

Arborist Report

To: Johnathon Spare
Site: 8265 SE 61st St, Mercer Island, WA 98040
Re: Tree Inventory
Date: March 20, 2024
Project Arborist: George White,
ISA Certified Arborist PN-8908A
ISA Qualified Tree Risk Assessor
Reviewed By: Connor McDermott,
ISA Certified Arborist PN- 8704A
ISA Qualified Tree Risk Assessor
Referenced Documents: Preliminary Site Plan A1.1 (Ectypos Architecture, 3.9.2024)
Attached: Table of Trees
Tree Site Map

Summary

I inventoried and assessed ten large (regulated) trees on this site. I tagged each tree with a numbered aluminum tree tag. Tree identifiers correspond to the number on each tag.

Of the trees assessed, three met the exceptional tree criteria outlined in the Mercer Island City Code (MICC). No tree groves were identified on-site.

There were six adjacent trees that required documentation for this property. Trees on neighboring properties were documented if they appeared to be large or exceptional trees 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 (ROW). I used alphabetical tree identifiers for trees off-site.

I reviewed provided plans for tree retention feasibility and determined that nine out of the ten regulated trees on-site can be retained, satisfying tree retention requirements. One exceptional tree (tree 170) will require removal if the proposed plans are implemented. Six replacement trees will be required to replace the removed tree.

Assignment and Scope of Work

This report outlines the site inspection by George White of Tree Solutions Inc., on January 17, 2024. I was asked to visit the site and provide a formal report including findings and management

recommendations. Johnathon Spare, owner of the property, requested these services for project planning purposes.

Observations and Discussion

Site

This 15,331 square foot site (parcel no. 1922800210) was located on SE 61st St of Mercer Island and is located in a single-family (R-15) zone. According to the City of Mercer Island GIS Portal, a steep slope Environmentally Critical Area (ECA) and watercourse buffer exist on-site. No trees are proposed for removal within either ECA.

The site slants continuously from east to west between SE 61st St and 82nd Ave SE with a gradually increasing slope angle. The site has been heavily terraced by a system of rock and concrete retaining walls. A single-family house, detached garage, deck, and landscaping currently exist on-site.

I observed moderate levels of invasive plant species including Himalayan blackberry (*Rubus bifrons*), English ivy (*Hedera helix*), cherry laurel (*Prunus laurocerasus*) English holly (*Ilex aquifolium*) and invasive bamboo (*Phyllostachys aurea*). Pressure from invasive plants is most concentrated on the easternmost portion of the site across the steep slope ECA. Invasive plant species should be managed prior to construction.

Proposed Plans

The most recent plans (Preliminary Site Plan A1.1, Ectypos Architecture, 12.5.2023) propose renovations to the existing residence, connecting the existing residence to the existing garage, construction of an entry court, and an expansion/regrading of the existing driveway.

Trees

I inventoried and assessed ten regulated trees on-site. Tree species on-site include Douglas-fir (*Pseudotsuga menziesii*), western hemlock (*Tsuga heterophylla*), bigleaf maple (*Acer macrophyllum*), western white pine (*Pinus monticola*), flowering plum (*Prunus cerasifera*), and flowering cherry (*Prunus spp.*).

Tree 166

Tree 166 is a 23.8-inch western hemlock located east of the existing garage. This tree has been topped and has two reiterated leaders growing above the site of the old topping wound. I also noted wounds from climbing gaffs on the trunk of the tree. I recommend hiring a competent ISA certified arborist to perform structural pruning of the reiterative growth and inspect the site of the old topping cut for decay.

Trees 168 and 169

Trees 168 and 169 are two exceptional Douglas-fir trees in good health/structure growing in the terraced area southeast of the existing residence. The base of tree 168 appears to be partially buried as a result of terracing. I recommend renovating the terrace at the base of this tree to expose the entire root flair.

