

Date: September 11th, 2024







Attn: Haiyun Li

Site: 9 Knoll Vista, Atherton CA

Subject: Planning Commission Application for proposed work within the tree protection zones of trees #33-38 at 9 Knoll Vista, Atherton, CA

Dear Haiyun Li,

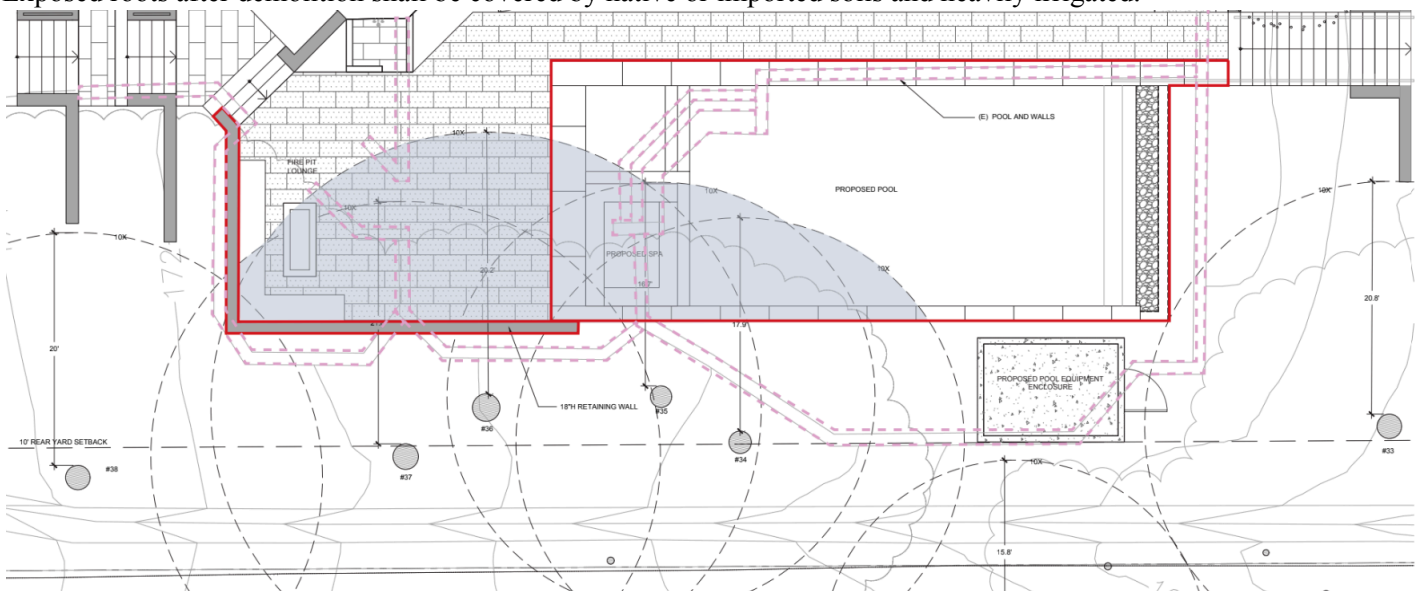
We are submitting this letter as part of the Planning Commission application for the proposed development at 9 Knoll Vista, Atherton, CA. This letter outlines the proposed work within the tree protection zones of redwood trees #33-37 and coast live oak tree #38. Overall impacts are expected to be minor to non-existent due to the existing retaining walls and pool located closer than the proposed.

