

Project No. TS - 8116

Arborist Report

To: JayMarc Homes c/o Garret Upper

Site: 4740 West Mercer Way, Mercer Island, WA 98040

Re: Tree Inventory

Date: December 1, 2022

Project Arborists: George White

ISA Certified Arborist #PN-8908A ISA Qualified Tree Risk Assessor

Reviewed By: Joseph Sutton-Holocomb

ISA Boar Certified Master Arborist #PN-8397BM

ISA Qualified Tree Risk Assessor

Referenced Documents: Site Plan A2.1 (Gary Upper, 11.10.2022)

Utility and Tree Plan (Offe Engineers, 11.21.2022)

Attached: Table of Trees

Tree Site Map

Summary

We inventoried and assessed ten trees on this lot. Based on the Mercer Island City Code (MICC) large (regulated) and exceptional trees must be assessed for development projects. Mercer island defines a large tree as any tree greater than 10 inches in diameter. We tagged each tree with an aluminum tree tag. Tree identifier corresponds to the number on each tag.

Of the trees assessed, seven met the exceptional tree criteria outlined in the MICC.

There was one adjacent tree that required documentation for this property. Trees on neighboring properties were documented if they appeared to be greater than 10 inches diameter 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.

Assignment and Scope of Work

This report outlines the site inspection by George White and Andrea Starbird of Tree Solutions Inc, on November 11th, 2021. We were asked to visit the site and provide a report including findings and management recommendations. Erik Spring requested these services for site management planning.

Observations and Discussion

Site

This 17,790 square foot site was located on West Mercer Way of Mercer Island. According to King County iMap, the site is located in an erosion hazard environmentally critical area.

Trees

We tagged and assessed ten large trees on site. The tree species on site were a mix of native, ornamental, and introduced species. We found all large trees on site to be in good health and good or fair structural condition.

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

We identified one large, off-site tree that overhung the property line. This tree (Tree A) is a red alder (*Alnus rubra*) in poor health and structural condition.

We recommend monitoring site trees for changes in condition on a 3–5-year interval or following abnormal weather events.

If desired, limited end-weight reduction pruning can be performed on tree 386, an exceptional Douglasfir (*Pseudotsuga menziesii*), by an ISA Certified Arborist. This will reduce the likelihood of limb breakout over the existing house (Photo 1). Outlying limbs and limbs that are particularly heavy can be reduced with cuts under 2 inches in diameter. No more than 10%-15% live crown should be removed in any year.

Proposed Plans

The most recent plans (Site Plan A2.1, Gary Upper, 11.10.2022) propose the demolition of existing structures and the construction of a new single-family house. Additionally, the existing driveway is to be demolished and replaced.

Discussion- Construction Impacts

All large trees are regulated in Mercer Island; therefore, the project will be subject to the tree protection regulations outlined in MICC 19.10.060.

The city of Mercer Island prioritizes the retention of exceptional trees greater than 24 inches in diameter; MICC 19.10.060 requires the retention of all exceptional trees greater than 24 inches in diameter, unless tree retention results in an unavoidable, hazardous situation or if tree retention limits the constructable gross floor area to less than 85 percent of the maximum gross floor area allowed. Removal of any large tree as part of a development proposal will require a tree replacement plan pursuant to MICC 19.10.070.

Development proposals must have a tree protection plan prepared by a qualified arborist. Tree protection plans must be consistent with existing best management practices (BMPs) as outlined by the International Society of Arboriculture (ISA). This generally involves tree protection areas established at the Recommended Limits of Disturbance (RLOD). For this site the recommended limits of disturbance equate to eight times trunk diameter.

Trees Proposed for Removal

Under the most recent plans, one large tree (Tree 383) is proposed for removal. Two replacement trees will be required pursuant to MICC 19.10.070.

Trees 377-382

Trees 377-382 comprise a stand of trees adjacent to the north property edge. These trees are growing above a rockery and block retaining wall approximately five feet above site grade. In my opinion, these trees can be successfully protected if tree protection fencing is installed at the top of the rockery/retaining wall, and the rockery/retaining wall remains intact, as I do not expect roots to extend below the existing rockery/retaining wall.

Trees 384 and 385

Trees 384 and 385 should be protected with tree protection fencing at the Recommended Limits of Disturbance (RLOD) listed in the attached table of trees. No excavation, grading, materials storage, or machine access is permitted within the limits of the tree protection fencing.

