of trees using their education, knowledge, training, and experience.

- **Limitations of Tree Assessment:** Arborists cannot guarantee the detection of all conditions that could compromise a tree’s structure or health. The consultant/arborist makes no warranties regarding the future condition of trees and shall not be liable for any incidents or damages resulting from tree failures.

- **Remedial Treatments Uncertainty:** Remedial treatments for trees have variable outcomes and cannot be guaranteed.
- **Considerations Beyond Scope:** The consultant/arborist's services are confined to tree assessment and care. The client assumes responsibility for matters involving property boundaries, ownership, disputes, and other non-arboricultural considerations.
- **Inherent Risks:** Living near trees inherently involves risks. The consultant/arborist is not responsible for any incidents or damages arising from such risks.
- **Client's Responsibility:** The client is responsible for considering the information and recommendations provided by the consultant/arborist and for any decisions made or actions taken.

The client acknowledges and accepts these Assumptions and Limiting Conditions and Arborist Disclosure Statement, recognizing that reliance upon this report is at their own risk. The consultant/arborist disclaims all warranties, express or implied.

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

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.

David Beckham

Signature of Consultant

David Beckham
Certified Arborist WE#10724A TRAQ Qualified
Dec 29, 2023