881 Castro St
Mountain View, CA
Arborist Report 2025

Updated 09.19.25

Prepared For:

GPR Ventures, Duke Capital Ventures & West Valley Ventures

Site: 881 Castro St
Mountain View, CA 94041

Submitted by:

David Beckham
Certified Arborist
WE#10724A
TRAQ Qualified

KIELTY
ARBORISTS SERVICES LLC
Certified Arborist WE#10724A TRAQ Qualified
P.O. Box 6187 San Mateo, CA 94403
650- 532-4418

KIELTY
ARBORISTS SERVICES LLC
Certified Arborist WE#10724A TRAQ Qualified
P.O. Box 6187 San Mateo, CA 94403
650- 532-4418

Date: May 30, 2024, Revised 9/12/24, Revised 2/28/25, Revised 5/5/25

GPR Ventures | Duke Capital Ventures | West Valley Ventures
Attn: Kyle Fahey
Site: 881 Castro St, Mountain View, CA 94041

Subject Re: Tree Protection Plan for 881 Castro St, Mountain View, CA 94041

Dear GPR Ventures,

At your request, Kielty Arborists Services LLC visited the property referenced above on 1/17/2024 to evaluate the trees present with respect to the proposed construction project. The report below contains the analysis of the site visit.

SUMMARY

Castro Commons is a proposed residential mixed-use project proposed at the intersection of Castro Street and El Camino Real. The goal of this project is to revitalize the gateway park by designing a community-oriented housing and commercial components that truly celebrate the pedestrian experience for locals and visitors. There are 61 trees in total that were surveyed for this site, 25 of which are Heritage trees (6-8, 10, 11, 17-19, 25, 26, 35-37, 41, 44, 45, 52-54, 58-61, 63, an 64. 33 trees are considered street trees (1-13, 17-19, 25, 26, 30-35, 38-43, 49, 50, and 62). Trees #3-7, and 54-64, are neighboring trees marked with an asterisk (*) on the survey. Below is a summary of the data collected on the trees.

Total Trees	Heritage Trees	Street Trees
61	25	33

Non-Protected Trees	Trees Proposed for Removal	Neighboring Trees
15	31	17

ASSIGNMENT

At the request of GPR Ventures, Kielty Arborists Services LLC conducted a site visit on 1/17/2024 to prepare a comprehensive Tree Inventory Report/Tree Protection Plan for the proposed construction project. This report is a requirement when submitting plans to the city of Mountain View. The analysis in this report is based on the architectural drawings dated 5/5/25 and the latest landscape drawings. Civil plans C-1.0 through C-6.0, dated 5/5/25 were also reviewed.

KIELTY
ARBORISTS SERVICES LLC
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P.O. Box 6187 San Mateo, CA 94403
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The primary focus of this report is as follows:

- Identification and assessment of trees on the construction site that may be affected by the proposed development.
- Determination of potential impacts on tree health and stability, considering factors such as root damage and crown damage.
- Provision of recommendations for tree protection and preservation measures during the construction process to mitigate potential impacts.
- Ensuring compliance with local regulations pertaining to tree preservation, protection, and removal within the construction plans.

Please note that the report will provide specific details regarding tree assessments, impacts, and preservation measures.

INTRODUCTION

According to our past communications with city staff, the City of Mountain View requires the following tree reporting elements for development projects:

1. Inventory of all trees shown on the provided survey.
2. Map of tree locations.
3. Tree protection or removal recommendations for all surveyed trees.

LIMITS OF THE ASSIGNMENT

As part of this assessment, it is important to note that Kielty Arborists Services LLC did not conduct an aerial inspection of the upper crown, a detailed root crown inspection, or a plant tissue analysis on the subject trees. Therefore, the information presented in this report does not include data obtained from these specific methods.

Furthermore, it is essential to clarify that no tree risk assessments were completed as part of this report unless stated otherwise. The focus of this assessment primarily centers on tree identification, general health evaluation, and the potential impacts of the proposed construction. While the absence of these specific assessments limits the scope of the analysis, the findings and recommendations provided within this report are based on available information and observations made during the site visit.

PURPOSE & USE OF THE REPORT

This report informs tree management decisions for the construction project and provides recommendations to maximize tree survival. It serves as a valuable resource for stakeholders, facilitating informed discussions and sustainable tree management practices.

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TESTING & ANALYSIS

In order to assess the trees, a thorough examination was conducted using a variety of methods. For trees with accessible trunks, precise measurements of the Diameter at Breast Height (DBH) were taken using a specialized diameter tape measure. In cases where the trunks were not readily accessible, visual estimations were employed to determine the DBH. As part of the inventory process, all trees exceeding a specific DBH threshold of 2 inches were included.

To evaluate the health of the trees, multiple factors were considered, including their overall appearance and our team's extensive experiential knowledge of each species. This holistic approach ensured a comprehensive understanding of the tree's well-being. To accurately document the location of each tree, a GPS smartphone application was utilized during the data collection process. This enabled us to create detailed maps that are included in this report. However, it is important to note that despite our efforts to minimize errors, inherent limitations of GPS data collection, coupled with slight discrepancies between GPS data and CAD drawings, may result in approximate tree locations depicted on the map.

To perform this assessment, a site visit was conducted on 1/17/2024. During this visit, meticulous observations and high-quality photographs were obtained to provide a comprehensive analysis. All site plans were electronically provided to us via email by GPR Ventures. By thoroughly analyzing these plans in conjunction with our field observations, we have developed an accurate and reliable assessment of the tree conditions.

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 trees were evaluated for their health, structure, form, and suitability for preservation with the following explanation of the ratings:

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EVALUATION FIELDS:

Tree Tag #:	Protected Tree:
Identification number for individual trees.	Specifies whether the tree is protected by the city or county ordinance.

Height (ft.) / Canopy Spread (ft.):	Trunk (in.):
Measures both the height of the tree and the spread of its canopy.	Measures the primary trunk's diameter at the required height.

Comments:	Tree Picture:
Any additional notes or observations about the tree.	A photograph of the tree for visual assessment and record-keeping.

Preserve or Remove:	Common Name / Scientific Name:
Indicates the recommended action based on the tree's condition.	Specifies the name of the tree, both in common terms and scientific nomenclature.

If more than 1 Trunks, Total Diameter:	6 ,8, 10 Times the Diameter (ft.):
If the tree has multiple trunks, this field indicates the combined diameter of all trunks.	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:
Poor: Major uncorrectable structural flaws present; significant dead wood, decay, or multiple trunks; potentially hazardous lean.
Fair: Structural flaws exist but less severe; issues like slight lean and crowding on trunk; some uncorrectable issues through pruning.
Good: Minor flaws; mainly upright trunk, well-spaced branches; flaws correctable through pruning; symmetrical or mostly symmetrical canopy.

Tree Health Ratings:
Poor: Minimal new growth; significant dieback and pest infestation; expected not to reach natural lifespan.
Fair: Moderate new growth; canopy density 60-90%; potential external threats; not in decline but vulnerable.
Good: Vigorous growth; healthy foliage; 90-100% canopy density; expected natural lifespan.

Suitability for Preservation:
Poor: Adds little to landscape; poor health and potential hazards; unlikely to survive construction impacts.
Fair: Contributes to landscape; survival possible with protection during minor construction impacts.
Good: Valuable landscape asset; likely survival during minor to moderate construction impacts with protection.

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

Tree Form Ratings:
Poor: Highly asymmetric or abnormal form; visually unappealing; little landscape function.
Fair: Significant asymmetries; deviation from species norm; compromised function or aesthetics.
Good: Near ideal form; minor deviations; consistent aesthetics and function in landscape.

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.

