

Arborist Report

To: Mina Laban
Site: 10 Brook Bay Rd, Mercer Island, WA 98040
Re: Preliminary - Tree Inventory for Development
Date: October 9, 2023
Project Arborist: Charlie Vogelheim
ISA Certified Arborist #PN-9375A
Qualified Tree Risk Assessor
Referenced Documents: Critical Area Study and Conceptual Mitigation Plan for Laban Remodel 10 Brook Bay Road. Wetland Resources Inc. 4.25.23.
Laban Remodel Corrections 1. Floisand Studio. 10.10.23.
Laban Residence Siteplan. Pacific Stormwater.
Attached: Table of Trees
Tree Site Map
Tree Retention Worksheet

Summary

On April 25, 2023, Tree Solutions inventoried and assessed 10 large regulated trees onsite. Based on the Mercer Island City Code (MICC) trees greater than 10 inches diameter at standard height (DSH) and exceptional trees are required to be assessed for development projects. We tagged each of these regulated trees with an aluminum tree tag. Tree identifier in the table of trees corresponds to the number on each tag.

Of the site trees assessed, six met the exceptional tree criteria for size outlined in the MICC.

The code defines an exceptional tree grove as a group of eight or more trees that are 10 inches DSH or greater with contiguous canopies. Six trees on the site are part of an exceptional tree grove. Trees that are part of a grove are also considered exceptional trees.

Tree Solutions documented four regulated adjacent trees for this property. Trees on neighboring properties were documented if they appeared to be greater than 10 inches DSH and their driplines extended over the property line. All trees on adjacent properties were estimated from the subject site or public property such as the adjacent right-of-way. We used an alphabetical tree identifier for trees off-site. We collected information on two unregulated adjacent trees for informational purposes.

Assignment and Scope of Work

This report outlines the tree inventory by Charlie Vogelheim and Arin Lewis, of Tree Solutions Inc, on April 25, 2023. They were asked to visit the site and provide a report including findings and management recommendations. Floisand Studio Architects requested these services for project planning purposes.

Observations

Site

This site's tax parcel number is 1137000100 and is 17,439 square feet. The lot has a single-family two-story residence Brook Bay Road on Mercer Island in an R-15 single family zone. The eastern side of the site is wooded with ornamental shrubs. The western side of the site is mostly manicured landscaping that includes patio and lawn.

According to the Mercer Island GIS portal, there is a type F stream flowing with open channel and piped segments within the property boundary. There is also a steep slope environmentally critical area (ECA) on the east side of the site.

Trees

We tagged and assessed ten trees on-site, and we assessed four trees that were off-site with overhanging canopies.

The trees are predominantly native species and included: Douglas-fir (*Pseudotsuga menziesii*), western hemlock (*Tsuga heterophylla*), and bigleaf maple (*Acer macrophyllum*). All trees were in good health and were in good-fair condition. Most of the trees we assessed had been topped at various heights. The landowner informed us that this was because of HOA view regulations.

The western side of the site consisted of a grove of ten trees including six onsite and four with overhanging canopies. These trees are all considered exceptional according to MICC.

Tree 231 was a Colorado spruce (*Picea pungens*) that was growing on the northern side of the property at the edge of the driveway, above a culverted section of the stream onsite. The northern side of this tree had little live foliage due to a failed birch tree that had been growing adjacent to it. It was in good health but had a fair structure because it had been topped and was beginning to show several reiterative branches forming new leaders. This may become a structural issue for this tree in the future.

We have attached an annotated aerial image of the site to serve as the site map as well as a table of trees that has detailed information about each tree.

Discussion—Construction Impacts

Tree Removals & Replacement

Tree Solutions has reviewed construction plans and currently there are no large regulated trees on site proposed for removal.

Tree Protection

Development work may occur within the recommended limits of disturbance (RLOD), defined as eight times trunk diameter at standard height or greater, depending on individual tree species and/or

condition. All work proposed within the RLOD must be reviewed and approved by the project arborist and the City of Mercer Island. The RLOD for each retained tree is listed in the attached table of trees.

