

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: Ken Chu & Wei Xu

Site Address or

Parcel Number: 4332 W. Mercer Way

Project Contact

Name: Lucia Pirzio-Biroli, Ectypos Architecture

Contact Email

Address: lucia@ectypos.com

Contact Phone

Number: (206) 232-9147

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

0

List tree numbers:

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

14

List tree numbers: 1,10,11,13,14,18,19,21,25,27,26.5,30,32,26

Number of trees from Exceptional Tree Table (MICC 19.16)

5 (size)

List tree numbers: Groves 1&2 encompass nearly all trees (39) & are considered exceptional see attached table of trees

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	39	(A)
List tree numbers:	Grove 1 & Grove 2 see attached table	
Number of Large Regulated Trees on site proposed for removal	1	(B)
List tree numbers:	17	
Percentage of trees to be retained ((A-B)/Ax100) note: must be at least 30%	97.5	%

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	2
List tree numbers:	25,26
Number of Large Regulated Trees in right of way proposed for removal	0
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	1	6
TOTAL TREE REPLACEMENTS			6

****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. ****



Table of Trees

4332 W Mercer Way, Mercer Island, WA 98040

Arborist: JU CM

Date of Inventory: 02/27/2024

Table Prepared: 03/11/2024

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.

Tree ID	Scientific Name	Common Name	DSH (inches)	DSH Multistem	Health Condition	Structural Condition	Dripline Radius (feet)				Exceptional Threshold	Exceptional	24-Inch DSH or Greater	Exceptional Grove	MLOD (feet)	RLOD (feet)	Proposed Action	Notes
							N	E	S	W								
1	<i>Thuja plicata</i>	Western redcedar	31.0		Good	Fair	1.3	13.3	26.8	17.8	30.0	Exceptional - Size	Yes	Yes	13	21	Retain	Topped at 20 ft with new reiterations above; phototropic to south; driveway 8.5 ft from base
7	<i>Pinus sylvestris</i>	Scots pine	15.0		Fair	Fair	8.6	-	12.6	22.6	24.0		-	-	6	10	Retain	Limited live canopy; likely suppressed; ivy at base; phototropic to west; shared
10	<i>Pseudotsuga menziesii</i>	Douglas-fir	32.0		Good	Fair	21.3	22.3	29.3	24.3	30.0	Exceptional - Size	Yes	Grove 1	13	21	Retain	Not tagged; growing on top of slope; sheer vertical cut; kink at 40 ft; sap weeping on west side 15 ft above base