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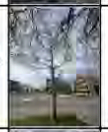
TREE INVENTORY SURVEY

Tree Tag #	Heritage Tree	Street Tree	Common Name / Scientific Name	Trunk (in.)	Height (ft.) / Canopy Spread (ft.)	Health Rating	Form Rating	Suitability for Preservation	Overall Condition (0-100%)	Feasibility of Transplanting (Heritage trees only)	Comments	Tree Picture	Preserve or Remove	Type of Fencing Required	Required Replacement Ratio
1	No	Yes	LONDON PLANE TREE ***Platanus × hispanica***	11	40/30	Good	Good	Good	80%	Low	Good vigor, good form, street tree.		(P)	Type 3	
2	No	Yes	LONDON PLANE TREE ***Platanus × hispanica***	10.4	40/30	Good	Good	Fair	80%	Low	Good vigor, good form, street tree.		(P)	Type 3	
3*	No	Yes	LONDON PLANE TREE ***Platanus × hispanica***	9.5	40/30	Good	Good	Fair	70%	Low	Good vigor, good form, street tree, **Gateway park.**		(P)	Type 3	
4*	No	Yes	LONDON PLANE TREE ***Platanus × hispanica***	12	40/30	Good	Good	Good	80%	Low	Good vigor, good form, street tree, **Gateway park**.		(P)	-	
5*	No	Yes	LONDON PLANE TREE ***Platanus × hispanica***	14	40/30	Good	Good	Fair	80%	Low	Good vigor, good form, street tree, **Gateway park.**		(P)	-	
6*	Yes	Yes	LONDON PLANE TREE ***Platanus × hispanica***	15.5	40/30	Good	Good	Fair	80%	Low	Good vigor, good form, street tree, **Gateway park.**		(P)	-	
7*	Yes	Yes	AMERICAN SWEETGUM ***Liquidambar styraciflua***	18	45/35	Good	Fair	Poor	60%	Low	Good vigor, fair form, heavy limbs over street, codominant at 10 feet, causing sidewalk damage, near existing water line, street tree, **Gateway park.**		(P)	-	

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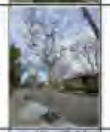
8	Yes	Yes	AMERICAN SWEETGUM ***Liquidambar styraciflua***	17.9	40/25	Faiir	Poor	Poor	45%	Low	Fair vigor, poor form, codominant at 8 feet with included bark, girdling root observed, causing sidewalk damage, street tree.		(P)	Type 3	
9	No	Yes	SCARLET OAK ***Quercus coccinea***	2.6	12/6	Good	Good	Good	80%	High	Good vigor, good form, recently planted, street tree.		(P)	Type 3	
10	Yes	Yes	LONDON PLANE TREE ***Platanus × hispanica***	23.4	45/35	Good	Good	Fair	70%	Low	Good vigor, good form, street tree		(P)	Type 2	
11	Yes	Yes	LONDON PLANE TREE ***Platanus × hispanica***	23.6	45/35	Good	Good	Fair	70%	Low	Good vigor, good form, street tree		(P)	Type 2	
12	No	Yes	LONDON PLANE TREE ***Platanus × hispanica***	7.5	20/15	Good	Good	Good	70%	High	Good vigor, good form, street tree		(P)	Type 2	
13	No	Yes	LONDON PLANE TREE ***Platanus × hispanica***	8.3	20/15	Good	Good	Good	70%	High	Good vigor, good form, street tree		(P)	Type 2	
17	Yes	Yes	LONDON PLANE TREE ***Platanus × hispanica***	16.7	45/35	Poor	Poor	Poor	0%	Low	DEAD Street tree		(R)	-	2:1

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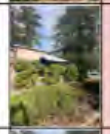
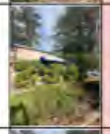
Tree Tag #	Heritage Tree	Street Tree	Common Name / Scientific Name	Trunk (in.)	Height (ft.) / Canopy Spread (ft.)	Health Rating	Form Rating	Suitability for Preservation	Overall Condition (0-100%)	Feasibility of Transplanting (Heritage trees only)	Comments	Tree Picture	Preserve or Remove	Type of Fencing Required	Required Replacement Ratio
18	Yes	Yes	DEODAR CEDAR ***Cedrus deodara***	27.5	70/35	Good	Fair	Fair	70%	Low	Good vigor, fair form, slight lean into property.		(P)	Type 1	
19	Yes	Yes	LONDON PLANE TREE ***Platanus × hispanica***	17.1	40/25	Fair-Poor	Fair	Fair	50%	Low	Fair to poor vigor, fair form, abundance of dead wood, street tree		(R)	-	2:1
20	No	No	HOLLYWOOD JUNIPER ***Juniperus chinensis 'Torulosa'***	6	8/5	Good	Fair	Good	50%	N/A	Good vigor, fair form, topiary pruned.		(R)	-	1:1
21	No	No	HOLLYWOOD JUNIPER ***Juniperus chinensis 'Torulosa'***	6	8/5	Good	Fair	Good	50%	N/A	Good vigor, fair form, topiary pruned.		(R)	-	1:1
22	No	No	HOLLYWOOD JUNIPER ***Juniperus chinensis 'Torulosa'***	6	8/5	Good	Fair	Good	50%	N/A	Good vigor, fair form, topiary pruned.		(R)	-	1:1
23	No	No	HOLLYWOOD JUNIPER ***Juniperus chinensis 'Torulosa'***	6	8/5	Good	Fair	Good	50%	N/A	Good vigor, fair form, topiary pruned.		(R)	-	1:1
24	No	No	HOLLYWOOD JUNIPER ***Juniperus chinensis 'Torulosa'***	6	8/5	Good	Fair	Good	50%	N/A	Good vigor, fair form, topiary pruned.		(R)	-	1:1

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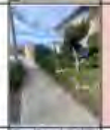
25	Yes	Yes	LONDON PLANE TREE ***Platanus × hispanica***	16	45/30	Poor	Fair	Poor	30%	Low	Poor vigor, fair form, large areas of dead wood, street tree		(R)	-	2:1
26	Yes	Yes	LONDON PLANE TREE ***Platanus × hispanica***	18.9	40/35	Good	Good	Fair	70%	Low	Good vigor, good form, street tree.		(R)	-	2:1
27	No	No	HOLLYWOOD JUNIPER ***Juniperus chinensis 'Torulosa'***	4.4	6/5	Good	Fair	Good	50%	N/A	Good vigor, fair form, topiary pruned.		(R)	-	1:1
28	No	No	HOLLYWOOD JUNIPER ***Juniperus chinensis 'Torulosa'***	3.5	6/5	Good	Fair	Good	50%	N/A	Good vigor, fair form, topiary pruned.		(R)	-	1:1
29	No	No	HOLLYWOOD JUNIPER ***Juniperus chinensis 'Torulosa'***	4	6/5	Good	Fair	Good	50%	N/A	Good vigor, fair form, topiary pruned.		(R)	-	1:1
30	No	Yes	LONDON PLANE TREE ***Platanus × hispanica***	11.8	35/30	Good	Good	Fair	80%	Low	Good vigor, good form. Street tree		(P)	Type 3	
31	No	Yes	LONDON PLANE TREE ***Platanus × hispanica***	11.7	35/30	Good	Good	Fair	80%	Low	Good vigor, good form. Street tree		(P)	Type 3	

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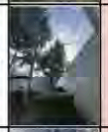
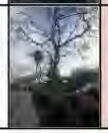
Tree Tag #	Heritage Tree	Street Tree	Common Name / Scientific Name	Trunk (in.)	Height (ft.) / Canopy Spread (ft.)	Health Rating	Form Rating	Suitability for Preservation	Overall Condition (0-100%)	Feasibility of Transplanting (Heritage trees only)	Comments	Tree Picture	Preserve or Remove	Type of Fencing Required	Required Replacement Ratio
32	No	Yes	LONDON PLANE TREE ***Platanus × hispanica***	11.4	35/30	Good	Good	Fair	80%	Low	Good vigor, good form. Street tree		(P)	Type 3	
33	No	Yes	LONDON PLANE TREE ***Platanus × hispanica***	11.1	35/30	Good	Good	Fair	80%	Low	Good vigor, good form. Street tree		(P)	Type 3	
34	No	Yes	CRAPE MYRTLE ***Lagerstroemia indica***	7.5	15/10	Good	Good	Good	80%	High	Good vigor, good form. Street tree		(P)	Type 3	
35	Yes	No	DEODAR CEDAR ***Cedrus deodara***	12.1	40/15	Good	Good	Fair	70%	Low	Good vigor, good form.		(R)	-	2:1
36	Yes	No	DEODAR CEDAR ***Cedrus deodara***	9.1	40/15	Fair	Good	Fair	60%	Low	Fair vigor, good form.		(R)	-	2:1
37	Yes	No	HOLLY OAK ***Quercus ilex***	11.6	30/15	Fair	Poor	Poor	50%	Low	Fair vigor, poor form, suppressed, grows into utility lines.		(R)	-	2:1
38	No	Yes	LONDON PLANE TREE ***Platanus × hispanica***	13.6	35/30	Good	Good	Fair	80%	Low	Good vigor, good form, Street tree		(R)	-	1:1