No ground disturbance is typically allowed within the minimum limits of disturbance (MLOD), defined as five times trunk diameter at standard height, or 6-feet, whichever is greater. Development work within the MLOD has high a potential for mechanical damage to structural roots and may destabilize trees.

Shed and Wall Removal on East side

The Demo Site Plan for this project indicates that sheds, the wall, and concrete supports on the east side of the property will be removed. This work will happen within the RLOD of regulated tree 234 and exceptional trees 235, 236, 238, 239, 240, A, and B. Removal of the concrete supports will likely impact roots and we recommend they be abandoned on-site. Methods that may disturb or impact the soil, such as the use of heavy machines, shall be avoided when removing these structures. Bare soil shall be covered with four inches of arborist woodchip mulch and irrigated during the dry summer season. The project arborist shall review the demolition methods and an arborist should be present during the removal of these structures to monitor, document, and direct tree protection measures. Appendix F includes further general tree protection measures. Tree protection fencing shall be replaced at the edge of the RLODs of these trees as soon as the work is completed.

Recommendations

- Obtain all necessary permits and approval from the City prior to commencement of site work.
- Tree protection consisting of chain-link fencing should be installed at the dripline of all retained trees. Trees growing in a group should be protected at the edge of their shared driplines. General tree protection specifications can be found in Appendix F and should be included when soliciting bids for development work, including demolition.
- Review special tree protection measures with Tree Solutions Inc., for trees that may be impacted by the shed and wall removal on the east side of the property.
- Have an arborist present to monitor, document, and direct tree protection measures during the removal of the shed and the wall.
- All off-site trees must be protected during construction. See specifications in Appendix F.
- Any pruning should be conducted by an International Society of Arboriculture (ISA) certified arborist following current ANSI A300 specifications.
- All tree retention and removal regulations must be followed and are outlined in MICC Chapter 19.10 Trees.
- Ensure tree protection standards comply with MICC 19.10.080 and ISA Best Management Practices (BMP) – Managing Trees During Construction.

Respectfully submitted,
Charlie Vogelheim
Consulting Arborist, Tree Solutions Inc.

Appendix A Photographs



Photo 1. This photo is looking east at the grove of exceptional trees. Plans call for the removal of the shed and the wall which should be done carefully as to not disturb the roots of the trees.

Appendix B Glossary

DBH or DSH: diameter at breast or standard height; the diameter of the trunk measured 54 inches (4.5 feet) above grade (Council of Tree and Landscape Appraisers 2019)

tree grove: a group of eight or more trees each 10 inches or more in diameter that form a continuous canopy. Trees that are part of a grove shall also be considered exceptional trees, unless they also meet the definition of a hazardous tree. (MICC 19.16.010)

exceptional tree: a tree measuring 36 inches DSH or greater or with a diameter that is equal to or greater than the diameter listed in the Exceptional Tree Table (MICC 19.16.010)

ISA: International Society of Arboriculture

large tree (regulated): A tree measuring 10 inches or greater DSH (MICC 19.16.010)

MLOD (Minimum Limits of Disturbance) Minimum Limits of Disturbance: represents a distance five (5) times that of the trunk and is the minimum distance from a trunk that a structural root can be cut to maintain tree stability.

RLOD (Recommend Limits of Disturbance): As outlined in ISA Best Management Practices: Managing Trees During Construction, this is calculated as a radial distance 8 times the trunk diameter. Some cases require 12 times the trunk diameter. For the purpose of this report, this represents the critical root zone (CRZ).

Visual Tree Assessment (VTA): method of evaluating structural defects and stability in trees by noting the pattern of growth (Mattheck & Breloer 1994)

Appendix C References

Accredited Standards Committee A300 (ASC 300). ANSI A300 (Part 1) Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning). Londonderry: Tree Care Industry Association, 2017.

Council of Tree and Landscape Appraisers, Guide for Plant Appraisal, 10th Edition Second Printing. Atlanta, GA: The International Society of Arboriculture (ISA), 2019.

Fite, Kelby and Dr. E. Thomas Smiley. Best Management Practices: Managing Trees During Construction, Second Edition. Champaign, IL: International Society of Arboriculture (ISA), 2016.