Tree Tag #	Protected Tree	Preserve or Remove	Common Name / Scientific Name	Appraised Value	Trunk (in.)	Six Times the Diameter in (ft.)	Eight Times the Diameter in (ft.)	Ten Times the Diameter in (ft.)	Height (ft.) / Canopy Spread (ft.)	Health Rating	Structural Rating	Form Rating	Suitability for Preservation	Overall Condition (0-100%)	Summary	Tree Picture #1
33	Yes	(P)	REDWOOD <i>Sequoia sempervirens</i>	\$14,100	25	12.5	16.7	20.8	55/35	Good	Good	Good	Good	70%	Next to landscaping and drainage ditch. On slope below pool deck. Aesthetically pleasing tree.	
34	Yes	(P)	REDWOOD <i>Sequoia sempervirens</i>	\$10,600	21.5	10.8	14.3	17.9	60/35	Good	Good	Good	Good	70%	Next to pool deck, privacy screen. Aesthetically pleasing tree.	
35	Yes	(P)	REDWOOD <i>Sequoia sempervirens</i>	\$9,300	20	10.0	13.3	16.7	65/35	Good	Good	Good	Good	70%	Next to pool deck, privacy screen. Aesthetically pleasing tree.	
36	Yes	(P)	REDWOOD <i>Sequoia sempervirens</i>	\$13,300	24.2	12.1	16.1	20.2	70/35	Good	Good	Good	Good	70%	Next to pool deck, privacy screen. Aesthetically pleasing tree.	
37	Yes	(P)	REDWOOD <i>Sequoia sempervirens</i>	\$15,400	26.2	13.1	17.5	21.8	70/35	Good	Good	Good	Good	70%	Next to pool deck, privacy screen. Aesthetically pleasing tree.	
38	Yes	(P)	COAST LIVE OAK <i>Quercus agrifolia</i>	\$10,100	24	12.0	16.0	20.0	45/45	Fair	Good	Good	Good	65%	Next to drainage ditch. Buried root crown. Leaning towards rear of property. Suppressed by redwood. Aesthetically pleasing tree.	

Showing survey of trees #33-38

Discussion of proposed work within tree protection zones

Redwood trees #33-37 were assigned a health rating of Good. Coast live oak tree #38 was assigned a fair condition rating. These trees are located below or adjacent to the existing pool deck/retaining wall. Work to be performed within 10x diameter of these trees will include new landscaping and patio work, as well as realignment of the existing swimming pool and new retaining wall work. All of the work is within the calculated tree protection zones of 10x diameter. The existing retaining walls and pool are closer to the trees than what is proposed. The plan will benefit the trees as soil space will be increased. The existing retaining walls and pool have likely acted as a root barrier for these trees, and little to no root growth is expected beyond the existing retaining walls. Impacts from the work are expected to be minor to non-existent. Demolition of the existing retaining walls within 10x the diameter of the trees will need to be carefully done under the direct supervision of the project arborist. Any exposed roots at the retaining wall will need to be covered by layers of wetted-down burlap to help avoid root desiccation. Demolition equipment must be placed as far from the trees as possible during the demolition work to reduce the risk of compaction within the tree protection zones. If access is needed within the tree protection zones, the areas shall be protected by a landscape barrier. Impacts are expected to be minor to nonexistent as little to no root growth is expected beyond the existing retaining walls where the work is proposed. Exposed roots after demolition shall be covered by native or imported soils and heavily irrigated.



Showing site plan overlaid onto the existing site conditions, notice the proposed retaining wall work is all further away from the trees than the existing retaining walls as well as the pool.

Excavation for the new pool and retaining walls is required to take place by hand under the direct supervision of the project arborist. All roots encountered must be shown to the project arborist and documented in the required monthly inspection letters during construction. It is the contractors responsibility to contact the project arborist in a timely manner. Any root that needs to be cut must be cut cleanly using a hand saw or loppers while under the direct supervision of the project arborist.

Redwood trees and oak trees have a good tolerance to construction impacts as seen in the Matheny and Clark relative tolerance to construction chart. It is recommended to maintain any existing irrigation for the redwood trees as redwood trees require supplemental irrigation during the dry season. If irrigation is no longer present, It is recommended to install an inline drip emitter system set up in a grid like manner to provide deep irrigation during the dry season. The irrigation system should be placed on top of grade and require no excavation. Irrigation shall be turned on weekly until the top foot of soil is saturated. It is also recommended to deep water fertilize the redwood grove and oak tree #38 with Nutriroot in spring of 2025. This will help to keep the trees healthy and mitigate the expected minor to non-existent impacts.