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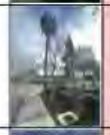
Tree Tag #	Heritage Tree	Street Tree	Common Name / Scientific Name	Trunk (in.)	Height (ft.) / Canopy Spread (ft.)	Health Rating	Form Rating	Suitability for Preservation	Overall Condition (0-100%)	Feasibility of Transplanting (Heritage trees only)	Comments	Tree Picture	Preserve or Remove	Type of Fencing Required	Required Replacement Ratio
39	No	Yes	LONDON PLANE TREE ***Platanus × hispanica***	9.8	35/25	Good	Good	Fair	80%	High	Good vigor, good form. Street tree		(R)	-	1:1
40	No	Yes	LONDON PLANE TREE ***Platanus × hispanica***	8.5	25/20	Fair	Good	Fair	70%	Low	Fair vigor, good form. Street tree, slight lean		(R)	-	1:1
41	Yes	Yes	MEXICAN FAN PALM ***Washingtonia robusta***	21.5	40/8	Good	Good	Fair	70%	Low	Good vigor, good form.		(R)	-	2:1
42	No	Yes	MAYTEN TREE ***Maytenus boaria***	7.9	15/10	Poor	Poor	Poor	30%	Low	Poor vigor, poor form, in decline.		(R)	-	1:1
43	No	Yes	MAYTEN TREE ***Maytenus boaria***	9	15/10	Poor	Poor	Poor	30%	Low	Poor vigor, poor form, in decline.		(R)	-	1:1
44	Yes	No	REDWOOD ***Sequoia sempervirens***	9.4	35/15	Good	Good	Good	80%	Low	Good vigor, good form.		(R)	-	2:1
45	Yes	No	HOLLY OAK ***Quercus ilex***	6.2	30/15	Fair	Fair	Fair	60%	Low	Fair vigor, fair form, suppressed by redwood.		(R)	-	2:1

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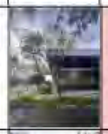
46	No	No	EVERGREEN PEAR ***Pyrus kawakamii***	11	18/12	Fair	Poor	Poor	50%	N/A	Fair vigor, poor form, suppressed by building, small planting area.		(R)	-	1:1
47	No	No	AFRICAN FERN PINE ***Afrocarpus falcatus***	5.3	10/6	Fair	Poor	Fair	50%	N/A	Fair vigor, poor form, suppressed by building, small planting area.		(R)	-	1:1
48	No	No	EVERGREEN PEAR ***Pyrus kawakamii***	9.5	15/12	Fair	Poor	Poor	50%	N/A	Fair vigor, poor form, suppressed by building, small planting area.		(R)	-	1:1
49	No	Yes	OLIVE TREE ***Olea europaea***	14.2	10/10	Good	Poor	Good	50%	High	Good vigor, poor form, multi leader at grade, topiary pruned.		(R)	-	1:1
50	No	Yes	OLIVE TREE ***Olea europaea***	8	10/8	Good	Poor	Good	50%	High	Good vigor, poor form, codominant at grade, topiary pruned.		(R)	-	1:1
51	No	No	JAPANESE PRIVET ***Ligustrum japonicum***	6.4	12/10	Fair	Poor	Fair	50%	N/A	Fair vigor, poor form, topiary pruned, against building.		(R)	-	1:1
52	Yes	No	HOLLY OAK ***Quercus ilex***	9	30/20	Fair	Fair	Fair	65%	Low	Fair vigor, fair form.		(R)	-	2:1

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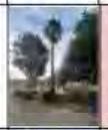
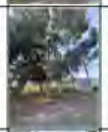
Tree Tag #	Heritage Tree	Street Tree	Common Name / Scientific Name	Trunk (in.)	Height (ft.) / Canopy Spread (ft.)	Health Rating	Form Rating	Suitability for Preservation	Overall Condition (0-100%)	Feasibility of Transplanting (Heritage trees only)	Comments	Tree Picture	Preserve or Remove	Type of Fencing Required	Required Replacement Ratio
53	Yes	No	MEXICAN FAN PALM ***Washingtonia robusta***	20.1	35/8	Good	Fair	Fair	55%	Low	Good vigor, fair form, trunk overlapping curb.		(R)	-	2:1
54*	Yes	No	DEODAR CEDAR ***Cedrus deodara***	33.9	50/40	Good	Poor	Fair	60%	Low	Good vigor, poor form, codominant at 3 feet with large lateral leader, **Gateway park.**		(P)	Type 1	
55*	No	No	CAMPHOR TREE ***Cinnamomum camphora***	14.8	35/30	Good	Poor	Poor	40%	N/A	Good vigor, poor form, multi leader at 1 foot within included bark, **Gateway park.**		(P)	-	
56*	No	No	JAPANESE PRIVET ***Ligustrum japonicum***	13.2	30/15	Poor	Fair	Poor	45%	N/A	Poor vigor, fair form, in decline, **Gateway park**.		(P)	-	
57*	No	No	JAPANESE PRIVET ***Ligustrum japonicum***	12.7	30/15	Poor	Fair	Poor	45%	N/A	Poor vigor, fair form, in decline, **Gateway park.**		(P)	-	
58*	Yes	No	JAPANESE PRIVET ***Ligustrum japonicum***	16	30/15	Poor	Fair	Poor	45%	Low	Poor vigor, fair form, in decline, **Gateway park.**		(P)	-	
59*	Yes	No	JAPANESE PRIVET ***Ligustrum japonicum***	18.8	30/15	Poor	Fair	Poor	45%	Low	Poor vigor, fair form, in decline, **Gateway park.**		(P)	-	

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Certified Arborist WE#10724A TRAQ Qualified
P.O. Box 6187 San Mateo, CA 94403
650- 532-4418

Tree Tag #	Heritage Tree	Street Tree	Common Name / Scientific Name	Trunk (in.)	Height (ft.) / Canopy Spread (ft.)	Health Rating	Form Rating	Suitability for Preservation	Overall Condition (0-100%)	Feasibility of Transplanting (Heritage trees only)	Comments	Tree Picture	Preserve or Remove	Type of Fencing Required	Required Replacement Ratio
60*	Yes	No	DEODAR CEDAR ***Cedrus deodara***	35.2	60/40	Good	Fair	Good	65%	Low	Good vigor, fair form, loss of apical dominance at 40 feet, **Gateway park.**		(P)	-	
61*	Yes	No	DEODAR CEDAR ***Cedrus deodara***	38.5	65/45	Good	Good	Fair	70%	Low	Good vigor, good form, raised root flare, surrounded by hardscapes, close to building, **Gateway park.**		(P)	Type 1	
62*	No	Yes	CHINESE PISTACHE ***Pistacia chinensis***	11.7	30/30	Good	Good	Fair	80%	Low	Good vigor, good form, **Gateway park.**		(P)	-	
63*	Yes	No	EVERGREEN PEAR ***Pyrus kawakamii***	21.2	25/30	Good	Fair	Fair	60%	Low	Good vigor, fair form, surrounded by hardscapes, mature, **Gateway park.**		(P)	-	
64*	Yes	No	REDWOOD ***Sequoia sempervirens***	35	100/40	Fair	Fair	Good	60%	Low	Fair to poor vigor, fair form, tree is drought stressed, few feet from property line, **Neighboring tree.**		(P)	-	

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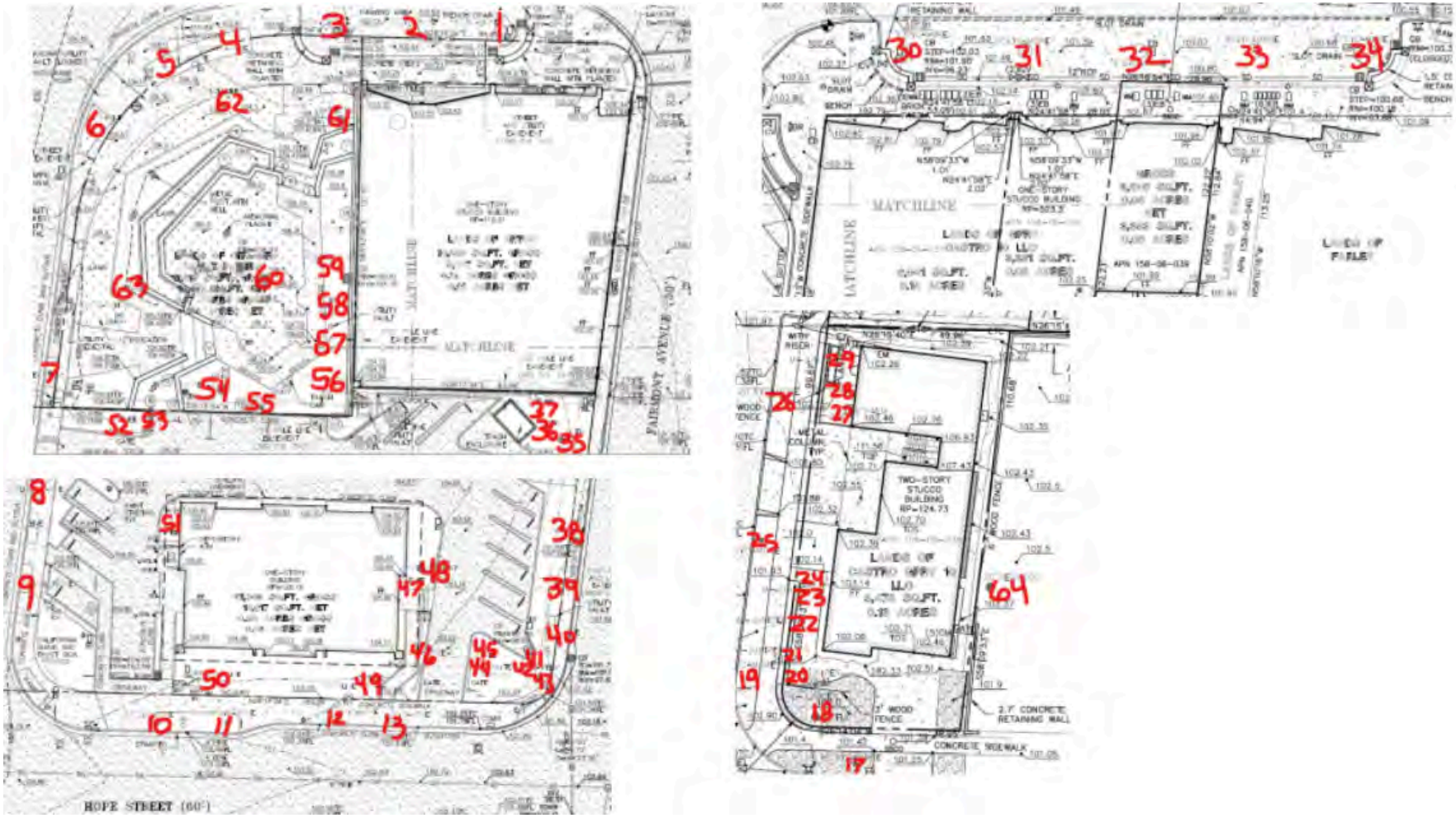
Certified Arborist WE#10724A TRAQ Qualified
P.O. Box 6187 San Mateo, CA 94403
650- 532-4418

