

# Kielty Arborist Services LLC

Certified Arborist WE#10724A

P.O. Box 6187

San Mateo, CA 94403

650- 532-4418

November 5<sup>th</sup>, 2021, Revised March 24<sup>th</sup>, 2022

LE Architecture

Attn: Kim Tran

Site: 183 Patricia Drive, Atherton CA

Dear LE Architecture,

As requested on Wednesday, October 27<sup>th</sup>, 2021, and again on Wednesday March 23<sup>rd</sup>, 2022, I visited the above site for the purpose of inspecting and commenting on the trees. A new home with a detached garage is proposed for this site, and your concern as to the future health and safety of the trees has prompted this visit. A tree protection plan, as required will be included within this report. The most recent site plan was reviewed for writing this report.

## Method:

All inspections were made from the ground; the trees were not climbed for this inspection. The trees in question were located on an existing topography map provided by you. The trees were then measured for diameter at 48 inches above ground level (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:

*\*-indicates neighbor's tree*

**P**-Indicates protected tree by city ordinance.

**R**-Indicates proposed removal

**DBH**-Diameter at breast height (48 inches above grade)

**CON**- Condition rating

**HT/SP**- Tree height/ canopy spread

183 Patricia

(2)

**Survey:**

<b>Tree#</b>	<b>Species</b>	<b>DBH</b>	<b>CON</b>	<b>HT/SP</b>	<b>Comments</b>
<b>1R</b>	Chinese Elm ( <i>Ulmus parvifolia</i> )	21.7	70	40/40	Good vigor, good form, slight lean, close to home, <b>IN BUILDABLE SPACE</b>
<b>2P/R</b>	Chinese Elm ( <i>Ulmus parvifolia</i> )	19.5	70	40/40	Good vigor, good form, close to home. <b>Appraised value=\$5,400</b> <b>10x diameter= 16.2'</b> <b>8x diameter= 13'</b>



**Showing Chinese Elm trees #1 and #2**



183 Patricia

(3)

**Survey:**

<b>Tree#</b>	<b>Species</b>	<b>DBH</b>	<b>CON</b>	<b>HT/SP</b>	<b>Comments</b>
3P	Deodar Cedar ( <i>Cedrus deodara</i> )	45.8	70	65/45	Good vigor, good form.
Appraised value=\$27,200					
10x diameter= 38.1'					
8x diameter= 30.5'					



4P	Coast Live Oak ( <i>Quercus agrifolia</i> )	24.0	70	40/30	Good vigor, fair form, too close to irrigation, heavy towards neighbor's property.
Appraised value=\$9,100					
10x diameter= 20'					
8x diameter= 16'					



183 Patricia

(4)

**Survey:**

<b>Tree#</b>	<b>Species</b>	<b>DBH</b>	<b>CON</b>	<b>HT/SP</b>	<b>Comments</b>
5	Sweet Bay ( <i>Laurus nobilis</i> )	10.0	50	12/8	Good vigor, fair form, hedge pruned, screening material.
6	Sweet Bay ( <i>Laurus nobilis</i> )	10.0	50	12/8	Good vigor, fair form, hedge pruned, screening material.
7	Sweet Bay ( <i>Laurus nobilis</i> )	12.0	50	12/8	Good vigor, fair form, hedge pruned, screening material.
8	Strawberry Madrone ( <i>Arbutus marina</i> )	9.8	50	15/12	Fair vigor, fair form, decay on trunk.
9P	Coast Live Oak ( <i>Quercus agrifolia</i> ) <b>Appraised value=\$7,800</b> <b>10x diameter= 19.8'</b> <b>8x diameter= 15.8'</b>	23.8	60	45/35	Good vigor, fair form, codominant at 12 feet with included bark.
10P	Coast Live Oak ( <i>Quercus agrifolia</i> ) <b>Appraised value=\$9,900</b> <b>10x diameter= 21'</b> <b>8x diameter= 16.8'</b>	25.2	70	45/40	Good vigor, good form.