Tree 386

Tree 386 is an exceptional 42-inch Douglas-fir (*Pseudotsuga menziesii*) located west of the existing house. Because of this tree's proximity to the proposed house, specific tree protection measures must be taken to successfully retain this tree.

This tree is to be protected with tree protection fencing. Tree protection fencing must extend to the RLOD listed in the table of trees to the south, to the property edge to the west, to the edge of the existing driveway to the north, and to the proposed limits of excavation to the east. No excavation, grading, materials storage, or machine access is permitted within the limits of the tree protection fencing. Tree protection fencing must be installed prior to any construction or demolition related activities.

The proposed limits of excavation for the house foundation are located 16.5 feet east of tree 386. Because this excavation is located just inside of the Minimum Limits of Disturbance (MLOD), exploratory air excavation must be conducted at the limits of excavation so that the project arborist can identify structural roots at this location. If multiple structural roots in excess of 4 inches in diameter are encountered the MLOD should be expanded to mitigate root impacts. Any exposed roots should be cut cleanly and immediately covered to prevent desiccation.

During the construction phase of the project the tree protection fencing on the east side of tree 386 will have to be reduced to within the MLOD (14 feet from the base of the tree) to allow for worker access. Before the fence is moved soil protection consisting of 6-8 inches of coarse woody mulch covered by half-inch plywood must be installed between the fencing and the proposed house.

According to utility plans (Utility and Tree Plan, Offe Engineers 11.21.2022), there is a proposed storm drain located approximately 32 feet north of tree 386. This storm drain is proposed to follow the footprint of the existing driveway. Because of the distance from the trunk, and the likely soil conditions below the existing driveway, I do not anticipate significant root impacts during the excavation of this line. Any roots encountered should be cut cleanly and backfilled to prevent desiccation.

Additional tree protection specifications can be found in appendix F.

Recommendations

- All retained trees must be protected by tree protection fencing consistent with the specifications outlined in Appendix F and the Construction Impacts discussion section of this report.
- Specific tree protection measures including alternate excavation, soil protection, and arborist monitoring must be called out on all pertinent plan sheets.
- Two replacement trees consistent with the specifications outlined in MICC 19.10.070 should be included on the landscape plan.
- Any required clearance pruning must be completed by an ISA certified arborist according the relevant best management practices outlined in the ANSI A300.
- All tree retention and removal regulations must be followed and are outlined in MICC Chapter 19.10 Trees.
- Obtain all necessary permits and approval from the City prior to commencement of site work.

Respectfully submitted,

George White Consulting Arborist

Appendix A 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)

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 B References

- Accredited Standards Committee A300 (ASC 300). <u>ANSI A300 (Part 1) Tree, Shrub, and Other Woody Plant Management Standard Practices (Pruning)</u>. Londonderry: Tree Care Industry Association, 2017.
- Council of Tree and Landscape Appraisers, <u>Guide for Plant Appraisal</u>, <u>10th Edition Second Printing</u>. Atlanta, GA: The International Society of Arboriculture (ISA), 2019.
- Fite, Kelby and Dr. E. Thomas Smiley. <u>Best Management Practices: Managing Trees During Construction, Second Edition</u>. Champaign, IL: International Society of Arboriculture (ISA), 2016.
- Mattheck, Claus and Helge Breloer, <u>The Body Language of Trees.</u>: 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 C Photographs



Photo 1. Tree 386, an exceptional Douglas-fir in excellent condition. We discussed end-weight reduction pruning to lessen the potential for limb break-outs above the house. The red arrow indicates an outlying limb that could be reduced.

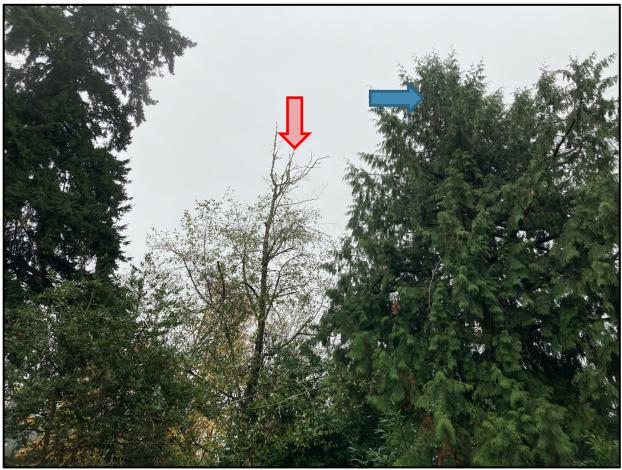


Photo 2. Tree A and tree 384. Tree A is an off-site alder with a dead top (indicated with red arrow) that is leaning on the fence. Tree 384 (indicated with blue arrow) is an exceptional western redcedar.