Mattheck, Claus and Helge Breloer, The Body Language of Trees.: A Handbook for Failure Analysis. London: HMSO, 1994.

Mercer Island Municipal Code (MICC) 19.16.010. Definitions

Mercer Island Municipal Code (MICC) 19.10. Trees

Appendix D Assumptions & Limiting Conditions

- 1 Consultant assumes that the site and its use do not violate, and is in compliance with, all applicable codes, ordinances, statutes or regulations.
- 2 The consultant may provide a report or recommendation based on published municipal regulations. The consultant assumes that the municipal regulations published on the date of the report are current municipal regulations and assumes no obligation related to unpublished city regulation information.
- 3 Any report by the consultant and any values expressed therein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event, or upon any finding to be reported.
- 4 All photographs included in this report were taken by Tree Solutions, Inc. during the documented site visit, unless otherwise noted. Sketches, drawings and photographs (included in, and attached to, this report) are intended as visual aids and are not necessarily to scale. They should not be construed as engineering drawings, architectural reports or surveys. The reproduction of any information generated by architects, engineers or other consultants and any sketches, drawings or photographs is for the express purpose of coordination and ease of reference only. Inclusion of such information on any drawings or other documents does not constitute a representation by the consultant as to the sufficiency or accuracy of the information.
- 5 Unless otherwise agreed, (1) information contained in any report by consultant covers only the items examined and reflects the condition of those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, climbing, or coring.
- 6 These findings are based on the observations and opinions of the authoring arborist, and do not provide guarantees regarding the future performance, health, vigor, structural stability or safety of the plants described and assessed.
- 7 Measurements are subject to typical margins of error, considering the oval or asymmetrical cross-section of most trunks and canopies.
- 8 Tree Solutions did not review any reports or perform any tests related to the soil located on the subject property unless outlined in the scope of services. Tree Solutions staff are not and do not claim to be soils experts. An independent inventory and evaluation of the site's soil should be obtained by a qualified professional if an additional understanding of the site's characteristics is needed to make an informed decision.
- 9 Our assessments are made in conformity with acceptable evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.

Appendix E Methods

Measuring

I measured the diameter of each tree at 54 inches above grade, diameter at standard height (DSH). If a tree had multiple stems, I measured each stem individually at standard height and determined a single-stem equivalent diameter by using the method outlined in the Guide for Plant Appraisal, 10th Edition Second Printing published by the Council of Tree and Landscape Appraisers. A tree is regulated based on this single-stem equivalent diameter value. Because this value is calculated in the office following field work, some unregulated trees may be included in our data set. These trees are included in the tree table for informational purposes only and not factored into tree totals discussed in this report.

Tagging

I tagged each tree with a circular aluminum tag at eye level. I assigned each tree a numerical identifier on our map and in our tree table, corresponding to this tree tag. I used alphabetical identifiers for trees off-site.

Evaluating

I evaluated tree health and structure utilizing visual tree assessment (VTA) methods. The basis behind VTA is the identification of symptoms, which the tree produces in reaction to a weak spot or area of mechanical stress. A tree reacts to mechanical and physiological stresses by growing more vigorously to re-enforce weak areas, while depriving less stressed parts. An understanding of the uniform stress allows the arborist to make informed judgments about the condition of a tree.

Rating

When rating tree health, I took into consideration crown indicators such as foliar density, size, color, stem and shoot extensions. When rating tree structure, I evaluated the tree for form and structural defects, including past damage and decay. Tree Solutions has adapted our ratings based on the Purdue University Extension formula values for health condition (*Purdue University Extension bulletin FNR-473-W - Tree Appraisal*). These values are a general representation used to assist arborists in assigning ratings.

Excellent - Perfect specimen with excellent form and vigor, well-balanced crown. Normal to exceeding shoot length on new growth. Leaf size and color normal. Trunk is sound and solid. Root zone undisturbed. No apparent pest problems. Long safe useful life expectancy for the species.