TREE LOCATION MAP



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ARBORISTS SERVICES LLC
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P.O. Box 6187 San Mateo, CA 94403
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OBSERVATIONS

Species List:

61 trees were surveyed on this property. The surveyed species comprise of the following:

"AFRICAN FERN PINE, *Afrocarpus falcatus"*
"AMERICAN SWEETGUM, *Liquidambar styraciflua"*
"CAMPHOR TREE, *Cinnamomum camphora"*
"CHINESE PISTACHE, *Pistacia chinensis"*
"CRAPE MYRTLE, *Lagerstroemia indica"*
"DEODAR CEDAR, *Cedrus deodara"*
"EVERGREEN PEAR, *Pyrus kawakamii"*
"HOLLY OAK, *Quercus ilex"*
"HOLLYWOOD JUNIPER, *Juniperus chinensis 'Torulosa'"*
"JAPANESE PRIVET, *Ligustrum japonicum"*
"LONDON PLANE TREE, *Platanus × hispanica"*
"MAYTEN TREE, *Maytenus boaria"*
"MEXICAN FAN PALM, *Washingtonia robusta"*
"OLIVE TREE, *Olea europaea"*
"REDWOOD, *Sequoia sempervirens"*
"SCARLET OAK, *Quercus coccinea"*

33 Trees, #1-13, 17-19, 25, 26, 30-35, 38-43, 49, 50, and 62, are street trees located within the public right of way. All of the street trees are in fair to good condition except street trees #8, 17, and 25, which are in very poor to poor condition. American sweetgum street tree #8 (to be retained) was given a poor condition rating due to included bark within the codominant union at 8 feet and due to a girdling root. This tree is a street tree in front of Gateway Park and is considered a neighboring tree.

Showing girdling root on sweetgum #8

London plane street tree #17 is dead and is proposed to be removed. Removal is recommended regardless of the proposed construction. London plane street tree #25 is in poor condition as large areas of dead wood indicating a decline in health were observed. This tree is proposed to be removed and is recommended to be removed regardless of the proposed construction.

Showing dead London plane tree #17 (left), Showing London plane tree #25 (right)

Trees proposed to be removed

31 trees in total are proposed for removal (Heritage trees #17, 19, 25, 26, 35-37, 41, 44, 45, 52, and 53, Street trees #38-40, and non-protected trees #20-24, 27-29, 42, 43, and 46-51 as they are in decline or conflict with proposed project features).

Trees proposed to be removed
Street trees- #38-40
Total Street trees=3
Hertiage trees- #17, 19, 25, 26, 35, 36, 37, 41, 44, 45, 52, and 53
Total Heritage trees=12
Non-protected trees-#20-24, 27-29, 42, 43, 46-51
Total non-protected trees=16
Total=31

Replacement trees: Heritage trees require a 2:1 replacement ratio, and non-heritage tree removals require a 1:1 replacement. If space is not available, cash-in-lieu will be required.

Tree replacement table

	Quantity	Replacement Ratio	Replacement Quantity
Heritage Tree Proposed For Removal	12	2:1	24
Non-Heritage Tree Proposed For Removal	19	1:1	19

TOTAL REPLACEMENT NEEDED=**43 TREES**

	Street-level	Roof level
Proposed Tree Replacement	42	14

TOTAL PROPOSED REPLACEMENT=**56 TREES**

Street level plantings

PLANT SCHEDULE

SYMBOL	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	WUCOLS	QTY	DETAIL	REMARKS
TREES								
	ACE SAN	Acer palmatum 'Sango-kaku' / Coral Bark Japanese Maple	24"	Box	M	6		replacement tree
	CER OCC	Cercis occidentalis / Western Redbud	24"	Box	VL	16		CA Native | replacement tree
	LAU XSA	Laurus x 'Saratoga' / Saratoga Hybrid Laurel	24"	Box	L	8		CA Native Hybrid | replacement tree
	QUE COC	Quercus coccinea / Scarlet Oak	24"	Box	M	1		El Camino Real Street Tree
	QUE DOU	Quercus douglasii / Blue Oak	24"	Box	L	2		CA Native | replacement tree
	TRI BRI	Tristania conferta / Brisbane Box	36"	Box	M	7		Hope St Street Tree | replacement tree
	CHI TAS	x Chitalpa tashkentensis / Chitalpa	36"	Box	M	2		Castro St Street Tree | replacement tree

Roof level plantings:

PLANT SCHEDULE

SYMBOL	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	WUCOLS	QTY	REMARKS
TREES							
	CER OCC	Cercis occidentalis / Western Redbud	24"	Box	VL	13	CA Native | replacement tree
	LAU XSA	Laurus x 'Saratoga' / Saratoga Hybrid Laurel	24"	Box	L	1	CA Native Hybrid | replacement tree

56 new trees are to be planted on site. 9 of the trees are to be upsized to a 36" box-size tree. The planting plan goes beyond what is required for replacement trees.

Reasoning for protected tree removals on site 1:

1. *London Plane Tree #17:*

Reason for proposed removal: The tree is dead, removal is recommended irrespective of proposed construction. *Transplanting feasibility:* This tree has a low rating for the feasibility to transplant due to its condition.

2. *London Plane Tree #19:*
Reason for proposed removal: Adjacent to the proposed basement cut and within the proposed paseo. Even if the paseo was reconfigured, impacts from the basement would be high, and the tree would not be expected to survive. *Transplanting feasibility:* This tree has a low rating for the feasibility to transplant due to its size and surroundings.

3. *Trees #25, 26, and 35-42:*
Reason for proposed removal: Within the footprint of the proposed basement. *Transplanting feasibility:* All of these trees have a low rating for the feasibility to transplant as the trees are large except for London plane tree #39 that has a high rating for the feasibility to transplant.

4. *Mayten Tree #43:*
Reason for proposed removal: 2' from proposed basement cut, and within proposed concrete area. The tree is also in poor condition and not expected to improve. Removal is recommended irrespective of proposed construction. *Transplanting feasibility:* This tree has a low rating for the feasibility to transplant due to its condition.

5. *Trees #44 and #45:*
Reason for proposed removal: Within the footprint of the proposed basement ramp. *Transplanting feasibility:* These trees have a low rating for the feasibility to transplant due to their surrounding conditions.

6. *Olive Trees #49 and #50:*
Reason for proposed removal: Trees located within 2' of the proposed basement footprint. Impacts are expected to lead to tree death. Also concrete sidewalk proposed on opposite side of trees. *Transplanting feasibility:* These trees have a high rating for the feasibility to transplant due to their location, condition and species.

7. *Trees #52 and #53:*
Reason for proposed removal: Trees are located 1' from the proposed basement cut. Impacts would result in the death of the trees. These trees have a low rating for the feasibility to transplant due to their surrounding conditions and size.