183 Patricia

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**Survey:**

<b>Tree#</b>	<b>Species</b>	<b>DBH</b>	<b>CON</b>	<b>HT/SP</b>	<b>Comments</b>
11	Ginkgo ( <i>Ginkgo biloba</i> )	11.3	65	30/20	Good vigor, good form, suppressed.
12P	Deodar Cedar ( <i>Cedrus deodara</i> ) <b>Appraised value=\$14,300</b> <b>10x diameter= 25'</b> <b>8x diameter= 20'</b>	30.0	70	65/30	Good vigor, good form.
13P	Deodar Cedar ( <i>Cedrus deodara</i> ) <b>Appraised value=\$20,500</b> <b>10x diameter= 34.1</b> <b>8x diameter= 27.3'</b>	41.0	60	85/35	Good vigor, poor form, codominant at 40'



183 Patricia

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**Survey:**

<b>Tree#</b>	<b>Species</b>	<b>DBH</b>	<b>CON</b>	<b>HT/SP</b>	<b>Comments</b>
14aP	Redwood ( <i>Sequoia sempervirens</i> ) <b>Appraised value=\$11,000</b> <b>10x diameter= 45.8'</b> <b>8x diameter= 36.6'</b>	35.2	60	80/35	Fair vigor, poor form, codominant at grade with 14b.

14bP	Redwood ( <i>Sequoia sempervirens</i> ) <b>Appraised value=\$16,900</b> <b>10x diameter= 45.8'</b> <b>8x diameter= 36.6'</b>	47.3	60	80/35	Fair vigor, poor form, codominant at grade with 14a.
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15	Saucer magnolia ( <i>Magnolia x soulangeana</i> )	13.1	70	25/40	Good vigor, fair form, aesthetically pleasing.
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16*P	Redwood ( <i>Sequoia sempervirens</i> ) <b>Appraised value=\$ 5,100</b> <b>10x diameter= 16.6'</b> <b>8x diameter= 13.3'</b>	20est	70	85/25	Fair vigor, fair form, minor drought stress.
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17*	Redwood ( <i>Sequoia sempervirens</i> )	14est	70	85/25	Fair vigor, fair form, minor drought stress.
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183 Patricia

(7)

**Survey:**

<b>Tree#</b>	<b>Species</b>	<b>DBH</b>	<b>CON</b>	<b>HT/SP</b>	<b>Comments</b>
18*P	Redwood ( <i>Sequoia sempervirens</i> ) <b>Appraised value=\$3,720</b> <b>10x diameter= 14.1'</b> <b>8x diameter= 11.3'</b>	17est	70	85/25	Fair vigor, fair form, minor drought stress.
19*P	Redwood ( <i>Sequoia sempervirens</i> ) <b>Appraised value=\$5,100</b> <b>10x diameter= 16.6'</b> <b>8x diameter= 13.3'</b>	20est	70	85/25	Fair vigor, fair form, minor drought stress.
20*	Redwood ( <i>Sequoia sempervirens</i> )	14est	70	85/25	Fair vigor, fair form, minor drought stress.
21*P	Redwood ( <i>Sequoia sempervirens</i> ) <b>Appraised value=\$ 14,700</b> <b>10x diameter= 31.6'</b> <b>8x diameter= 25.3'</b>	38est	60	95/25	Fair vigor, fair from, bot canker infected.
22*P	Redwood ( <i>Sequoia sempervirens</i> ) <b>Appraised value=\$17,600</b> <b>10x diameter= 36.6'</b> <b>8x diameter= 29.3'</b>	44est	60	110/30	Fair vigor, fair form, drought stressed, die back.
23*	Liquidambar ( <i>Liquidambar styraciflua</i> )	14est	55	50/25	Fair vigor, fair form, suppressed.
24*P	Redwood ( <i>Sequoia sempervirens</i> ) <b>Appraised value=\$9,900</b> <b>10x diameter= 23.3'</b> <b>8x diameter= 18.6'</b>	28est	70	90/25	Fair vigor, fair form.
25*P	Redwood ( <i>Sequoia sempervirens</i> ) <b>Appraised value=\$9,900</b> <b>10x diameter= 23.3'</b> <b>8x diameter= 18.6'</b>	28est	70	90/25	Fair vigor, fair form.