Good - Imperfect canopy density in few parts of the tree, up to 10% of the canopy. Normal to less than ¾ typical growth rate of shoots and minor deficiency in typical leaf development. Few pest issues or damage, and if they exist, they are controllable, or tree is reacting appropriately. Normal branch and stem development with healthy growth. Safe useful life expectancy typical for the species.

Fair - Crown decline and dieback up to 30% of the canopy. Leaf color is somewhat chlorotic/necrotic with smaller leaves and “off” coloration. Shoot extensions indicate some stunting and stressed growing conditions. Stress cone crop clearly visible. Obvious signs of pest problems contributing to lesser condition, control might be possible. Some decay areas found in main stem and branches. Below average safe useful life expectancy

Poor - Lacking full crown, more than 50% decline and dieback, especially affecting larger branches. Stunting of shoots is obvious with little evidence of growth on smaller stems. Leaf size and color reveals overall stress in the plant. Insect or disease infestation may be severe and uncontrollable. Extensive decay or hollows in branches and trunk. Short safe useful life expectancy.

Appendix F Tree Protection Specifications

The following is a list of protection measures that must be employed before, during and after construction to ensure the long-term viability of retained trees.

1. **Project Arborist:** The project arborists shall at minimum have an International Society of Arboriculture (ISA) Certification and ISA Tree Risk Assessment Qualification.
2. **Tree Protection Zone (TPZ):** The city of Mercer Island requires a tree protection zone (TPZ) for retained trees. The TPZ shall be at the Limits of Disturbance (LOD) as shown in the arborist report and associated table of trees. In some cases, the TPZ may extend outside tree protection fencing. Work within the TPZ must be approved and monitored by the project arborist.
3. **Tree Protection Fencing:** Tree protection shall consist of 6-foot chain-link fencing installed at the TPZ as approved by the project arborist. Fence posts shall be anchored into the ground or bolted to existing hardscape surfaces.
 - a. Where trees are being retained as a group the fencing shall encompass the entire area including all landscape beds or lawn areas associated with the grove.
 - b. Per arborist approval, TPZ fencing may be placed at the edge of existing hardscape within the TPZ to allow for staging and traffic.
 - c. Where work is planned within the TPZ, install fencing at edge of TPZ and move to limits of disturbance at the time that the work within the TPZ is planned to occur. This ensures that work within the TPZ is completed to specification.
 - d. Where trees are protected at the edge of the project boundary, construction limits fencing shall be incorporated as the boundary of tree protection fencing.
4. **Access Beyond Tree Protection Fencing:** In areas where work such as installation of utilities is required within the TPZ, a locking gate will be installed in the fencing to facilitate access. The project manager or project arborist shall be present when tree protection areas are accessed.
5. **Tree Protection Signage:** Tree protection signage shall be affixed to fencing every 20 feet. Signage shall be fluorescent, at least 2' x 2' in size, with 3" tall text. Signage will note: "Tree Protection Area – Do Not Enter: Entry into the tree protection area is prohibited unless authorized by the project manager." Signage shall include the contact information for the project manager and instructions for gaining access to the area.
6. **Filter / Silt Fencing:** Filter / silt fencing within the TPZ of retained trees shall be installed in a manner that does not sever roots. Install so that filter / silt fencing sits on the ground and is weighed in place by sandbags or gravel. Do not trench to insert filter / silt fencing into the ground.
7. **Monitoring:** The project arborist shall monitor all ground disturbance at the edge of or within the TPZ, including where the TPZ extends beyond the tree protection fencing.
8. **Soil Protection:** No parking, foot traffic, materials storage, or dumping (including excavated soils) are allowed within the TPZ. Heavy machinery shall remain outside of the TPZ. Access to the tree protection area will be granted under the supervision of the project arborist. If project arborist allows, heavy machinery can enter the area if soils are protected from the load. Acceptable methods of soil protection include applying 3/4-inch plywood over 4 to 6 inches of wood chip mulch or use of AlturnaMats® (or equivalent product approved by the project arborist). Retain existing paved surfaces within or at the edge of the TPZ for as long as possible.
9. **Soil Remediation:** Soil compacted within the TPZ of retained trees shall be remediated using pneumatic air excavation according to a specification produced by the project arborist.
10. **Canopy Protection:** Where fencing is installed at the limits of disturbance within the TPZ, canopy management (pruning or tying back) shall be conducted to ensure that vehicular traffic does not

damage canopy parts. Exhaust from machinery shall be located five feet outside the dripline of retained trees. No exhaust shall come in contact with foliage for prolonged periods of time.