Tree 170

Tree 170 is an exceptional, 44.2-inch, bigleaf maple growing northeast of the existing residence. This tree is growing above a rock retaining wall and therefore has somewhat limited rooting area. In some

places confined roots have caused minor damage to an adjacent retaining wall, steps, and hardscape. This tree has considerable overhang of the existing residence.

This tree is of great concern to Mr. Spare as its crown overhangs his children's bedroom. He often moves his children into the basement during wind events because he is worried that a large branch or trunk will fail and impact their bedroom with severe consequence.

Tree 171

Tree 171 is a 22.2-inch, western white pine growing southwest of the existing house. This tree is in poor health as evidenced by thinning foliage, limited dieback, and a stress cone-crop.

I predict that this tree is tree will continue to decline in health.

Trees 173-175

Trees 173-175 are growing in the steep slope ECA near the western property edge. All of these trees are in fair health and are exhibiting poor structure because they have been repeatedly topped/mal pruned.

Additional Trees Below Regulated Size

While on-site, I observed several additional trees and shrubs that were below regulated size but may hold a high retention value to the property owner. I believe these trees can be retained if they are protected to the same standards as retained, regulated trees.

I have attached an annotated survey of the site to serve as the site map and attached a table of trees that has detailed information about each tree.

Discussion

Tree Retention Requirements

MICC 19.20.060.2 requires the retention of 30 percent of all large/exceptional trees located on-site during development in single-family zones. Eight out of the ten regulated trees on-site are currently proposed for retention resulting in a tree retention rate of 80 percent, satisfying these requirements.

Exceptional Trees

MICC 19.20.060.3 requires the retention of all exceptional trees in excess of 24 inches in diameter unless specific circumstances apply.

Tree 170

One exceptional tree in excess of 24 inches (Tree 170) is currently proposed for removal. This removal is permitted under MMIC 19.20.060.3.a, because its retention would prevent the replacement, or lasting repair, of the existing steps that have been damaged by the tree's root system. This limits safe egress/access from the front of the house and thereby creates an unavoidable hazardous situation. In addition, the only feasible avenue to access the west, and north sides of the existing structure is via the north side-yard. Tree 170 would conflict directly with this avenue if retained.

Replacement Trees

Replacement trees are required to be planted for trees removed for site development. Replacement tree requirements and ratios are located in MICC 19.10.070 – Tree Replacement. For this site, eight replacement trees are required to be planted to replace trees removed during development.

The project proposes a fee-in-lieu of replacement pursuant to MICC 19.10.070.C for all eight required replacement trees.

Discussion—Construction Impacts

This report is preliminary as we have not reviewed finalized design or construction plans for this area.

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

Development work may occur within the recommended limits of disturbance (RLOD), defined as eight times DSH 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.

Tree protection fencing consisting of 6-foot-high chain-link fencing should be installed at the recommended limits of disturbance. In some cases, tree protection fencing may be placed at the edges of existing hardscapes that provided sufficient soil protection, or at the edges of retaining walls, existing foundations, or abrupt grade changes that limit the distribution of roots in a particular direction. The areas contained within this tree protection fencing are referred to as Tree Protection Zones (TPZs). It is common for multiple retained trees to be protected by the same TPZ with fencing placed at their shared RLOD.

No excavation, grading, material storage, or vehicle/machine access is permitted within the TPZ without arborist coordination. Work within the TPZ will require alternative tree protection including but not limited to, alternative excavation techniques and monitoring by the project arborist.

Additional tree protection specifications can be found in Appendix F.

Recommendations

Planning Phase

- Obtain all necessary permits and approval from the city prior to commencement of site work.
- Ensure tree protection standards comply with MICC 19.10.080.
- Create a Tree Protection Plan (TPP) sheet consistent with the tree protection recommendations described in this report. The TPP sheet should include:
 - The locations of all regulated trees (including those off-site).
 - All trees proposed for removal marked with an X.
 - The RLOD, and MLOD of all retained trees, and the proposed locations of all tree protection fencing.
 - Notes pertaining to any alternative tree protection including the locations of alternative excavation, soil protection, and areas of work to be monitored by the project arborist.
- Negotiate and pay fees-in-lieu for all eight required replacement trees.