**Pictures showing neighboring Redwood trees #16-22 & #24 and 25**



183 Patricia

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**Survey:**

<b>Tree#</b>	<b>Species</b>	<b>DBH</b>	<b>CON</b>	<b>HT/SP</b>	<b>Comments</b>
26P	Silver maple ( <i>Acer saccharinum</i> )	32.1	50	35/35	Fair vigor, poor form, topped for utilities, off balanced, heavy into property.
<b>Appraised value=\$5,900</b>					
<b>10x diameter= 26.7'</b>					
<b>8x diameter= 21.4'</b>					




27P	Coast Live Oak ( <i>Quercus agrifolia</i> )	23.5	60	35/25	Fair vigor, fair form, pruned for utilities on one side, close to irrigation.
<b>Appraised value=\$6,700</b>					
<b>10x diameter= 19.5'</b>					
<b>8x diameter= 15.6'</b>					



183 Patricia

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**Survey:**

<b>Tree#</b>	<b>Species</b>	<b>DBH</b>	<b>CON</b>	<b>HT/SP</b>	<b>Comments</b>
28	Birch ( <i>Betula pendula</i> )	10.9	70	25/15	Good vigor, good form.
29	Birch ( <i>Betula pendula</i> )	11.8	70	25/15	Good vigor, good form.
30	Birch ( <i>Betula pendula</i> )	11.2	70	25/15	Good vigor, good form.
31	Birch ( <i>Betula pendula</i> )	10.1	70	25/15	Good vigor, good form.
32	Pittosporum ( <i>Pittosporum eugenioides</i> )	9.5	50	30/15	Fair vigor, poor form, topped for utilities.
33P	Redwood ( <i>Sequoia sempervirens</i> ) <b>Appraised value=\$7,300</b> <b>10x diameter= 20.2'</b> <b>8x diameter= 16.2'</b>	24.3	70	55/20	Good vigor, good form.
					
34	Plum ( <i>Prunus sp.</i> )	10.0	20	20/15	Poor vigor, poor form, in decline, topped for utilities.



**Survey:**

<b>Tree#</b>	<b>Species</b>	<b>DBH</b>	<b>CON</b>	<b>HT/SP</b>	<b>Comments</b>
35P	Redwood	34-38-15	55	75/25	Good vigor, poor form, codominant. ( <i>Sequoia sempervirens</i> ) fixed diameter= 62.5 <b>Appraised value=\$ 26,800</b> <b>10x diameter= 52'</b> <b>8x diameter= 41.6'</b>
36P	Redwood	41.5	70	75/25	Good vigor, good form. ( <i>Sequoia sempervirens</i> ) <b>Appraised value=\$ 19,800</b> <b>10x diameter= 34.5'</b> <b>8x diameter= 27.6'</b>
37P	Redwood	25-38	60	75/25	Good vigor, fair form, codominant. ( <i>Sequoia sempervirens</i> ) fixed diameter=50.5 <b>Appraised value=\$ 21,400</b> <b>10x diameter= 42'</b> <b>8x diameter= 33.6'</b>



**Showing Redwood trees #35-37**

183 Patricia

(12)