11. **Duff/Mulch:** Apply 6 inches of arborist wood chip mulch or hog fuel over bare soil within the TPZ to prevent compaction and evaporation. TPZ shall be free of invasive weeds to facilitate mulch application. Keep mulch 1 foot away from the base of trees and 6 inches from retained understory vegetation. Retain and protect as much of the existing duff and understory vegetation as possible.
12. **Excavation:** Excavation done at the edge of or within the TPZ shall use alternative methods such as pneumatic air excavation or hand digging. If heavy machinery is used, use flat front buckets with the project arborist spotting for roots. When roots are encountered, stop excavation and cleanly sever roots. The project arborist shall monitor all excavation done within the TPZ.
13. **Fill:** Limit fill to 1 foot of uncompacted well-draining soil, within the TPZ of retained trees. In areas where additional fill is required, consult with the project arborist. Fill must be kept at least 1 foot from the trunks of trees.
14. **Root Pruning:** Limit root pruning to the extent possible. All roots shall be pruned with a sharp saw making clean cuts. Do not fracture or break roots with excavation equipment.
15. **Root Moisture:** Root cuts and exposed roots shall be immediately covered with soil, mulch, or clear polyethylene sheeting and kept moist. Water to maintain moist condition until the area is back filled. Do not allow exposed roots to dry out before replacing permanent back fill.
16. **Hardscape Removal:** Retain hardscape surfaces for as long as practical. Remove hardscape in a manner that does not require machinery to traverse newly exposed soil within the TPZ. Where equipment must traverse the newly exposed soil, apply soil protection as described in section 8. Replace fencing at edge of TPZ if soil exposed by hardscape removal will remain for any period of time.
17. **Tree Removal:** All trees to be removed that are located within the TPZ of retained trees shall not be ripped, pulled, or pushed over. The tree should be cut to the base and the stump either left or ground out. A flat front bucket can also be used to sever roots around all sides of the stump, or the roots can be exposed using hydro or air excavation and then cut before removing the stump.
18. **Irrigation:** Retained trees with soil disturbance within the TPZ will require supplemental water from June through September. Acceptable methods of irrigation include drip, sprinkler, or watering truck. Trees shall be watered three times per month during this time.
19. **Pruning:** Pruning required for construction and safety clearance shall be done with a pruning specification provided by the project arborist in accordance with American National Standards Institute ANSI-A300 2017 Standard Practices for Pruning. Pruning shall be conducted or monitored by an arborist with an ISA Certification.
20. **Plan Updates:** All plan updates or field modification that result in impacts within the TPZ or change the retained status of trees shall be reviewed by the senior project manager and project arborist prior to conducting the work.
21. **Materials:** Contractor shall have the following materials onsite and available for use during work in the TPZ:
 - **Sharp and clean bypass hand pruners**
 - **Sharp and clean bypass loppers**
 - **Sharp hand-held root saw**
 - **Reciprocating saw with new blades**
 - **Shovels**
 - **Trowels**
 - **Clear polyethylene sheeting**
 - **Burlap**
 - **Water**

DSH (Diameter at Standard Height) is measured 4.5 feet above grade, or as specified in the *Guide for Plant Appraisal, 10th Edition*, published by the Council of Tree and Landscape Appraisers.

DSH for multi-stem trees are noted as a single stem equivalent, which is calculated using the method defined in the *Guide for Plant Appraisal, 10th Edition*.

Letters are used to identify trees on neighboring property with overhanging canopies.

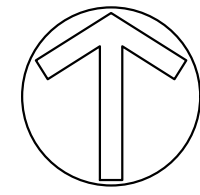
Minimum Limit of Disturbance (MLOD) is defined as 5 times trunk diameter or 6 feet, whichever is greater.