Construction Phase

- Tree protection consisting of 6-foot-tall chain-link fencing should be installed at the RLOD of retained trees or at the edges of existing retaining walls, hardscapes, or other existing site features that limit root distribution. Trees growing in a group should be protected at the edge of their shared RLOD. General tree protection specifications can be found in Appendix F.
- All off-site trees must be protected during construction.
- All pruning should be conducted by an ISA certified arborist following current and applicable ANSI A300 specifications.
- Follow tree protection specifications located in Appendix F throughout construction.
- Remove all invasive plants during construction.

General Recommendations

- Renovate retaining wall adjacent to tree 168 to expose entire root flare.

Respectfully submitted,

George White,
Consulting Arborist

Appendix A Photographs



Photograph 1. Tree 166, a western hemlock that had been topped at the point indicated by the red arrow. This tree is currently proposed for removal.



Photograph 2. The base of tree 168 has been partially buried during the yard-terracing. The root flare of this tree should be exposed to prevent disease.



Photograph 3. Tree 170, an exceptional bigleaf maple currently proposed for removal.



Photograph 4. Limited rooting area at the base of tree 170 causing uplift of the adjacent steps and damage to the existing retaining wall.



Photograph 5. Tree 171, a western white pine in poor health (red arrow) exemplified by a very thin crown.



Photograph 6. Tree 174 (red arrow), a Douglas-fir in poor health/structure that has been repeatedly topped. Several invasive plant species that should be managed are also shown in this photo.

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): represents a distance five (5) times that of the trunk or 6-feet, whichever is greater, 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 or greater depending on tree species and/or condition. 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.

Health

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.

Structure

Excellent - Root plate undisturbed and clear of any obstructions. Trunk flare has normal development. No visible trunk defects or cavities. Branch spacing/structure and attachments are free of any defects.

Good - Root plate appears normal, with only minor damage. Possible signs of root dysfunction around trunk flare. Minor trunk defects from previous injury, with good closure and less than 25% of bark section missing. Good branch habit; minor dieback with some signs of previous pruning. Codominant stem formation may be present, requiring minor corrections.

Fair - Root plate reveals previous damage or disturbance. Dysfunctional roots may be visible around the main stem. Evidence of trunk damage or cavities, with decay or defects present and less than 30% of bark sections missing on trunk. Co-dominant stems are present. Branching habit and attachments indicate poor pruning or damage, which requires moderate corrections.