11	<i>Acer macrophyllum</i>	Bigleaf maple	34.6		Fair	Good	23.4	13.4	22.4	40.4	30.0	Exceptional - Size	Yes	Grove 1	14	23	Retain	Not tagged; pruned with stub cuts for clearance; south most stem is likely dead; can be reduced to snag; clearance likely required for wall; remove lowest 3-4 rungs of branches; fill at base
12	<i>Acer macrophyllum</i>	Bigleaf maple	17.0		Good	Good	8.7	0.7	24.7	35.7	30.0	Exceptional-Grove	-	Grove 1	7	11	Retain	Estimated due to slope and ivy; lower stem pruned for clearance
13	<i>Pseudotsuga menziesii</i>	Douglas-fir	29.0		Good	Good	20.2	14.2	22.2	23.2	30.0	Exceptional-Grove	Yes	Grove 1	12	19	Retain	Ivy at base; large stems of ivy removed; growing on top of slope; estimated due to slope and ivy
14	<i>Alnus rubra</i>	Red alder	31.0		Poor	Poor	16.3	1.3	26.3	37.3	-	Exceptional-Grove	Yes	Grove 1	13	21	Retain	Central trunk long dead; diameter at standard height estimated due to fence; ivy at base; not good long term retention tree
15	<i>Thuja plicata</i>	Western redcedar	10.3		Good	Good	9.4	9.4	9.4	9.4	30.0	Exceptional-Grove	-	Grove 1	6	7	Retain	Small tree suppressed by adjacent trees
17	<i>Acer macrophyllum</i>	Bigleaf maple	19.1	9.5, 11.6, 11.9	Good	Good	25.8	12.8	29.8	25.8	30.0	Exceptional-Grove	-	Grove 1	8	13	Remove	Growing on slope; anaerobic clay soils; codominant at base; potentially impacted by piling for wall
18	<i>Pseudotsuga menziesii</i>	Douglas-fir	28.1		Good	Fair	14.2	12.7	9.7	11.2	30.0	Exceptional-Grove	Yes	Grove 2	12	19	Retain	Limbed up on south east side; mechanical damage on south side; sap weeping from old wounds; 50 percent live crown ratio
19	<i>Pseudotsuga menziesii</i>	Douglas-fir	33.6		Good	Good	23.4	22.4	25.4	20.4	30.0	Exceptional - Size	Yes	Grove 2	14	22	Retain	Top broken out in past but has new reiterations; limbed up for powerlines; ivy at base
20	<i>Prunus cerasifera</i>	Flowering plum	11.4		Good	Fair	9.5	12.5	12.5	10.0	21.0	Exceptional-Grove	-	Grove 2	6	8	Retain	Pruned for powerlines; narrow union; stems combined for diameter at standard height due to orientation of stems
21	<i>Acer macrophyllum</i>	Bigleaf maple	32.0	29.6, 9.9, 7.1	Fair	Good	20.3	9.3	29.3	43.8	30.0	Exceptional - Size	Yes	Grove 2	13	21	Retain	Dieback in upper 3rd of canopy; ivy into crown; ivy limits assessment; pruned for powerlines with heading cuts; poor shoot extension; codominant at base
25	<i>Pseudotsuga menziesii</i>	Douglas-fir	25.9		Good	Fair	20.6	16.1	20.1	21.1	30.0	Exceptional-Grove	Yes	Grove 2	11	17	Retain	Topped at 25 ft; reiterative tops allowed to grow; canopy pruned over road