Recommended Limit of Disturbance (RLOD) is 8 times trunk diameter or greater depending on tree species and/or condition.

Dripline is measured from the center of the tree to the outermost extent of the canopy.

Dripline Radius (feet)

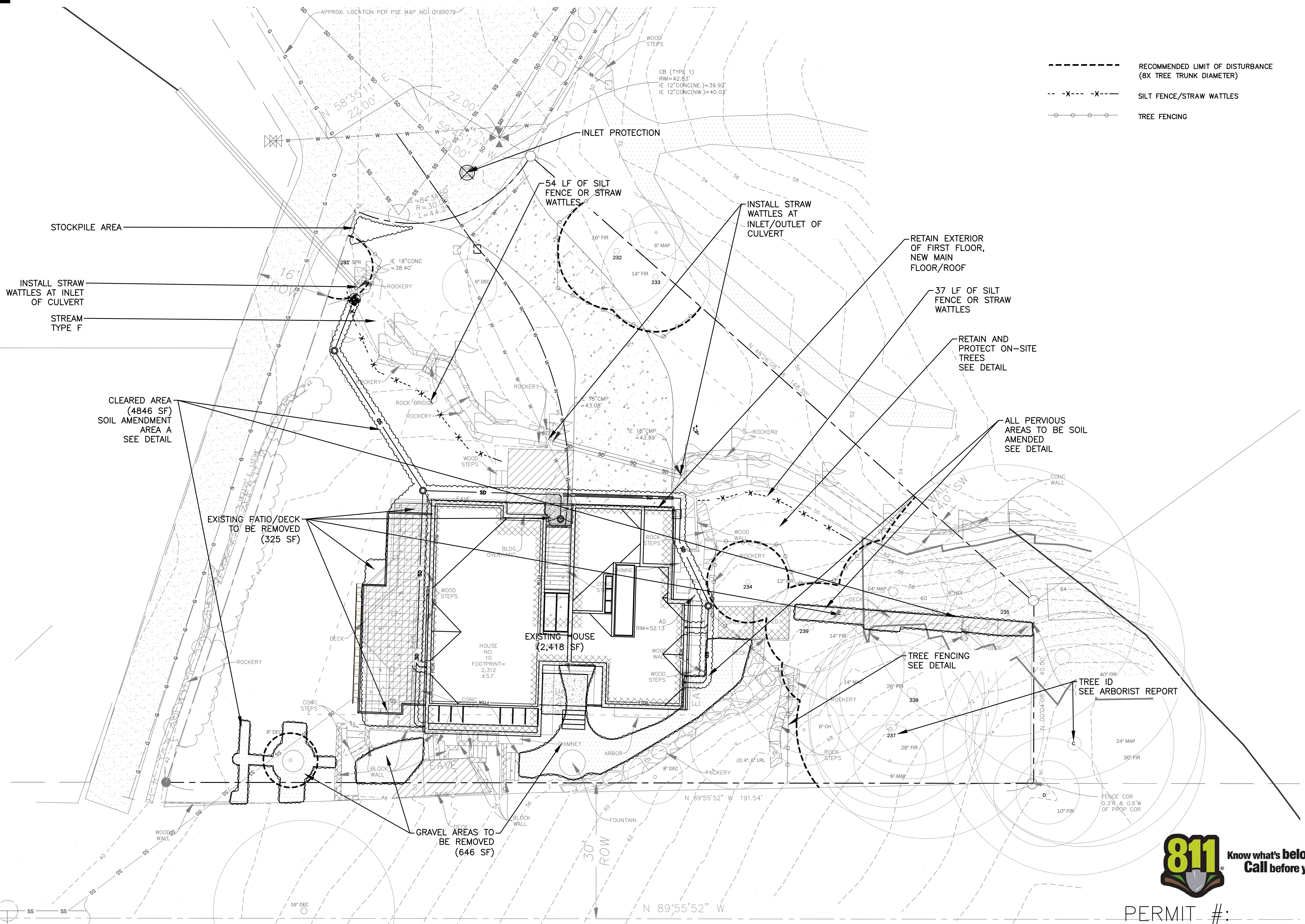
Tree ID	Code	Scientific Name	Common Name	DSH (inches)	Health Condition	Structural Condition	Dripline Radius (feet)				Exceptional Threshold	Exceptional	24-Inch DSH or Greater	MLOD (feet)	RLOD (feet)	Proposed Action	Notes
							N	E	S	W							
231	Pipu	<i>Picea pungens</i>	Colorado spruce	10.6	Good	Fair	10.4	9.4	10.4	10.4	-	-	6	7	Remove	Little foliage on north side due to recently removed trees. Topped at 16 feet.	
232	Psme	<i>Pseudotsuga</i>	Douglas-fir	20.2	Good	Fair	13.8	6.8	7.8	16.8	30.0	-	8	13	Retain	Topped at 20 feet.	
233	Tshe	<i>Tsuga heterophylla</i>	Western Hemlock	18.6	Good	Fair	9.8	10.8	12.3	18.8	24.0	-	8	12	Retain	Topped at 20 feet. Sealed torsional crack.	
234	Psme	<i>Pseudotsuga</i>	Douglas-fir	13.9	Good	Fair	16.6	10.6	16.6	15.6	30.0	-	6	9	Retain	Topped at 20 feet.	
235	Psme	<i>Pseudotsuga menziesii</i>	Douglas-fir	45.5	Good	Fair	31.9	31.9	31.9	31.9	30.0	Exceptional - Size	Yes	19	30	Retain	Topped at 60 feet, bare on southeast side due to shade from tree A.
236	Acma	<i>Acer macrophyllum</i>	Bigleaf Maple	34.2	Good	Good	15.4	18.4	34.4	12.4	30.0	Exceptional - Size	Yes	14	23	Retain	Phototropic lean to south. Decay cavity on a side with good reaction growth.