Opportunities or feasibility for the relocation (transplanting) of smaller Heritage trees.
3 Heritage trees that are proposed for removal (#39, 49, and 50) have a good feasibility rating for relocation. These trees are smaller-sized heritage trees. London plane tree #39 is under 10" in diameter. Due to the location of the tree and existing hardscapes within the root zone, it may be deemed unfeasible if below-ground root issues like girdling roots are present. During the demolition of the site, after sidewalks have been carefully removed by hand when underneath the tree drip line, excavation of the tree root balls within 10x the diameter of the tree should be done by air knife to inspect the root balls and to then determine the feasibility of these smaller trees. This work should be done by a tree moving contractor who specializes in this type of work. Transplanting is recommended to be done in late fall to early spring while the trees are dormant to minimize stress. Olive trees #49 and #50 are suitable for relocation. Olive trees generally take well to transplanting. These trees have been topiary pruned and will therefore

require frequent pruning to maintain shape or crown restoration pruning to restore a more natural looking canopy. Post-transplanting care would need to include proper watering, mulching, and monitoring for signs of stress or disease. Regular follow-up visits ensure that the trees are adapting well to their new surroundings would be recommended.

PROJECT PLAN REVIEW

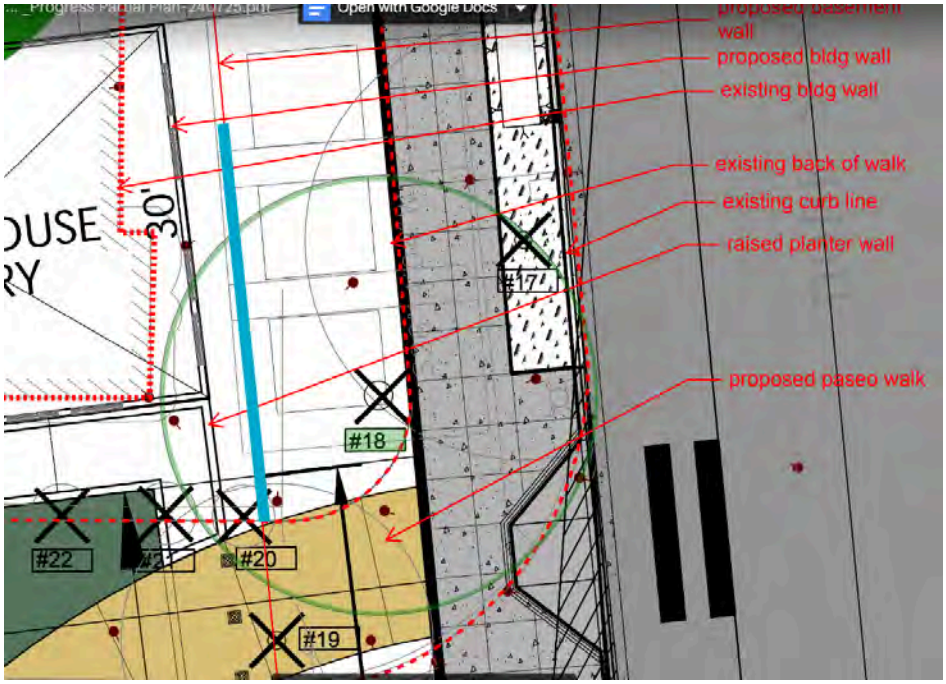
In reviewing the construction plans for 881 Castro St, Mountain View, CA 94041, titled "Castro Commons (Mixed-Use Development Mountain View, California) A1-A64" by GPR Ventures, we have identified several tree-related considerations.

London plane trees #10-13
The sidewalk/street has been redesigned near London plane trees #10-13 in order to allow these trees to be retained. The curb now follows the existing curb line on site near the trees. As a result of the plan change, the two trees are now to be retained. The existing sidewalk and curb is to be demolished. Hand demolition under the project arborist supervision will be required when working within 10x the diameter of these trees. All encountered roots shall stay as damage-free as possible. Exposed roots during this process shall be covered in layers of wetted-down burlap to help avoid root desiccation. If possible, the existing base rock shall be re-used for the new sidewalk. If not possible all existing baserock shall be removed by hand. Any needed excavation for the sidewalk or curb shall be done by hand with the use of an air knife while retaining all roots. New baserock material for the sidewalk is recommended to be Structural Soil (CU Mix). Structural Soil shall be packed around all exposed roots with the sidewalk and curb built on top of the root zone. This work will need to be inspected and documented by the project arborist. No roots over 2” in diameter shall be cut. All roots exposed at the basement cut shall be shown the project arborist and cleanly cut back to the wall of the basement. Impacts to the trees are expected to be minor. It is recommended that the trees be irrigated every other week during the dry season using 40 gallons of water per tree. Soaker hoses shall be installed within the tree protection zones. Pre and post-construction fertilization is also recommended. These trees are recommended to be inspected monthly throughout the construction project. A 4” thick layer of organic mulch shall be placed within the tree protection zone for these trees. All work within 10x the the tree’s diameter will require direct supervision of the Project Arborist. **Tree protection:** Type 2 tree protection fencing is recommended for these trees. Fencing will need to be placed in a way that completely fences off the street tree planting strip when within 10x the diameter of the trees. Where work is within this distance, the fencing shall be placed as close as possible to the proposed work while still allowing construction to safely continue. A 4” thick layer of organic mulch shall be placed within the tree protection zone for both trees. All work within 10x the tree’s diameter will require direct supervision of the Project Arborist.

Deodar cedar tree #18
An exploratory trench was completed at the proposed basement wall cut (shown in blue in the diagram) near Cedar Tree #18 in order to determine the feasibility of the proposed plan. The exploratory trench was completed using hand tools, and all roots were retained within the exploratory trench. There is an existing concrete pathway in the exact location of the proposed

basement cut. The concrete and the associated compaction have likely helped to discourage root growth in this area. The exploratory trench was completed to a depth of 3-4 feet and was 18" wide. Only 2 small roots measuring 1.1 and 1.4 inches in diameter were encountered within the exploratory trench. Signs of past trenching were observed as an irrigation line and a sewer cleanout were observed in this area. Given the findings, impacts from the proposed basement cut are expected to be minor. The basement will be required to be vertically shored in order to prevent over-excavation (OSHA cut) that would lead to high impacts. Vertical shoring is likely required due to the location of the street/sidewalk. All encountered roots at the proposed basement cut are recommended to be cleanly cut using a hand saw or loppers back to the basement wall. It is recommended that cut root ends be covered in layers of wetted-down burlap to avoid root desiccation. While exposed, the contractor shall wet down the burlap daily.

Showing the trench (left), showing only two roots encountered (right)



Blue line indicating the proposed basement cut and exploratory trench location

The proposed sidewalk work and Paseo walkway are all within the same footprint of the existing sidewalk near cedar tree #18. The existing hardscapes have all likely discouraged root growth in the area of proposed work. All excavation within 10x the diameter of the tree (22.9') shall take place by hand under the direct supervision of the project arborist. All encountered roots shall be documented by the project arborist. Roots encountered within the proposed aggregate sections are recommended to be retained by packing aggregate around tree roots. Existing grades and proposed grades are recommended to be nearly identical where possible near this tree to prevent excavation near the tree. Overall impacts to the tree are expected to be minor. It is recommended to deep water fertilize the tree with Nutriroot during the dry season as a mitigation measure. This is recommended to be down twice during the growing season. It is also recommended to deeply water the tree once a month using 50 gallons of water within the tree protection zone.

Deodar cedar #61

Deodar cedar tree #61 is located at Gateway Park. The tree is located approximately 5 feet from the property line and has a total canopy spread of 45 feet that extends over the existing structure. The existing structure near the tree is located at the property line. The structure may have acted as a natural root barrier and roots are not likely to be found in abundance on the Castro Commons property side. To confirm this, it is recommended to perform an exploratory trench at the proposed basement cut on the property side once the structures have been demolished. This work is recommended to be done with the use of an air knife and done either by the Project Arborist or underneath the direct supervision of the Project Arborist. This is the only way to confirm that no roots are on the Castro

Commons side of the property. The proposed construction involves a 2-level deep basement near tree #61, which raises potential concerns about its impact on the tree's root structure. The basement is further back from the footprint of the existing structure near the tree. Impacts from the basement cut are expected to be minor to non-existent as the existing structure near the tree has likely acted as a root barrier. The basement will be required to be vertically shored. The Project arborist is required to be on site during the basement excavation when within 10x the tree's diameter. It is crucial to document this work for the city of Mountain View, with a letter sent to the city arborist. In addition to these recommendations for tree #61, the demolition of the existing structure foundation near the tree should also be done by hand when working within 10x the tree's diameter. The existing foundation is recommended to be broken into hand manageable sized pieces with the use of a jackhammer to avoid upward pressure on the root crown. If roots over 1.5 inches in diameter are encountered during demolition, the Project arborist must be consulted before further excavation.

A new pathway is proposed between the basement cut and property line near deodar cedar tree #61. Due to the existing building located at the property line impacts are expected to be minor to non-existent as the existing foundation likely acted as a root barrier. If roots are found within the exploratory trench at the proposed basement cut (to take place after demolition), the pathway may need to be built up on top of grade to reduce impacts to the tree's roots. This will be decided during the completion of the exploratory trench.