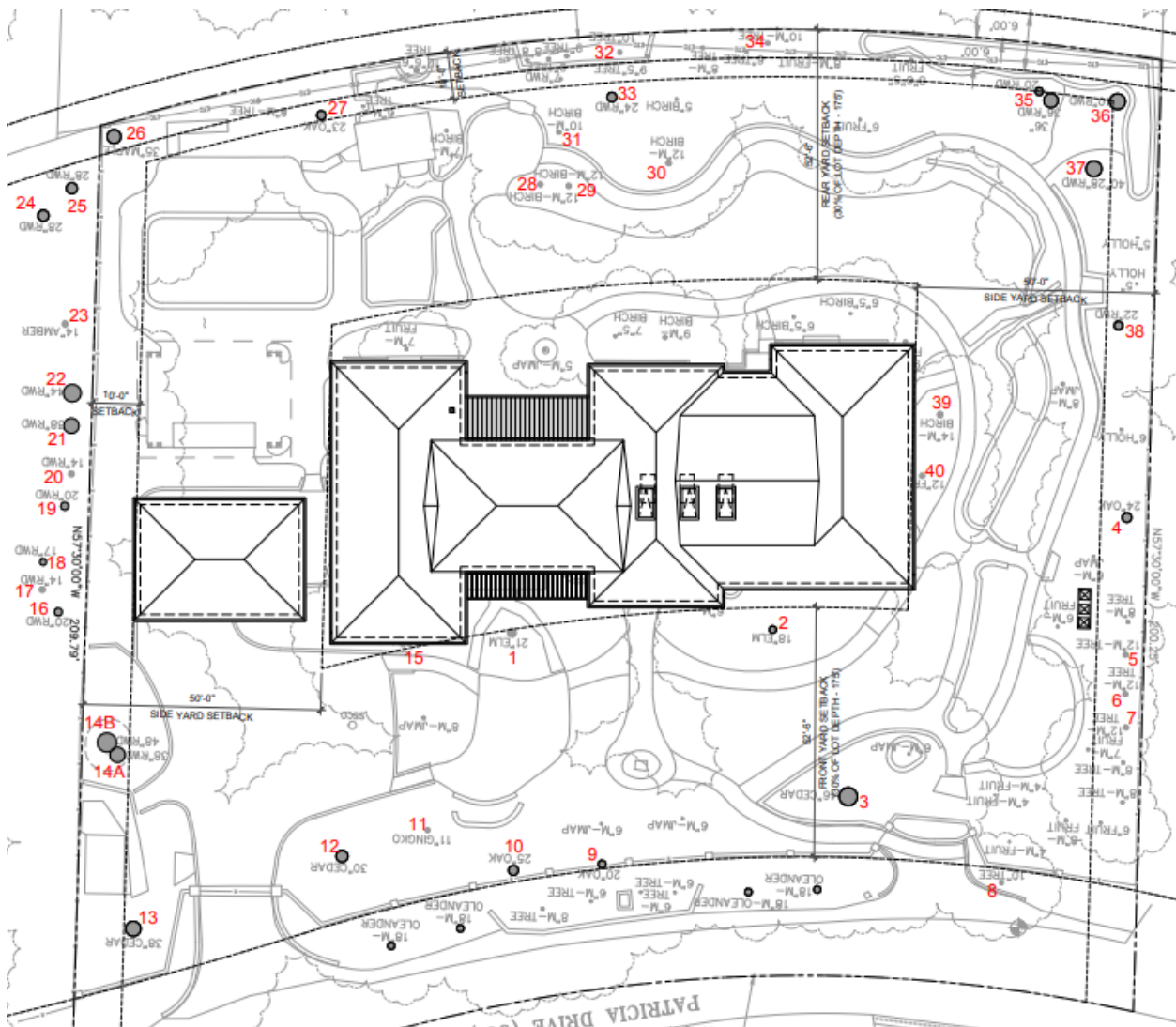
**Survey:**

<b>Tree#</b>	<b>Species</b>	<b>DBH</b>	<b>CON</b>	<b>HT/SP</b>	<b>Comments</b>
38P	Redwood ( <i>Sequoia sempervirens</i> )	22.2	70	55/20	Good vigor, good form.
<b>Appraised value=\$ 6,200</b>					
<b>10x diameter= 18.5'</b>					
<b>8x diameter= 14.8'</b>					



39	Birch ( <i>Betula pendula</i> )	12.2	60	16/12	Good vigor, fair form, topped.
40	Cherry ( <i>Prunus serrulata</i> )	14.5	70	16/20	Fair vigor, fair form.





Showing tree locations

**Summary of site visit:**

The site at 183 Patricia has 22 large “Heritage” sized trees. The landscape is very well landscaped and is aesthetically pleasing. The majority of the “Heritage” trees are well located near the property lines. Irrigation was noticed near many of the oak trees on site was observed. Dry season irrigation near oak trees can significantly raise risk of the tree developing a root rot disease that can destabilize the tree or lead to tree death. Irrigation near oak trees is recommended to be permanently suspended out to the tree driplines. The large “Heritage” trees are recommended to be inspected annually by a Certified Arborist for any tree work needed.

**Protected tree proposed for removal:**

Chinese Elm tree #2 is in good condition. The tree is located too close to the existing home and proposed home. Any limb failure or trunk failure would likely have high chance of impacting the home (target). Consequences of failure would be high for the high value home. The proposed home foundation is at risk of being damaged by the tree's roots, as the tree is very close to the proposed home. Cutting roots at the proposed foundation would have a high impact on the stability and health of the tree. Tree removal is recommended as the tree is hazardous to the home. (See picture on page 2)

**Distances to proposed construction:**

The text below are multiple rules from the ordinance that are recommended to be followed where possible.

