SHOFFNER CONSULTING

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June 20, 2023

Jay Mezistrano JayMarc Homes 7525 SE 24th St. Suite 520 Mercer Island, WA 98040

RE: Tree Inventory Report - 4104 83rd Ave. SE Mercer Island, WA.

Jay:

This report is provided to address the recent inventory I conducted of the trees on the property and just off-site at the address of 4104 83rd Ave. SE in Mercer Island, WA. Please see the accompanying tree inventory map for the locations and numbers of the trees and the tree evaluation data spreadsheet for complete information on the trees and the City of Mercer Island.

1.0 Professional Experience and Credentials

Following is a summarization of my experience and credentials as a consulting arborist:

- Master of Science in Urban Horticulture from Center for Urban Horticulture, University of Washington, 1996. Focus of study and thesis was nursery production of Pacific madrone (*Arbutus menziesii*) and establishment into a natrual/urban ecosystem.
- ISA Certified Arborist since 1996.
- Tree Risk Assessment Qualified since 2012.
- Consulting arborist, 1996-present.
- Wetland Biologist, 1996-1998
- Other related experience: City of Everett Urban Forestry, summers 1989-1992;
 Natural Resource Management staff and Bellevue Botanical Garden staff, City of Bellevue, 1996-1997.

2.0 Site Conditions

The property is developed with a single family residence and is located in a single family residence neighborhood. The landscape consists of a mixture and native and non-native trees and shrubs. The topography is flat.

3.0 Tree Inventory Methods and Results

I conducted visual evaluations of all the trees according to ISA standards and based upon many years conducting such evaluations on trees in the Pacific Northwest. I conducted level 2 basic visual assessments, oberserving trees up close to inspect conditions of the trunks and from afar to inspect conditions in the crowns. For the trees located on the slope and at the base of it, both on and off-site, I conducted level 1

assessments from the top of the slope as this is an area of no development and the trees are far enough from the residence, both in vertical and horizontal distance, to not pose a risk of impact in the event of failure. All assessments were conducted according to the methods specified in the ISA Tree Risk Assessment Manual and on nearly 20 years experience conducting such evaluations.

The investigations involved the gathering of the following information:

- Tree species
- Trunk diameter
- Crown spread diameter
- Location factors
- Health and condition notes (general level of vigor, defects, disease or pest problems)

The information gathered on all of the trees is provided in the accompanying Tree Evaluation Data spreadsheet. No trees on or just off-site possessed any conditions, symptoms of conditions or defects worth noting.

4.0 Tree Retention and Protection Requirements

Tree City of Mercer Island retention requirements are specified in 19.10.060 of the MICC, titled Tree removal —Associated with a development proposal, and are as follows:

- A minimum of 30% of trees with a diameter of 10 inches or greater, or that otherwise meet the definition of a large tree, shall be retained over a rolling five year period.
- The following trees shall be prioritized for retention:
 - (a) Exceptional trees;
 - (b) Trees with a diameter of more than 24 inches;
 - (c) Trees that have a greater likelihood of longevity; and
 - (d) Trees that are part of a healthy grove. (Note: the definition of a grove is not provided in MICC.)

There is a total of 11 sigificant trees (10 inches or greater) on the property, two of which are exceptional by size. Both of the exceptional trees and an additional two trees are required to be retained.

5.0 Tree Replacement

Per 19.10.070, trees that are cut pursuant to a tree permit shall be replaced as specified in subsections A and B of this section, or a fee in lieu shall be paid as specified in subsection C of this section.

Diameter of removed tree	Number of replacement trees
< 10 inches	1
10 inches up to 24 inches	2
24 inches up to 36 inches	3

6.0 Limits of Disturbance Discussion and Encroachment

The City of Mercer Island requires Limits of Disturbance (LOD) be established as minimum distance of protection for all retained trees on site and for those just off-site with driplines that extend onto the property. Limits of development for each tree are provided on the accompanying Tree Evaluation Data spreadsheet.

The LODs are set based upon the following criteria:

- For trees that have low crowns the LODs are set just outside the dripline to protect the crowns.
- For taller, larger trees with high crowns, the LODs are set at a distance to protect the root plate and adjusted dependent upon how many sides of the root plate are subject to impacts by development.

7.0 Tree Protection and Impact Assessment

The accompanying tree evalution data spreadsheet provides the limits of disturbance (LOD) for each tree. The LOD is the radial distances from the trees in feet and is the zone of protection where impacts are not to occur within, particularly below ground. However, for most of the trees, development will only occur on one side, so below ground impacts may be allowed within the specified LODs for these trees.

Tree protection fencing is to be installed at the specified LODs prior to beginning any work on the site including clearing and grading and is to remain in place throughout development.

If encroachment into the LOD is approved, the fencing is only to be removed at the time that the work within the LOD is to be done.

8.0 Use of This Report and Limitations

This report is provided to JayMarc Homes to address the inventory of the trees on the property at the address of 4104 83rd Ave. SE in Mercer Island, WA. Natural decline and failure of trees following development is not predictable, therefore, Shoffner Consulting and Tony Shoffner cannot be held liable for retained trees that die or fail prior to or following development of the property.