Regarding pruning, deodar cedar tree #61 is proposed to be pruned for building clearance, with a maximum of 25% of the canopy to be pruned using the crown reduction method. All pruning cuts should be made out on the ends of the limbs, and branches must be removed back to a lateral branch that is at least 1/3 of the size of the parent branch where possible. Limbs should only be removed for building clearance. All pruning shall be done by a licensed tree care provider under the direct supervision of the Project Arborist. Impacts from the pruning are expected to be minor.

Privet trees #56-59
Privet trees #56-59 located at Gateway Park may need to be pruned for building clearance. The pruning is expected to be minor and done at the outer ends of the limbs. All pruning cuts should be made out on the ends of the limbs, and branches must be removed back to a lateral branch that is at least 1/3 of the size of the parent branch where possible. Limbs should only be removed for building clearance. All pruning shall be done by a licensed tree care provider under the direct supervision of the Project Arborist. Impacts from the pruning are expected to be minor. The basement excavation and pathway work are not expected to have impacts on the privet trees due to the existing structure located at the property line likely acting as a root barrier.

London plane trees #1-3, #30-34 and crape myrtle #34
Existing site conditions for these trees consist of 100% hardscapes surrounding the trees with the trees growing in tree grates. The proposed plan will also consist of hardscapes surrounding the trees with the grade being raised by a foot. The grade is recommended to be retained within the tree planting pits themselves with the tree grates placed above grade to match the proposed finished surface of the concrete. This will ensure the tree root crowns are not buried as this would likely lead to root rot disease. The existing hardscapes surrounding the trees are recommended to be carefully removed under the direct supervision of the project arborist. The concrete is recommended to be

broken up by a jackhammer into small hand manageable sized pieces. If existing baserock could be retained this would be beneficial as roots would not need to be exposed. If not possible, all base rock material within the tree drip lines would need to be removed by hand. Exposed roots are then recommended to be covered by layers of wetted down burlap with the contractor wetting down the burlap daily while exposed. This will help to avoid root desiccation. New base rock material is then recommended to be packed around tree roots with new hardscapes being built on top of the tree root zones. By packing baserock around roots this would eliminate the need to cut tree roots. Keeping roots moist during this process is essential to the survival of the trees. New baserock material is recommended to consist of Structural Soil (CU Mix). Structural soil, often referred to as "CU mix," is a specialized type of soil mixture designed to provide support for pavement and urban infrastructure while also promoting healthy tree growth in urban environments. It was developed to address the challenges of planting and maintaining trees in urban areas, where compacted soil and limited space can impede root growth and water infiltration. Here's how structural soil (CU mix) works and its benefits for trees:

Composition: CU mix typically consists of a blend of crushed stone or aggregate, soil, and a stabilizing agent, such as cement or synthetic materials. The mixture is designed to be load-bearing and provide a stable foundation for pavement or sidewalks.

Load-bearing properties: One of the primary functions of structural soil is to support the weight of urban infrastructure like roads and sidewalks. The load-bearing capacity allows for the construction of paved surfaces while still allowing tree roots to penetrate and grow.

Soil volume: The mix is designed to create a sufficient volume of soil beneath the pavement for tree roots to spread and access nutrients, water, and oxygen. This helps prevent soil compaction, which is a common problem in urban areas.

Root penetration: The coarse texture of structural soil encourages tree roots to grow downward and outward, rather than circling the planting hole. This promotes healthier root development and reduces the risk of girdling roots, which can strangle the tree as it grows.

Water infiltration: Structural soil is engineered to allow water to penetrate through the soil and reach the tree's roots. This helps ensure adequate moisture for tree growth and reduces the risk of surface runoff.

Tree health: By providing an environment where tree roots can grow freely and access essential resources, structural soil promotes healthier and more robust urban trees. Healthy trees offer a range of benefits, including improved air quality, shade, and aesthetics.

Urban planning: The use of structural soil allows urban planners and landscapers to integrate trees into urban environments without compromising on the functionality of infrastructure. It enables the coexistence of trees and human-made structures, enhancing the overall quality of urban living spaces.

All utility lines proposed underneath the drip lines of trees #1-3 & #30-34 are required to be excavated by hand under the direct supervision of the project arborist. All encountered roots shall be retained and wrapped in layers of wetted down burlap to avoid root desiccation. Utility lines are then recommended to be tunneled underneath or besides roots where possible. In the event that there is no work around to save tree roots, the root must be shown to the project arborist before being cleanly cut. Impacts to trees #1-3 &#30-34 are expected to be minor if done as recommended above. The trees are recommended to be frequently irrigated as a mitigation measure. The trees are recommended to be irrigated weekly using 20 gallons of water per tree. Deep water fertilizing the trees is also recommended as an additional mitigation measure to ensure the health of the trees. All work within the drip lines of the trees is required to be supervised by the project arborist. **Tree protection:** Trees #1-3, & 30-34 are recommended to be protected by type 3 tree protection fencing.

Trees #8 & #9 (New sidewalk)
New sidewalks are proposed for street trees #8 & #9. Demolition of the existing sidewalks are recommended to be done with the use of a jackhammer under the direct supervision of the project arborist. The concrete is recommended to be broken up by a jackhammer into small hand manageable sized pieces. If existing baserock could be retained this would be beneficial as roots would not need to be exposed. If not possible, all base rock material within the tree drip lines would need to be removed by hand. Exposed roots are then recommended to be covered by layers of wetted down burlap with the contractor wetting down the burlap daily while exposed. This will help to avoid root desiccation. New base rock material is then recommended to be packed around tree roots with new sidewalks being built on top of the tree root zones. By packing baserock around roots this would eliminate the need to cut tree roots. Keeping roots moist during this process is essential to the survival of the trees. New baserock material is recommended to consist of Structural Soil (CU Mix). Impacts are expected to be minor to moderate. It is recommended to irrigate the street tree planting strips with 20 gallons of water per tree weekly. The street tree planting strips are also recommended to be deep water fertilized as an additional mitigation measure. **Tree protection:** Trees #8 & 9 are recommended to be protected by type 3 tree protection fencing.

Neighboring redwood tree #64
Neighboring redwood tree #64 is located 8’ from the existing structure on site. The proposed basement cut is 15’ from the tree and the and the proposed 1st floor foundation is 10’ from the tree. The existing structure has likely acted as a root barrier for this tree and roots are not likely to be found in abundance on the Castro Commons property side. To confirm this, it is recommended to perform an exploratory trench at the proposed basement cut on the property side once the structures have been demolished. This work is recommended to be done with the use of an air knife and done either by the Project Arborist or underneath the direct supervision of the Project Arborist. This is the only way to confirm that no roots are on the Castro Commons side of the property. The proposed construction involves a 2-level deep basement near tree #64, which raises potential concerns about its impact on the tree's root structure. The basement is further back from the footprint of the existing structure near the tree. Impacts from the basement cut are expected to be minor to non-existent as the existing structure near the tree has likely acted as a root barrier. The basement will be required to be vertically shored. The Project arborist is required to be on site during the basement excavation when within 10x the tree’s diameter. It is crucial to document this work for the city of Mountain View, with a letter sent to the city arborist. In addition to these recommendations for tree #64, the

demolition of the existing structure foundation near the tree should also be done by hand when working within 10x the tree's diameter. The existing foundation is recommended to be broken into hand manageable sized pieces with the use of a jackhammer to avoid upward pressure on the root crown. If roots over 1.5 inches in diameter are encountered during demolition, the Project arborist must be consulted before further excavation.

A new pathway is proposed between the proposed structure and neighboring redwood tree #64. The pathway is recommended to be built on top of grade with no more than 6" of excavation used mostly for rough grading purposes when working within 10x the tree's diameter. All excavation when within the tree's drip line must be done under the direct supervision of the project arborist. Overall impacts to neighboring redwood tree #64 are expected to be minor. It is recommended to talk with the neighbor and to deep water fertilize the neighbor's tree (will require access to neighbor's property) with Nutriroot.

TREE MANAGEMENT PLAN

To ensure the health and resilience of trees impacted by construction activities, a meticulously planned approach that includes both pre-construction and post-construction care is essential. This comprehensive strategy is designed to mitigate stress, promote root and shoot growth, and ensure long-term tree vitality.

Pre-Construction Care:

In the pre-construction phase, it is critical to prepare the trees for the upcoming stress and disturbances. Implementing a deep watering schedule is foundational, ensuring trees receive adequate moisture deep within their root zones. To enhance soil moisture control and support new root growth, applying NutriRoot (2-2-3) is recommended which is beneficial for improving soil health and facilitating nutrient uptake. The application of these treatments sets a robust foundation for the trees to withstand construction impacts.