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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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 city of Seattle Director's Rule 16-2008 or the <u>Guide for Plant Appraisal</u>, 10th <u>Edition Second Printing</u> 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.

<u>Excellent</u> - 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.

<u>Good</u> - 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.

<u>Fair</u> - 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

<u>Poor</u> - 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.
- Tree Protection Zone (TPZ): The city of Mercer Island requires a tree protection zone (TPZ)
 congruent with the Recommend Limits of Disturbance (RLOD) established by the project arborist.
 The RLOD must be consistent with current ISA BMPs. 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

King County iMap



The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a survey product. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.

Date: 11/11/2021 Notes:





Tree Solutions Inc

Table of Trees

4740 W. Mercer Way, Mercer Island, WA

Arborists: Andrea Starbird, George White **Date of Inventory:** 11/11/2021

Table Revised: 12/01/2022

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 <u>Guide for Plant Appraisal, 10th Edition</u>.

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

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

Dripline Radius (feet)

		1	1	1	1	1			1105 (10						1	
Tree ID 377	Scientific Name Acer macrophyllum	Common Name Bigleaf Maple	DSH (inches) 34.7	DSH Multistem 24,25	Health Condition Good	Structural Condition Good	N 26.4		s 33.4	w	Exceptional Threshold 30.0	Exceptional Exceptional - Size	Above 24 inches Yes	Minimum Limits of Disturbance (feet)	Reccomended Limits of Distrubance (feet) 23	Notes Codominant stems diverging at base, property line tree, old chain enveloped in trunk, soil pilings near base, surface roots present, 8" diameter root cut 2' from base on the SW side of tree.
378	Pinus contorta	Lodgepole Pine	11.5		good	Fair	0.5	13.5	24.5	12.5	6.0	Exceptional - Size	No	5	8	12" codominant stem has been removed, corrected phototropic lean towards the south, growing out of rockery
379	Pinus nigra	Austrian Black Pine	26.7		Good	Fair	17.1	9.1	26.1	21.1	24.0	Exceptional - Size	Yes	11	18	Codominant at 20', narrow union.
380	Pinus nigra	Austrian Black Pine	28.3		Good	Fair	19.2	21.2	27.2	9.2	24.0	Exceptional - Size	Yes	12	19	Corrected phototropic lean towards southwest, girdling roots present, concrete fence footing near base, kink in trunk at 40'
381	Thuja plicata	Western Redcedar	12.9		Good	Good	14.5	14.5	14.5	14.5	30.0		No	5	9	Subdominant, 6" codominant stem has been removed.
382	Thuja plicata	Western Redcedar	32.5		Good	Good	21.4	21.4	21.4	21.4	30.0	Exceptional - Size	Yes	14	22	Limbs to ground
383	Prunus spp. (serrula, serrulata)	Flowering Cherry	10.2	6.5,7.1,3. 3	Good	Good	16.4	8.4	12.4	16.4	23.0		No	4	7	Multiple trunks grafted at base, 1.5' from rockery
384	Thuja plicata	Western Redcedar	45.4		Good	Good	31.9	21.9	26.9	21.9	30.0	Exceptional - Size	Yes	19	30	Codominant trunks at 15', south stem is codominant again at 17', grass debris piled at base, steep slope 2.5' west of base, previously lost top.
385	Pseudotsuga menziesii	Douglas-fir	20.3		Good	Good	15.8	15.8	15.8	15.8	30.0		No	8	14	Growing near fence, narrow profile
386	Pseudotsuga menziesii	Douglas-fir	42.0		Good	Excellent	25.8	25.8	25.8	23.8	30.0	Exceptional - Size	Yes	18	28	Significant surface roots present, failed sod planted over surface roots, steep slope directly west of trunk, canopy overhangs fence.

Tree Solutions Inc

Table of Trees

4740 W. Mercer Way, Mercer Island, WA

Arborists: Andrea Starbird, George White

Date of Inventory: 11/11/2021 **Table Revised:** 12/01/2022

Tree ID	Scientific Name			DSH Multistem		Structural Condition	N	E	s		Exceptional Threshold	Above 24	Limits of Disturbance		Notes
Α	Alnus rubra	Red alder	12.0		Poor	Fair	15.5	17.5	10.5	16.5	-	No	5	8	Tree is on neighboring property,
															leaning on fence, dead top,
															overhangs property by 15'