237	Psme	<i>Pseudotsuga menziesii</i>	Douglas-fir	31.6	Good	Good	9.3	9.3	10.3	10.3	30.0	Exceptional - Size	Yes	13	21	Retain	
238	Psme	<i>Pseudotsuga menziesii</i>	Douglas-fir	29.1	Good	Fair	22.2	22.2	22.2	9.2	30.0	Exceptional - Grove	Yes	12	19	Retain	Topped at 50 feet.
239	Tshe	<i>Tsuga heterophylla</i>	Western Hemlock	15.2	Good	Fair	12.6	12.6	12.6	12.6	24.0	Exceptional - Grove	-	6	10	Retain	Topped at 40 feet.
240	Arme	<i>Arbutus menziesii</i>	Madrone	12.5	Good	Fair	9.5	0.5	9.5	20.5	6.0	Exceptional - Size	-	6	8	Retain	Strong phototropic growth toward west over house.
A	Psme	<i>Pseudotsuga menziesii</i>	Douglas-fir	40.0	Good	Fair	31.7	11.7	11.7	11.7	30.0	Exceptional - Size	Yes	17	27	Retain	Topped at 60 feet, low crown ratio (10%)
B	Acma	<i>Acer macrophyllum</i>	Bigleaf Maple	32.0	Good	Good	36.3	31.3	3.3	6.3	30.0	Exceptional - Size	Yes	13	21	Retain	Barely overhanging property, pruning wounds up to 8 inches in upper crown
C	Psme	<i>Pseudotsuga menziesii</i>	Douglas-fir	43.0	Good	Fair	31.8	31.8	31.8	21.8	30.0	Exceptional - Size	Yes	18	29	Retain	Topped at 50 feet, overextended upper limbs with reiterations and weak attachment points.
D	Psme	<i>Pseudotsuga menziesii</i>	Douglas-fir	10.0	Good	Good	12.4	12.4	12.4	12.4	30.0	Exceptional - Grove	-	6	7	Retain	Ivy on trunk.