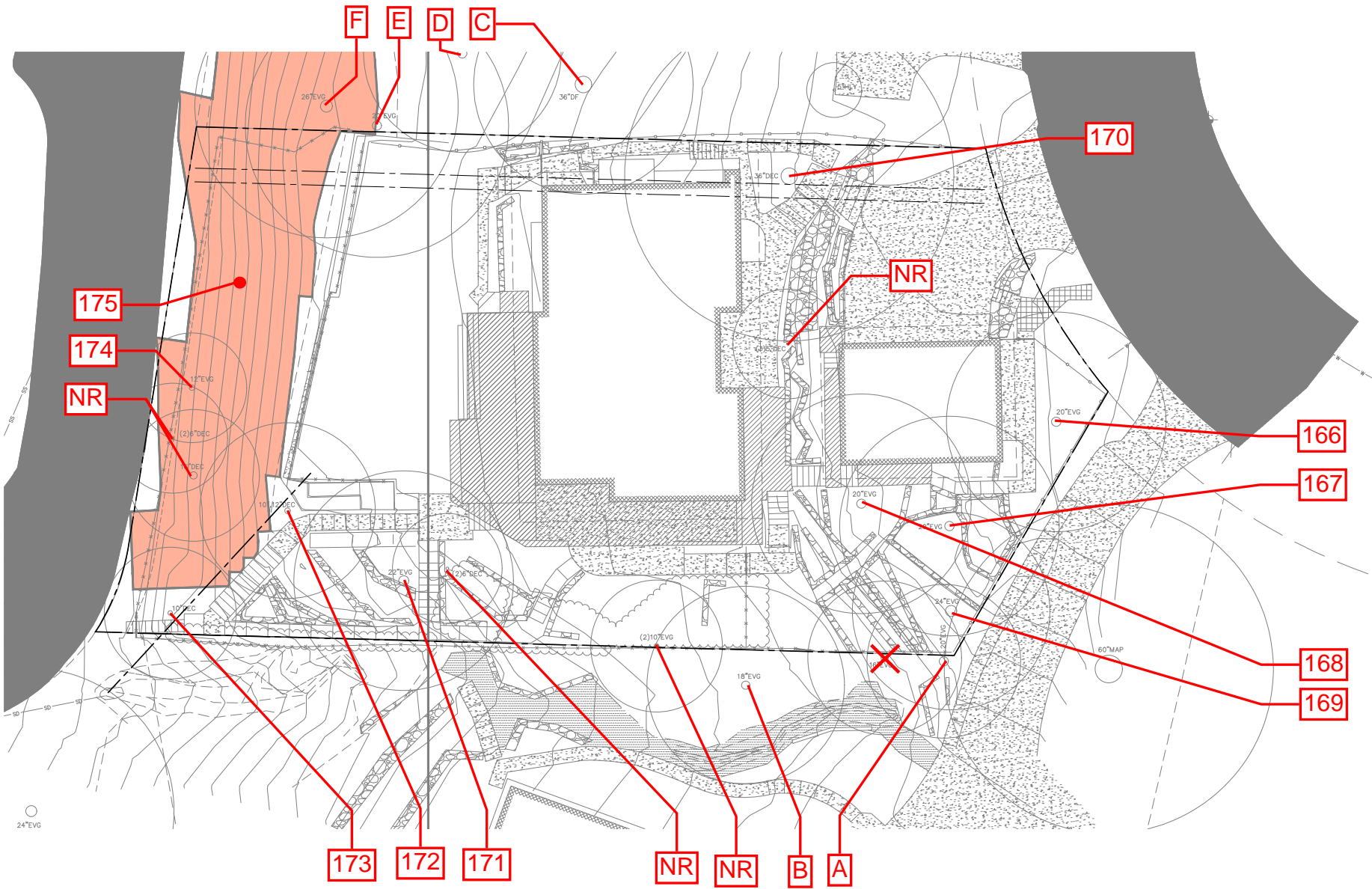
Poor - Root plate disturbance and defects indicate major damage, with girdling roots around the trunk flare. Trunk reveals more than 50% of bark section missing. Branch structure has poor attachments, with several structurally important branches dead or broken. Canopy reveals signs of damage or previous topping or lion-tailing, with major corrective action required.

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 TPZ is to be set at the Recommended Limits of Disturbance listed in the 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-tall 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:** 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. 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 or at the edge of 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 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 5 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 of these specifications. 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 in place 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**



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NESTLER-SPARES RESIDENCE

Remodel/Addition
8265 SE 61ST ST
Mercer Island, WA 98040

Tree Inventory

Arborist: GW
Inventory date: 1.17.2024
Map Created: 3.20.2024

This map documents the site visit of GW, of Tree Solutions Inc. on January 17, 2024. All regulated on-site trees were tagged and assigned a numerical identifier. All off-site trees that appeared to be of regulated size were assigned an alphabetical identifier. Off-site trees were not tagged.

Map Key

- : Surveyed tree removed at time of inventory
- NR** : Surveyed tree below regulated size (Not Regulated)
- : Approximate location of surveyed tree not included in provided survey



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 10 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.