Post-Construction Care:

Following the completion of construction activities, it's vital to continue supporting the trees' recovery and growth. Maintaining the deep watering schedule will ensure that trees remain adequately hydrated. A post-construction application of NutriRoot is advised to sustain soil moisture control and support ongoing root health. Additional applications of soil amendments like Biochar and HydraHume will continue to enhance soil structure, fertility, and water-holding capacity, supporting the trees' long-term health and resilience. Employing air spading techniques can also be advantageous to aerate the soil and gently introduce these amendments without causing root damage.

By adopting this dual-phase approach, (Pre & Post Construction) leveraging a combination of deep watering, nutritional support, and soil health enhancement, the strategy aims to not only protect the trees during construction but also promote their recovery and thriving in the post-construction landscape. This holistic care plan underscores a commitment to sustainable tree management, ensuring that the trees remain a valuable and vibrant part of the ecosystem for years to come.

KIELTY
ARBORISTS SERVICES LLC
Certified Arborist WE#10724A TRAQ Qualified
P.O. Box 6187 San Mateo, CA 94403
650- 532-4418

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.

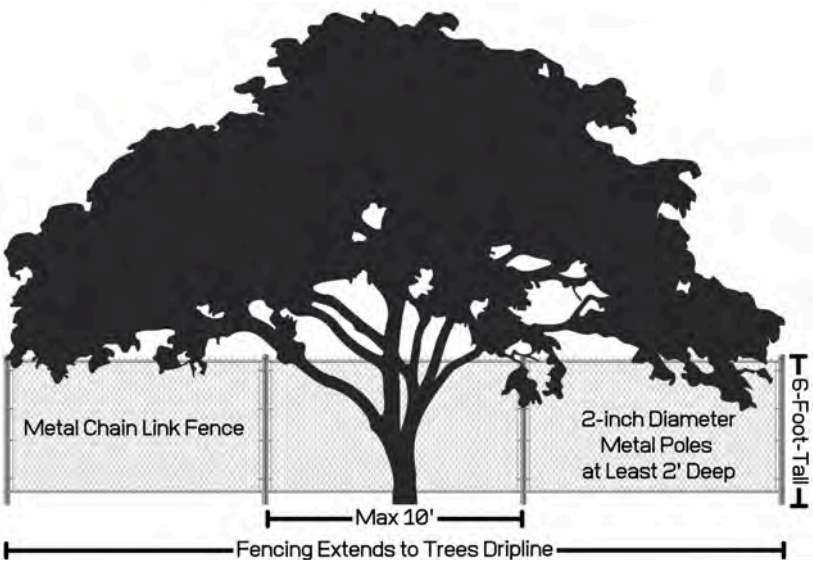
Definitions And Distances:
***TPZ*-**The Tree Protection Zone (TPZ) refers to a radius spanning from the external surface of the trunk measured at 54 inches above grade. It is possible to find many, but certainly not all, of the tree's roots in this area, which are essential for its biological functioning 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 X 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. A 4” thick layer of mulch shall be installed within tree protection zones where possible.

Type I Tree Protection:
Description: This is the most comprehensive form of tree protection fencing. It encompasses the full Tree Protection Zone (10x diameter) 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. Tree #18 is to be protected by Type I tree protection fencing.



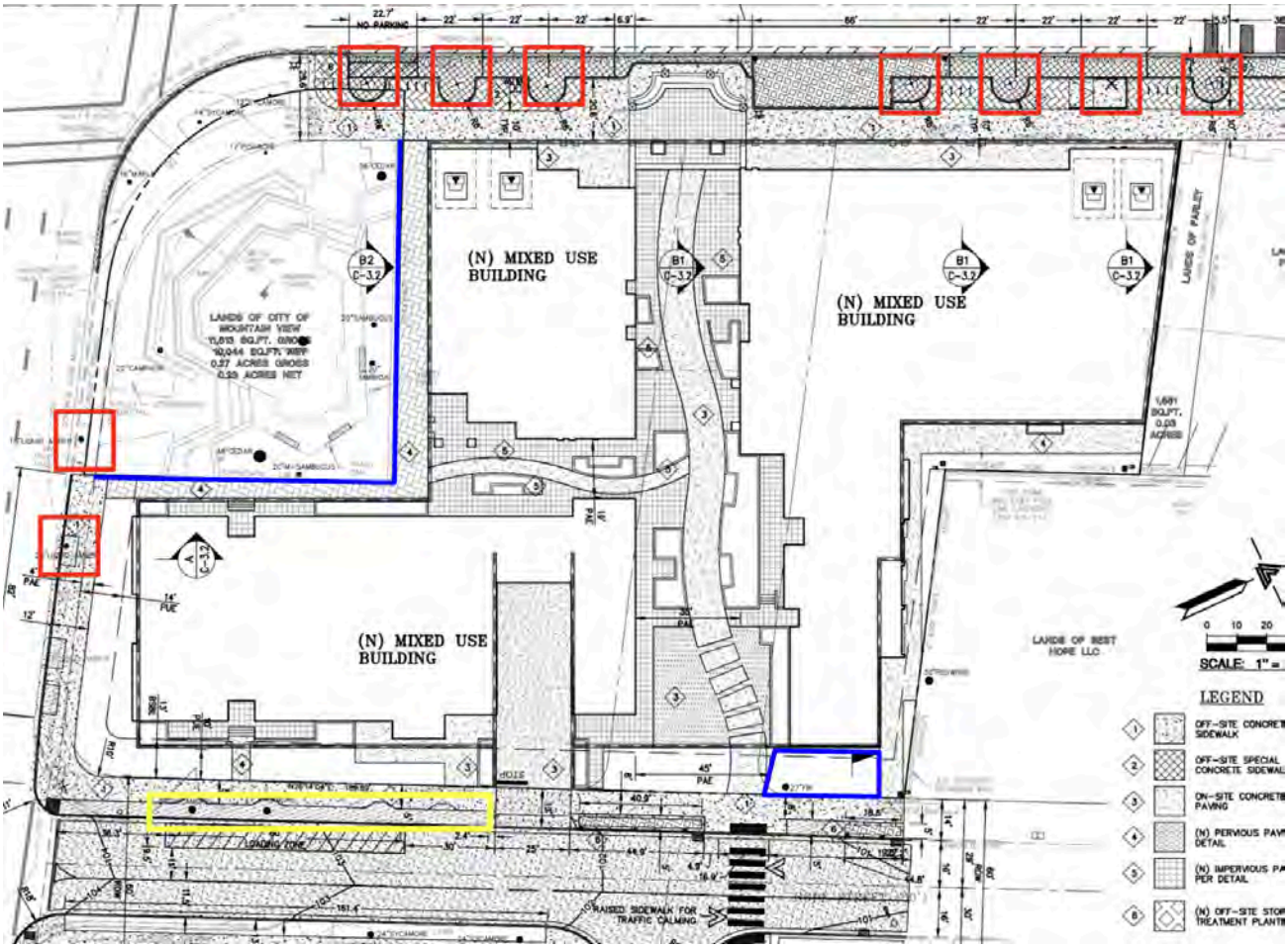
Type I Fencing

Type II Tree Protection:
Description: This fencing type is specifically designed for trees located within narrow planting strips generally between a sidewalk and street.
Application: It is best suited for urban areas where trees are sandwiched between sidewalks and roads, allowing pedestrian and vehicular movement while protecting the tree.
Specifications: The fencing specifications shall be identical to that of Type I in terms of the material used and installation method. The 6-foot-tall metal chain link fence should be installed in a way that completely encloses the planting strip between the sidewalk and street when within the TPZ. This will keep the sidewalk and street open for public use if needed. Street Trees #10-13 are to be protected by Type II tree protection fencing.

Type III Tree Protection:
Description: For trees situated in smaller enclosures like tree wells or sidewalk planter pits, a different approach is taken to ensure their protection.
Application: Often seen in dense urban settings where trees are integrated into pedestrian pathways.
Specifications: Tree trunks are shielded by wrapping them in 2-inch thick orange plastic fencing, from the base and extending to the first primary branch. The plastic fencing serves as padding to prevent damage from pedestrian traffic or minor construction activities. To add a layer of protection, 2-inch thick wooden slats are secured on the outside of this plastic layer. The installation of these slats requires care to ensure the tree bark and primary branches aren't inadvertently damaged. For trees with extended primary scaffold limbs located at lower heights, these limbs might also need the protective covering of the plastic fencing. In such cases, wooden slats might also be affixed to these limbs, ensuring they are safeguarded from potential impacts or abrasions. As with other types, all protective measures should be periodically inspected for wear or damage and replaced or repaired as necessary. Consultation with the City Arborist might be required to assess if additional protection or modifications are necessary, based on the specific environment and tree type. Trees #1-3, 8, 9, and 30-34 are to be protected by Type III tree protection fencing.