TREE PROTECTION PLAN

Detailed Tree Protection Plan

For the aforementioned tree protection plan, this detailed guide has been designed by Kielty Arborists Services LLC. The following section offers an in-depth perspective on the recommended tree preservation guidelines. The aim is to ensure the conservation, vitality, and beauty of trees during construction and developmental endeavors, mitigating any potential detrimental effects. Adherence to these guidelines is essential to uphold both the ecological significance and visual allure of trees within the designated project vicinity. Effective tree protection during construction or development projects requires the use of fencing to demarcate and protect sensitive areas around trees. Should you have any questions or require further clarification, please contact Kielty Arborists Services directly.

Definitions And Distances:

TPZ-The Tree Protection Zone (TPZ) refers to a radius spanning from the external surface of the trunk measured at 54 inches above grade. It is possible to find many, but certainly not all, of the tree's roots in this area, which are essential for its biological functioning and structural stability. Any activity occurring in the TPZ or within the confines of the Tree Protective Zone (TPZ) needs to adhere to the work scheme endorsed by the Project Arborist as discussed in the plan review section of this report. Work within the TPZ is required to be done under the supervision of the project arborist. The TPZ is determined by multiplying the diameter of the trunk by ten ($10 \times \text{DBH} / 12$).

Tree roots predominantly grow in the top two feet of soil, with a small number of roots occasionally extending deeper. Establish Tree Protection Zones (TPZ) around each preserved tree to safeguard the root system from disturbance. Clearly mark the TPZ with weatherproof signage stating "Tree Protection Zone - Authorized Persons Only" to prevent unauthorized access. Prohibit the storage of equipment, materials, or any other activity that may damage the tree's root system within the TPZ. During construction, regularly inspect and maintain the TPZ to ensure its integrity and effectiveness.

Fencing Specifications:

The tree protection fencing should be established and maintained throughout the entire length of the project. It's essential that no equipment, materials, or debris are stored or cleaned inside these protection zones. The zones should remain free from human activity unless explicitly authorized. The choice of fencing type depends on the tree's location and the nature of the surrounding environment.

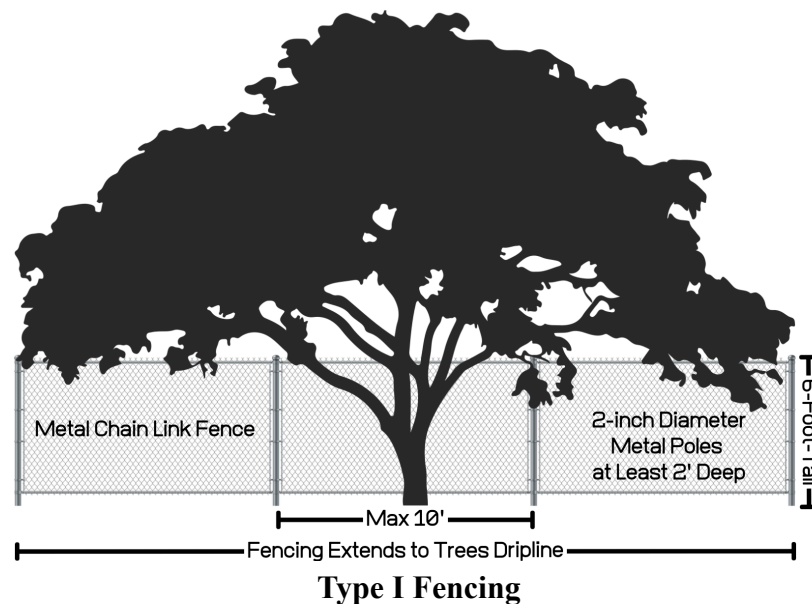
Type I Tree Protection:

Description: This is the most comprehensive form of tree protection fencing. It encompasses the full canopy dripline or Tree Protection Zone (TPZ) of trees designated for preservation.