Tree ID	Scientific Name	Common Name	DSH (inches)	DSH Multistem	Health Condition	Structural Condition	Dripline (feet)	Exceptional Threshold	Exceptional	24-Inch DSH or Greater	MLOD (feet)	RLOD (feet)	Proposed Action	Notes
166	<i>Tsuga heterophylla</i>	Western hemlock	23.8		Good	Fair	24.0	24.0		-	10	20	Remove	Topped with two reiterations, wounds on trunk from climbing gaffs
167	<i>Pseudotsuga menziesii</i>	Douglas-fir	29.7		Good	Good	19.2	30.0		Yes	12	25	Retain	Growing amongst rockery, utilities at base
168	<i>Pseudotsuga menziesii</i>	Douglas-fir	34.0		Good	Good	17.4	30.0	Exceptional - Size	Yes	14	28	Retain	Six feet from garage, base partially buried in east side from terrace, growing above rockery
169	<i>Pseudotsuga menziesii</i>	Douglas-fir	32.6		Good	Good	17.4	30.0	Exceptional - Size	Yes	14	27	Retain	Growing on terrace, low live crown ratio
170	<i>Acer macrophyllum</i>	Bigleaf maple	44.2		Good	Good	34.8	30.0	Exceptional - Size	Yes	18	37	Remove	Growing above retaining wall, limited rooting area, significant overhang of existing house, rockery being pushed out by roots, some stems on north east aspect may have been topped
171	<i>Pinus monticola</i>	Western white pine	22.2		Poor	Good	24.9	24.0		-	9	19	Retain	Very sparse foliage, stress cone crop, clearly declining, phototropic lean to southwest
172	<i>Prunus cerasifera</i>	Flowering plum	17.4	13.1,11.5	Good	Good	26.2	21.0		-	7	15	Retain	Two codominant stems originate at 3 feet above grade, heavy epicormic growth, growing below retaining wall
173	<i>Prunus spp. (serrula, serrulata)</i>	Flowering cherry	13.5	5.9,12.1	Fair	Fair	14.6	23.0		-	6	11	Retain	Large pruning cuts, growing on steep slope, heavy epicormic growth, topped



Table of Trees
8265 SE 61st St, Mercer Island, WA

Arborist: GW
Date of Inventory: 1.17.2024
Table Updated: 3.20.2024

Tree ID	Scientific Name	Common Name	DSH (inches)	DSH Multistem	Health Condition	Structural Condition	Dripline (feet)	Exceptional Threshold	Exceptional	24-Inch DSH or Greater	MLOD (feet)	RLOD (feet)	Proposed Action	Notes
174	<i>Pseudotsuga menziesii</i>	Douglas-fir	16.6		Fair	Poor	9.7	30.0		-	7	14	Retain	Growing on steep slope, debris at base, very little live foliage present, topped repeatedly/malpruned,
175	<i>Prunus cerasifera</i>	Flowering plum	12.2	6,7,8	Fair	Poor	10.5	21.0		-	6	10	Retain	Topped/malpruned repeatedly, growing on slope, debris at base, heavy epicormic sprouting
Off-Site Trees														
A	<i>Pseudotsuga menziesii</i>	Douglas-fir	17.0		Good	Good	15.7	30.0		-	7	14	Retain	Growing on steep slope, slight phototropic lean to south
B	<i>Pseudotsuga menziesii</i>	Douglas-fir	20.0		Good	Good	19.8	30.0		-	8	17	Retain	Crown appears slightly sparse when compared to surrounding trees
C	<i>Pseudotsuga menziesii</i>	Douglas-fir	32.0		Good	Good	21.3	30.0	Exceptional - Size	Yes	13	27	Retain	Overhanging house, one long, overextended limb to south, consider reduction
D	<i>Pseudotsuga menziesii</i>	Douglas-fir	16.0		Good	Good	21.7	30.0		-	7	13	Retain	Shorter than surrounding firs, topped with multiple reiterations, somewhat suppressed
E	<i>Pseudotsuga menziesii</i>	Douglas-fir	18.0		Good	Good	17.3	30.0		-	8	15	Retain	Jog in trunk at 40 feet, growing below retaining wall
F	<i>Pseudotsuga menziesii</i>	Douglas-fir	26.0		Good	Good	22.1	30.0		Yes	11	22	Retain	Asymmetric crown to east, growing below retaining wall