Type III Fencing

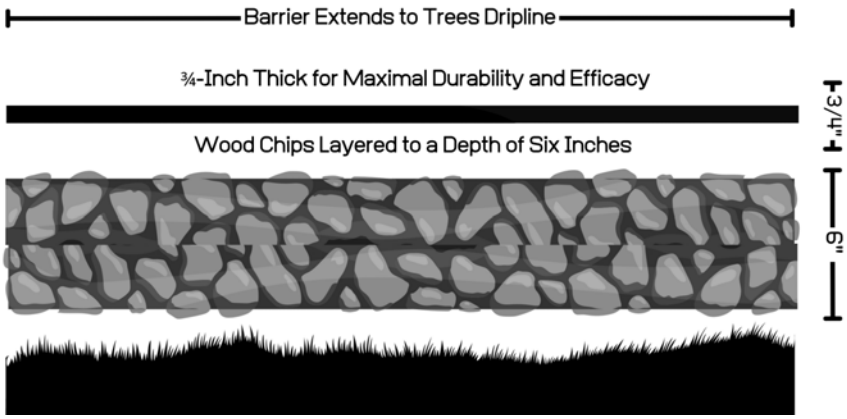
Gateway Park Trees
All trees at Gateway Park are to be protected by fencing placed at the property lines where the subject property is adjacent (type 1). By placing fencing at the property line, the park can still be used by people.



Red boxes indicate type 3 tree protection fencing, yellow box indicates type 2 tree protection fencing, and blue line indicates type 1 tree protection fencing around Gateway Park

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 ¾-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. No trees will require a Landscape Barrier at this time.



Landscape Barrier Zone

Staging
All tree protection measures must be in place before the start of construction. An inspection prior to the start of construction is often required by the town. All vehicles must remain on paved surfaces if possible. Existing pavement should remain and should be used for staging. If vehicles are to stray from paved surfaces, 6 inches of chips shall be spread, and plywood laid over the mulch layer. This type of landscape buffer will help reduce the compaction of desired trees. Parking will not be allowed off the paved surfaces

Root Cutting
If for any reason roots are to be cut, the work shall be monitored and documented. Large roots (over 2 inches 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.

Trenching/excavation
Trenching or excavation for irrigation, drainage, electrical, foundation, or any other reason shall be done by hand in combination with an air knife when within 10x the diameter of a retained 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 their 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.

Grading
All existing grades underneath the dripline of a protected tree shall remain as is where possible. Grading within the dripline of a protected tree is required to be done under the supervision of the project arborist.

Irrigation
Irrigating the retained mature trees in the landscape is important to ensure their health and vitality. Proper watering can help the trees continue to thrive. Deep irrigation is recommended to take place

every other week during the dry season. During the dry season, trees typically need deep, infrequent watering. Watering every 2 weeks is sufficient for the retained trees on this site. Applying water slowly and consistently until it penetrates at least 12-18 inches into the soil is recommended. Avoid spraying water directly on the trunks, as this can lead to disease and decay. Mulch is recommended to be maintained with mulch added overtime as needed. Mulch helps retain soil moisture, regulates temperature, and prevents weeds, which can compete with the tree for water. The use of soaker hoses or an inline drip emitter system set up in a grid like manner to provide deep irrigation during the dry season is recommended. The irrigation system should be placed on top of grade and require no excavation. This will help to keep the trees healthy.

Tree Pruning
Tree pruning during construction is not just about aesthetics and safety; it's also about adhering to best practices and standards set by professional bodies like the International Society of Arboriculture (ISA) and the American National Standards Institute (ANSI A300 Pruning Standards) . The ISA sets rigorous standards to ensure trees are cared for sustainably and scientifically. Under these guidelines, and for the well-being of trees during construction, it's imperative to have an expert arborist oversee any pruning. Their knowledge guarantees that only the necessary branches are removed, ensuring both safety and tree health. The guideline to prune no more than 25% of the tree's total foliage is grounded in sound arboricultural practices. This safeguards the tree's photosynthetic capability, reduces undue stress, and preserves the balance between its roots and canopy. Homeowners should be aware of these standards and ensure they are being met, trusting in the expertise of their arborist and keeping open communication about their tree care decisions. This approach not only ensures the tree's compatibility with new construction aesthetics but also its long-term health and vitality.

Traffic Within TPZs
Strictly prohibit driving vehicles or heavy foot traffic on bare soil within the TPZs of protected trees. Such activities can crush roots directly and compact the soil, impeding oxygen and water infiltration. In areas without existing pavement, use temporary anti-compaction materials, such as wood chips covered with plywood, to prevent damage to tree roots (landscape barrier). Temporary pathways or boardwalks can be constructed to facilitate access while minimizing soil compaction within the TPZ.

Chemical and Material Handling
Store chemicals and construction materials away from TPZs to prevent accidental spills or exposure that may harm tree health. Follow proper handling and disposal procedures for chemicals to ensure compliance with environmental regulations. Minimize the use of toxic materials near trees and opt for environmentally friendly alternatives whenever possible.

Monitoring and Inspection
Regularly monitor and inspect the tree protection measures throughout the construction process to ensure their effectiveness and compliance with the Tree Preservation Plan. Assign a qualified individual, such as a project arborist or certified arborist, to conduct periodic inspections and provide recommendations for any necessary adjustments or improvements. Maintain detailed records of inspections, including dates, findings, and any actions taken.

Post-Construction Maintenance
After construction is completed, continue monitoring the health and condition of preserved trees to address any potential issues promptly. Implement post-construction maintenance practices such as watering, mulching, pruning, and fertilization as needed to support the recovery and long-term health of the trees. Regularly assess the trees for signs of stress, disease, or structural instability and take appropriate measures, including consulting with a certified arborist if necessary.

Compliance with Environmental Laws
Ensure full compliance with all applicable local, state, and federal environmental laws, regulations, and permit requirements pertaining to tree protection during construction. Familiarize yourself with specific regulations regarding tree preservation in your jurisdiction and consult with local authorities or arborists for guidance if needed.

Responsibility
Designate a responsible person or team within the project organization to oversee the implementation and enforcement of the Tree Preservation Plan. Clearly communicate the roles and responsibilities of all parties involved in the construction project regarding tree protection.

Emergency Procedures
Develop clear procedures to follow in the event of emergencies that may impact tree preservation, such as severe storms, accidents, or unexpected tree health issues. Ensure that emergency response plans address prompt actions to mitigate potential risks to trees and contact qualified professionals, such as arborists or tree care companies when needed.

Communication and Training
Facilitate effective communication among all project stakeholders, including contractors, subcontractors, architects, engineers, and landscape professionals, regarding the importance of tree preservation and the specific guidelines to follow. Conduct training sessions or workshops to educate personnel.

TREE WORK STANDARDS AND QUALIFICATIONS

To ensure high-quality tree work, including removal, pruning, and planting, the following standards and qualifications will be adhered to:

- **Industry Standards**: All tree work will be performed in accordance with industry standards established by the International Society of Arboriculture (ISA). These standards encompass best practices and guidelines for tree care and maintenance.
- **Contractor Licensing and Insurance:** The contractor undertaking the tree work must possess a valid State of California Contractors License for Tree Service (C61-D49) or Landscaping (C-27). Additionally, they must have comprehensive general liability, worker's compensation, and commercial auto/equipment insurance coverage.
- **Workmanship Standards:** Contractors must adhere to the current Best Management Practices of the International Society of Arboriculture (ISA) and the American National Standards Institute (ANSI). These standards, including ANSI A300 and Z133.1, outline

guidelines for tree pruning, fertilization, and safety. Compliance with these standards ensures the use of proper techniques and practices throughout the tree work process.

By adhering to these established standards and qualifications, we can ensure the provision of professional and safe tree services that meet the industry's best practices and promote the health and longevity of the trees.

SCHEDULE OF INSPECTIONS

Kielty Arborists Services LLC:

We will conduct the following inspections as needed for the project:

- **Pre-Equipment Mobilization, Delivery of Materials, Tree Removal, and Site Work:** Our project arborist will meet with the general contractor and owners to review tree protection measures. We will identify and mark tree-protection zone fencing, specify equipment access routes and storage areas, and assess the existing conditions of trees to determine any additional necessary protection measures.
- **Inspection after Installation of Tree-Protection Fencing:** Upon completion of tree-protection fencing installation, our project arborist will inspect the site to ensure that all protection measures are correctly implemented. We will also review any contractor requests for access within the tree protection zones and assess any changes in tree health since the previous inspection.
- **Inspection during Soil Excavation or Work Potentially Affecting Protected Trees:** During any work within non-intrusion zones of protected trees, our project arborist will inspect the site and document the implemented recommendations. We will assess any changes in tree health since the previous inspection to monitor the well-being of the trees.
- **Final Site Inspection:** Prior to project completion, our project arborist will conduct a final site inspection to evaluate tree health and provide necessary recommendations to promote their longevity. A comprehensive letter report summarizing our findings and conclusions will be provided to the City of Mountian View.

Our inspections aim to ensure proper tree protection, health, and adherence to project requirements.

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 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
May 5th, 2025