SCALE: 1" = 10'

LABAN RESIDENCE TESC PLAN

A PTN OF THE SE 1/4 OF SEC. 24, TWP. 24 NORTH, RGE. 4 EAST, W.M.
CITY OF MERCER ISLAND, KING COUNTY, STATE OF WASHINGTON



- RECOMMENDED LIMIT OF DISTURBANCE (BX TREE TRUNK DIAMETER)
- SILT FENCE/STRAW WATTLES
- TREE FENCING

THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THESE SERVICES WERE PROVIDED. THESE PLANS AND SPECIFICATIONS SHALL BE VOID IF ANY CHANGES OR MODIFICATIONS ARE MADE OR IF ANY PART IS REPRODUCED, COPIED, OR TRANSMITTED IN ANY MANNER OR BY ANY MEANS, WITHOUT THE WRITTEN CONSENT OF THE ENGINEER. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE TO PERSONS OR PROPERTY CAUSED BY THE USE OF THESE PLANS AND SPECIFICATIONS.



PACIFIC STORMWATER
 414 NE RAVENNA BLVD.
 SUITE A #1055
 SEATTLE, WA 98115
 WWW.PACIFICSW.COM

PREPARED FOR:
 MINA & BALSALABAN
 10 BROOK BAY RD.
 MERCER ISLAND, WA 98040

LABAN RESIDENCE
 10 BROOK BAY RD.
 MERCER ISLAND, WA 98040
 TESC PLAN



PERMIT #:

CITY OF MERCER ISLAND

COMMUNITY PLANNING & DEVELOPMENT

9611 SE 36TH STREET | MERCER ISLAND, WA 98040

PHONE: 206.275.7605 | www.mercergov.org



MERCER ISLAND TREE INVENTORY & REPLACEMENT SUBMITTAL INFORMATION

PROJECT INFORMATION

Property Owner
Name: _____

Site Address or
Parcel Number: _____

Project Contact
Name: _____

Contact Email
Address: _____

Contact Phone
Number: _____

EXCEPTIONAL TREES

Exceptional Trees- means a tree or group of trees that because of its unique historical, ecological or aesthetic value constitutes an important community resource. A tree that is rare or exceptional by virtue of its size, species, condition, cultural/historical importance, age, and/or contribution as part of a tree grove. Trees with a diameter of more than 36 inches, or with a diameter that is equal to or greater than the diameter listed in the Exceptional Tree Table shown in MICC 19.16 under Tree, Exceptional.

List the total number of trees for each category and the tree identification numbers from the arborist report.

Number of trees 36" or greater _____

List tree numbers: _____

Number of trees 24" or greater (including 36" or greater) _____

List tree numbers: _____

Number of trees from Exceptional Tree Table (MICC 19.16) _____

List tree numbers: _____

LARGE REGULATED TREES

Large Regulated Trees- means any tree with a diameter of 10 inches or more, and any tree that meets the definition of an Exceptional Tree.

Number of Large Regulated Trees on site _____ (A)

List tree numbers: _____

Number of Large Regulated Trees on site proposed for removal _____ (B)

List tree numbers: _____

Percentage of trees to be retained ((A-B)/Ax100) note: must be at least 30% _____ %

RIGHT OF WAY TREES

Right of Way Trees- means a tree that is located in the street right of way adjacent to the project property.

Number of Large Regulated Trees in right of way _____

List tree numbers: _____

Number of Large Regulated Trees in right of way proposed for removal _____

List tree numbers: _____

Reason for removal: _____

TREE REPLACEMENT

Tree replacement- removed trees must be replaced based on the ratio in the table below. Replacement trees shall be conifers at least six feet tall and or deciduous at least one and one-half inches in diameter at base.

Diameter of Removed Tree (measured 4.5' above ground)	Tree replacement Ratio	Number of Trees Proposed for Removal	Number of Tree Required for Replacement Based on Size/Type
Less than 10"*	1		
10" up to 24"	2		
Greater than 24" up to 36"	3		
Greater than 36" and any Exceptional Tree	6		
TOTAL TREE REPLACEMENTS			

****no replacement tree is needed if the tree fits all of the following;
Less than 10 inches in diameter, not an exceptional tree, and not a replacement tree from another tree permit. ****