1. R1-A Zoning District for lots of more than 10,000 square feet:
  - a. The TPZ is 10x away from all buildings and structures.
  - b. The TPZ is 8x away from any new driveway.
2. R1-B Zoning District and lots in the R1-A Zoning District that are 10,000 square feet or less:
  - a. The TPZ is 6x away from all buildings, structures, and new driveways.
3. For all lots:
  - a. The TPZ is 6x away from all CMU walls and 5x away from all wood or metal fences that require a permit.
  - b. The TPZ is 3x from all landscaping, Landscape Screening trees and bushes.
  - c. For replacement of existing driveways and/or new, proposed compacted surfaces, allow for replacement in the existing location, but in no cases less than 3 times (3x).

**Town Arborist Exceptions:**

A Town Arborist exception from the TPZ standards noted in Section 2.2 (A) can be considered under any of the following scenarios.

- A TPZ exception in the R1-A from 10x the diameter, down to a minimum of 8x the diameter, for all development types unless otherwise specified.
- A TPZ exception in the R1-A from 6x the diameter, down to a minimum of 3x the diameter, for lots in the R1-B, or lots in the R1-A 10,000 square feet or less.
- A TPZ exception for all walls or fences from 6x the diameter, down to 3x the diameter

An application and fee are required to be completed prior to a Town Arborist TPZ exception review. Submitting and paying for the application does not guarantee approval to reduce the TPZ. If the Town Arborist denies an application submitted for a Town Arborist exception to the TPZ, the application can be appealed to the Planning Commission in accordance with the Atherton Municipal Code.



**Impacts and recommendations due to proposed construction:**

The proposed detached garage on site will need a town arborist exception for Redwood trees #14a, 14b, 16, 19, 21, and 22. This is discussed in a separate letter as an addendum to this report and will be used for the planning commission meeting. None of the other retained Heritage trees will have work proposed within the 10x diameter distance and therefore no other impacts are expected. The following tree protection plan will help to reduce impacts to the trees on site.

**Tree Protection Plan:**

In the town of Atherton, tree protection fencing is recommended to be placed at 8 to 10 times diameter as required. Tree protection zones should be established and maintained throughout the entire length of the project. Fencing for the protection zones should be 6 foot tall metal chain link (minimum 12 gauge) supported by 2 inch galvanized iron post pounded into the ground by no less than 2 feet. The support poles should be spaced no more than 10 feet apart on center. This detail shall appear on grading, demolition, and building permit plans. The location for the protection fencing can be determined by the formula: 8-10 times diameter. Any deviation in determining the tree protection zone will require approval by the Town Arborist. I have approved tree protection fencing being reduced for trees near the proposed work on site to a minimum of 8 times diameter. Where the proposed work is to take place underneath the dripline of a protected tree, the fencing shall be placed as close as possible to the proposed work. Tree protection fencing for trees near existing driveways to be retained shall follow the perimeter of the driveway when within the 8-10x diameter range. No excavation shall be allowed inside tree protection zones without the Site Arborist consent. Signs should be placed on fencing signifying "Tree Protection Zone - Keep Out". No materials or equipment should be stored or cleaned inside the tree protection zones. It is recommended to mulch the tree protection zones using 4-6 inches of wood chips. Tree protection fencing can only be removed at the end of the project by approval from the Town Arborist. The town of Atherton will require at Tree Protection Procedure Acknowledgement Signature to be signed by the owner of the property or contractor, acknowledging the existence of Heritage Trees on the property and that the Town's Standards and Specifications will be followed throughout the length of the project. Verification that all tree protection fencing measures have been installed will be needed before the issuing of permits as required by the Town. A site meeting with the general contractor, Town Arborist, and Site Arborist before the project starts will be required to review tree protection measures and to establish haul routes, staging areas, etc.