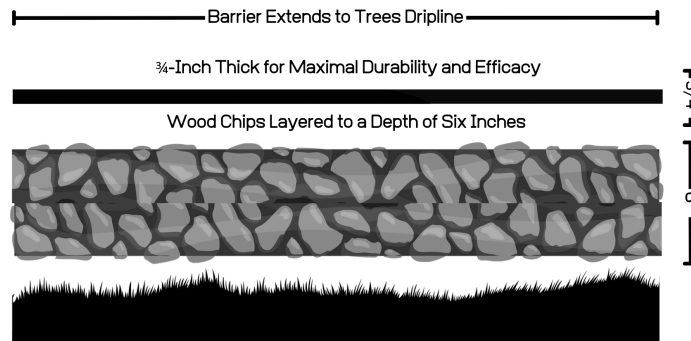
Application: Typically used in areas where trees are a significant distance away from construction activity or when trees have a large canopy spread.

Specifications:

The fencing shall remain intact throughout the duration of the project or until activities within the TPZ are finalized. Tree protection fencing should be a 6-foot-tall metal chain link type supported by 2-inch thick diameter metal posts pounded into the ground to a depth of no less than 2 feet, ensuring stability even in challenging conditions. Poles should be spaced no more than 10 feet apart from center to center, providing a consistent and strong barrier. For trees near existing hardscapes or structures, tree protection fencing shall be placed as close as possible while still allowing access. Sensitive areas may require a landscape barrier if fencing needs to be reduced for access reasons. The location for tree protection fencing for the protected trees on site should be placed at 10x the tree diameters where possible (TPZ). All other non-protected trees are recommended to be protected by fencing placed at the drip line. No equipment or materials should be stored or cleaned inside protection zones. Signs should be placed on fencing signifying “Tree Protection Zone - Keep Out”. If fencing needs to be reduced for access or any other reasons, the non-protected areas must be protected by a landscape buffer. All tree protection and inspection schedule measures, design recommendations, watering, and construction schedules shall be implemented in full by the owner and contractor. All trees are required to be protected by Type I Tree Protection Fencing.

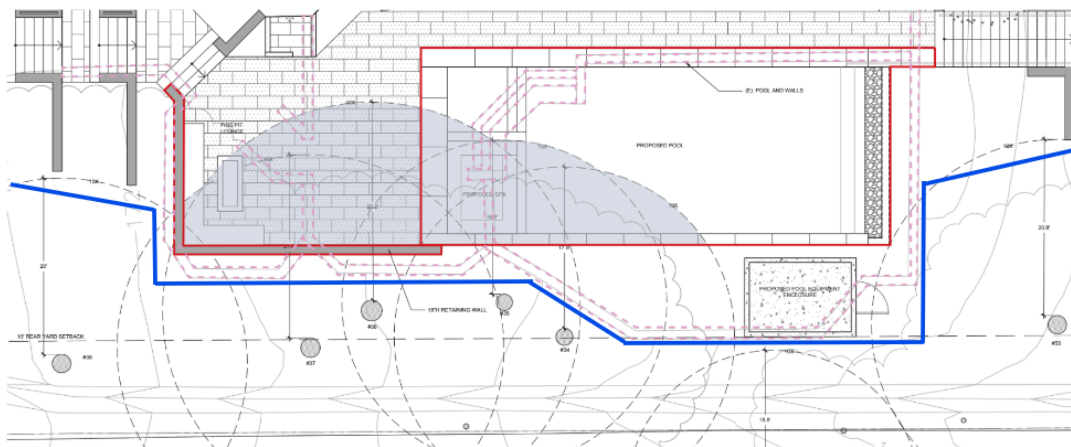
**Landscape Barrier Zone**

If for any reason a smaller tree protection zone is needed for access, a landscape buffer should be used, composed of wood chips layered to a depth of six inches, complemented by plywood atop the wood chips where tree protection fencing would typically be situated. The plywood should be $\frac{3}{4}$ -inch thick for maximal durability and efficacy. This landscape buffer plays a crucial role in mitigating soil compaction within the tree's vulnerable root zone. For optimum stability, it is advisable to securely join the plywood boards, thus preventing any unwanted shifts in the plywood or underlying wood chips.