Table of Trees

4332 W Mercer Way, Mercer Island, WA 98040

Arborist: JU CM

Date of Inventory: 02/27/2024

Table Prepared: 03/11/2024

Tree ID	Scientific Name	Common Name	DSH (inches)	DSH Multistem	Health Condition	Structural Condition	N	E	S	W	Exceptional Threshold	Exceptional	24-Inch DSH or Greater	Exceptional Grove	MLOD (feet)	RLOD (feet)	Proposed Action	Notes
26	<i>Acer macrophyllum</i>	Bigleaf maple	18.5		Good	Good	25.8	0.8	34.8	35.8	30.0	Exceptional-Grove	-	Grove 2	8	12	Retain	Phototrophic over road; canopy raised over road; bamboo at base; small cavity at union 8 ft above base
27	<i>Pseudotsuga menziesii</i>	Douglas-fir	24.6		Good	Fair	8.0	1.0	7.0	16.0	30.0	Exceptional-Grove	Yes	Grove 2	10	16	Retain	Topped or broke top at 35 ft reiteration to west and road; ivy at base
28	<i>Acer macrophyllum</i>	Bigleaf maple	15.6		Poor	Poor	8.7	19.2	8.7	8.7	30.0	Exceptional-Grove	-	Grove 2	7	10	Retain	Nearly dead; ivy growing on trunk; poor shoot extension; east stem young and most alive is phototrophic to east
29	<i>Thuja plicata</i>	Western redcedar	9.8	7.4, 6.5	Good	Good	12.9	19.4	13.4	8.4	30.0	Exceptional-Grove	-	Grove 2	6	7	Retain	Low canopy hangs over driveway; ivy on trunk
30	<i>Thuja plicata</i>	Western redcedar	14.0		Poor	Poor	8.6	8.6	8.6	8.6	30.0	Exceptional-Grove	-	Grove 2	6	9	Retain	Top is dead; cavity on north side; through crack at base on east side and from root flare
31	<i>Pseudotsuga menziesii</i>	Douglas-fir	23.7		Good	Good	18.0	14.0	13.0	15.0	30.0	Exceptional-Grove	-	Grove 2	10	16	Retain	Potentially lost top at some point; tree 30 grows out of base of tree
32	<i>Pseudotsuga menziesii</i>	Douglas-fir	20.1		Good	Good	13.3	23.3	12.8	12.8	30.0	Exceptional-Grove	-	Grove 2	8	13	Retain	On-site; potentially was codominant at 30 ft; now has kink on trunk; low live crown ratio; ivy at base
33	<i>Acer platanoides</i>	Norway maple	12.9	3.3, 6.6, 7.4, 7.6	Fair	Fair	14.5	22.0	18.5	11.5	-	Exceptional-Grove	-	Grove 2	6	9	Retain	Off-site; codominant at base; suppressed with dieback in crown observed; ivy at base
34	<i>Thuja plicata</i>	Western redcedar	12.5		Good	Good	11.0	11.0	11.0	11.0	30.0	Exceptional-Grove	-	Grove 2	6	8	Retain	Off-site; small healthy tree
35	<i>Alnus rubra</i>	Red alder	17.9		Good	Fair	7.7	0.7	15.7	34.2	-	Exceptional-Grove	-	Grove 2	7	12	Retain	Off-site; corrected lean to west toward road; cavity at base on south side with reaction wood; partial slope failure
37	<i>Pinus nigra</i>	Austrian black pine	19.1		Good	Good	0.8	3.8	17.3	17.3	24.0	Exceptional-Grove	-	Grove 2	8	13	Retain	Offsite; phototrophic lean to west; 50 percent live crown ratio; 2ft from driveway
38	<i>Pseudotsuga menziesii</i>	Douglas-fir	26.5		Excellent	Good	1.1	17.1	20.1	10.1	30.0	Exceptional-Grove	Yes	Grove 2	11	18	Retain	Offsite; ivy on trunk; driveway cracking below; dominant tree in row
39	<i>Pseudotsuga menziesii</i>	Douglas-fir	17.4		Good	Good	0.7	12.7	18.2	6.7	30.0	Exceptional-Grove	-	Grove 2	7	12	Retain	Offsite; stem girdled at 2 ft by wire; ivy on trunk; 5.5 ft from driveway
40	<i>Pseudotsuga menziesii</i>	Douglas-fir	18.1		Good	Good	0.8	10.8	12.3	10.8	30.0	Exceptional-Grove	-	Grove 2	8	12	Retain	Offsite; stem girdled by wire at 3 ft; suppressed in row; 6.5 ft from driveway
A	<i>Acer platanoides</i>	Norway maple	30.0		Good	Fair	1.3	1.3	1.3	16.8	-	Exceptional-Grove	Yes	Grove 1	13	20	Retain	Offsite tree; managed for end weight
B	<i>Acer macrophyllum</i>	Bigleaf maple	15.0		Good	Good	-	-	-	18.6	30.0		-		6	10	Retain	Offsite; no tag; upright canopy; ivy at base; estimated
C	<i>Acer macrophyllum</i>	Bigleaf maple	14.0		Good	Good	-	-	15.6	21.6	30.0		-		6	9	Retain	Offsite; no tag; pruned to property line with poor cut; phototrophic to south west; estimated
D	<i>Alnus rubra</i>	Red alder	32.0		Excellent	Good	1.3	19.3	33.3	22.3	-		Yes	Grove 2	13	21	Retain	Offsite; no tag; estimated; growing adjacent to creek; good condition
E	<i>Alnus rubra</i>	Red alder	26.0		Good	Good	1.1	6.1	27.1	25.1	-		Yes	Grove 2	11	17	Retain	Offsite; no tag; estimated; growing north of creek