**Root cutting**

Any roots to be cut should be monitored and documented. Large roots measuring 2 inches in diameter or larger will need to be inspected by the Project Arborist before being cut. If possible, roots should be cut back to sound lateral roots under the supervision of the Project Arborist. The Project Arborist will likely recommend irrigation if root cutting is significant. Cut all roots clean with a saw or loppers. Roots to be left exposed for a period of time should be covered with layers of burlap and kept moist. The Project Arborist will be on site for excavation near all protected trees on site. If injury is to take place to tree roots proper mitigation measures will need to be applied.

**Trenching**

Trenching for irrigation, electrical, drainage or any other reason should be hand dug in combination with an air spade when beneath the driplines of protected trees. Hand digging and carefully laying pipes below or beside protected roots will dramatically reduce root loss of desired trees thus reducing trauma to the entire tree. Trenches should be backfilled as soon as possible with native material and compacted to near its original level. Trenches that must be left exposed for a period of time should also be covered with layers of burlap and kept moist. Plywood over the top of the trench will also help protect exposed roots below. All trenching within a tree protection zone will need to be observed by the Site Arborist so that proper mitigation measures can be applied. Any Trenching less than 10x the diameter (dbh) is required to be hand dug including exploratory Trenching if approved to trench closer than 10x.

**Grading**

The grading contractors are required to meet with the Project Arborist and the Town Arborist at the site prior to beginning grading to review tree protection measures. The Project Arborist shall perform an inspection during the course of rough grading adjacent to the tree protection zone to ensure trees will not be injured by compaction, cut or fill, drainage and trenching, and if required, inspect aeration systems, tree wells, drains and special paving. The Site Arborist shall be notified at least 48 hours before an inspection is needed. If compaction from grading has taken place within a tree protection zone proper mitigation measures will need to be applied.

**Irrigation**

Normal irrigation should be maintained throughout the entire length of the project. The imported trees on this site will require irrigation during the warm season months. Some irrigation may be required during the winter months depending on the seasonal rainfall. During the summer months the trees on this site should receive heavy flood type irrigation 2 times a month. During the fall and winter 1 time a month should suffice. Mulching the root zone of protected trees will help the soil retain moisture, thus reducing water consumption. The native oak trees on site shall not be irrigated unless their root zones are traumatized. Any existing irrigation underneath native oak trees should be permanently suspended. Oak trees shall only be irrigated during the months of May and September.

**Required Inspections****A. Pre -Construction Meeting**

Prior to commencement of construction, the applicant or contractor shall conduct a pre-construction meeting to discuss tree protection with the job site superintendent, grading equipment operators, Project Arborist, and Town Arborist.

**B. Inspection of Protective Tree Fencing**

The Town Arborist shall be in receipt of a written statement from the applicant or Project Arborist verifying that he has conducted a field inspection of the trees and that the protective tree fencing is in place prior to issuance of a demolition, grading, or building permit.

**C. Inspection of Rough Grading**

The project arborist shall perform an inspection during the course of rough grading adjacent to the TPZ to ensure trees will not be injured by compaction, cut or fill, drainage and trenching, and

if required, inspect aeration systems, tree wells, drains and special paving. The contractor shall provide the Project Arborist at least 48 hours advance notice of such activity.

**D. Monthly Inspections**

The Project Arborist shall perform monthly inspections to monitor changing conditions and tree health and submit a written report to the Town Arborist.

**E. Special Activities within the Tree Protection Zone**

Work in this area (TPZ) requires the direct onsite supervision of the Project Arborist.

Kiely Arborist Services can be reached at (650) 515-9783 (Kevin), or by email at kkarbor0476@yahoo.com. This information should be kept on site at all times. The information included in this report is believed to be true and based on sound arboricultural principles and practices.

Sincerely,

David Beckham Certified Arborist WE#10724A TRAQ Qualification *David Beckham*

## Kiely Arborist Services

P.O. Box 6187  
San Mateo, CA 94403  
650-532-4418

### ARBORIST DISCLOSURE STATEMENT

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

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

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, landlord-tenant matters, etc. Arborists cannot take such issues into account unless complete and accurate information is given to the arborist. The person hiring the arborist accepts full responsibility for authorizing the recommended treatment or remedial measures.

***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.***

Arborist: *David Beckham*  
David Beckham

Date: March 25<sup>th</sup>, 2022