Landscape Barrier Zone

TREE PROTECTION MAP



The blue line showing tree protection fencing for trees #33-38

Sincerely,

David Beckham

Signature of Consultant

David Beckham, Certified Arborist WE#10724A TRAQ Qualified

September 11th, 2024

METHOD OF INSPECTION

The inspections were conducted from the ground without climbing the trees. No tissue samples or root crown inspections were performed. The trees under consideration were identified based on the provided site plan. To assess the trees, their diameter at 54 inches above ground level (DBH or diameter at breast height) was measured using a D-Tape. For the surveying of multi-trunk trees, our methodology aligns with city ordinances. In cases where the city does not offer specific guidelines for measuring multi-trunk trees, we adhere to the standards outlined in the "Guide for Plant Appraisal, 10th Edition, Second Printing" by the Council of Tree and Landscape Appraisers. Additionally, the protected trees were evaluated for their health, structure, form, and suitability for preservation with the following explanation of the ratings:

EVALUATION FIELDS:

Tree Tag #: Identification number for individual trees.	Protected Tree: Specifies whether the tree is protected by the city or county ordinance.
Height (ft.) / Canopy Spread (ft.): Measures both the height of the tree and the spread of its canopy.	Trunk (in.): Measures the primary trunk's diameter at the required height.
Comments: Any additional notes or observations about the tree.	Tree Picture: A photograph of the tree for visual assessment and record-keeping.
Preserve or Remove: Indicates the recommended action based on the tree's condition.	Common Name / Scientific Name: Specifies the name of the tree, both in common terms and scientific nomenclature.
If more than 1 Trunks, Total Diameter: If the tree has multiple trunks, this field indicates the combined diameter of all trunks.	6, 8, 10 Times the Diameter (ft.): Provides calculations based on the diameter to assist in various tree protection requirements.
Appraised Value: An unbiased estimate of the tree's worth is performed in accordance with the current edition of the Guide for Plant Appraisal by the Council of Tree and Landscape Appraisers.	

*Note that not all fields may be provided for every tree. Some might be left blank due to various reasons, such as lack of accessibility to the tree, incomplete data, or the parameter not being applicable for a particular tree.

Tree Structure Ratings:	Tree Health Ratings:
Poor: Major uncorrectable structural flaws present; significant dead wood, decay, or multiple trunks; potentially hazardous lean.	Poor: Minimal new growth; significant dieback and pest infestation; expected not to reach natural lifespan.
Fair: Structural flaws exist but less severe; issues like slight lean and crowding on trunk; some uncorrectable issues through pruning.	Fair: Moderate new growth; canopy density 60-90%; potential external threats; not in decline but vulnerable.
Good: Minor flaws; mainly upright trunk, well-spaced branches; flaws correctable through pruning; symmetrical or mostly symmetrical canopy.	Good: Vigorous growth; healthy foliage; 90-100% canopy density; expected natural lifespan.
Suitability for Preservation:	Tree Form Ratings:
Poor: Adds little to landscape; poor health and potential hazards; unlikely to survive construction impacts.	Poor: Highly asymmetric or abnormal form; visually unappealing; little landscape function.
Fair: Contributes to landscape; survival possible with protection during minor construction impacts.	Fair: Significant asymmetries; deviation from species norm; compromised function or aesthetics.
Good: Valuable landscape asset; likely survival during minor to moderate construction impacts with protection.	Good: Near ideal form; minor deviations; consistent aesthetics and function in landscape.

*Suitability for Preservation: This rating is based solely on the tree itself, irrespective of potential construction impacts.

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

The trees were assigned a condition rating based on a combination of existing tree health, tree structure, and tree form using the following scale.

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 predetermined 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.

CERTIFICATION

I 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

September 11, 2024