Cordially,

Tony Shoffner

ISA Certified Arborist #PN-0909A, TRAQ

TREE EVAL	UATION DATA	A JayMarc Homes - 4104 83rd Ave. SE Me	rcer Island,	WA						June 9, 2023		
				Limits of Disturbance								
Tree #	Location	Species	Dbh	CSD	Class	LOD N	LOD S	LOD E	LOD W	Condition Notes	CRZ radius	
1	Off-site	Ponderosa pine (Pinus ponderosa)	18"	28'	Significant	15'	15'	15'	15'	Good condition and health.	18'	
2	On-site	Blue spruce (Picea pungens 'glauca')	12"	16'	Significant	10'	10'	10'	10'	Good condition and health.	12'	
3	On-site	Flowering cherry (Prunus serrulata)	14"	24'	Significant	14'	14'	14'	14'	Good condition and health.	14'	
4	On-site	Laceleaf maple (Acer palmatum)	3"	5'	Not significant	N/A	N/A	N/A	N/A	Good condition and health.	3'	
5	On-site	Mugo pine (Pinus mugo)	5"	8'	Not significant	N/A	N/A	N/A	N/A	Good condition and health.	5'	
6	Off-site	Saucer magnolia (Magnolia x. soulangeana)	7"	16'	Significant	10'	10'	10'	10'	Good condition and health.	7'	
7	On-site	Holly (Ilex aquifolium)	4"	8"	Not significant	N/A	N/A	N/A	N/A	Good condition and health.	4'	
8	On-site	Leyland cypress (Cupressus x. leylandii)	12"	18'	Significant	10'	10'	10'	10'	Good condition and health.	12'	
9	On-site	Leyland cypress (Cupressus x. leylandii)	5"	8'	Not significant	N/A	N/A	N/A	N/A	Good condition and health.	5'	
10	On-site	Leyland cypress (Cupressus x. leylandii)	4"	6'	Not significant	N/A	N/A	N/A	N/A	Good condition and health.	4'	
11	On-site	Leyland cypress (Cupressus x. leylandii)	4"	6'	Not significant	N/A	N/A	N/A	N/A	Good condition and health.	4'	
12	On-site	Leyland cypress (Cupressus x. leylandii)	3"	6'	Not significant	N/A	N/A	N/A	N/A	Good condition and health.	3'	
13	On-site	Leyland cypress (Cupressus x. leylandii)	10"	12'	Significant	10'	10'	10'	10'	Good condition and health.	10'	
14	On-site	Leyland cypress (Cupressus x. leylandii)	10"	14'	Significant	10'	10'	10'	10'	Good condition and health.	10'	
15	On-site	Leyland cypress (Cupressus x. leylandii)	10"	14'	Significant	10'	10'	10'	10'	Good condition and health.	10'	
16	On-site	Leyland cypress (Cupressus x. leylandii)	6"	8'	Significant	10'	10'	10'	10'	Good condition and health.	6'	
17	On-site	Leyland cypress (Cupressus x. leylandii)	6"	8'	Significant	10'	10'	10'	10'	Good condition and health.	6'	
18	On-site	Hawthorn (Crataegus sp.)	10"	22'	Significant	12'	12'	12'	12'	Good condition and health.	10'	
19	On-site	Douglas fir (Pseudotsuga menziesii)	40"	42'	Exceptional	16'	16'	16'	16'	Good condition and health.	40'	
20	On-site	Big leaf maple (Acer macrophyllum)	46"	76'	Exceptional	16'	16'	16'	16'	Good condition and health.	46'	
21	On-site	Douglas fir (Pseudotsuga menziesii)	8"	16'	Significant	10'	10'	10'	10'	Good condition and health.	8'	
22	On-site	Douglas fir (Pseudotsuga menziesii)	14"	30'	Significant	16'	16'	16'	16'	Good condition and health.	14'	
23	On-site	Goldenchain tree (Laburnum x. wateri)	18"	N/A	Significant	28'	28'	28'	28'	Dead.	18'	
24	On-site	Vine maple (Acer circinatum)	10"	18'	Significant	10'	10'	10'	10'	Good condition and health.	10'	
25	Off-site	Leyland cypress (Cupressus x. leylandii)	10"	18'	Significant	10'	10'	10'	10'	Good condition and health.	10'	
26	Off-site	Leyland cypress (Cupressus x. leylandii)	10"	18'	Significant	10'	10'	10'	10'	Good condition and health.	10'	
27	On site	Evergreen magnolia (Magnolia grandiflora)	6"	10'	Significant	14'	14'	14'	14'	Good condition and health.	6'	
28	On-site	Hawthorn (Crataegus sp.)	10"	18"	Significant	10'	10'	10'	10'	Good condition and health.	10'	

Tree # On or Off site

Location Tag # assigned by survey

Species Tree Species

Dbh Diameter at 54"

CSD CSD is crown spread diameter for the on-site and right of way trees and crown spread distance onto the property for off-site trees.

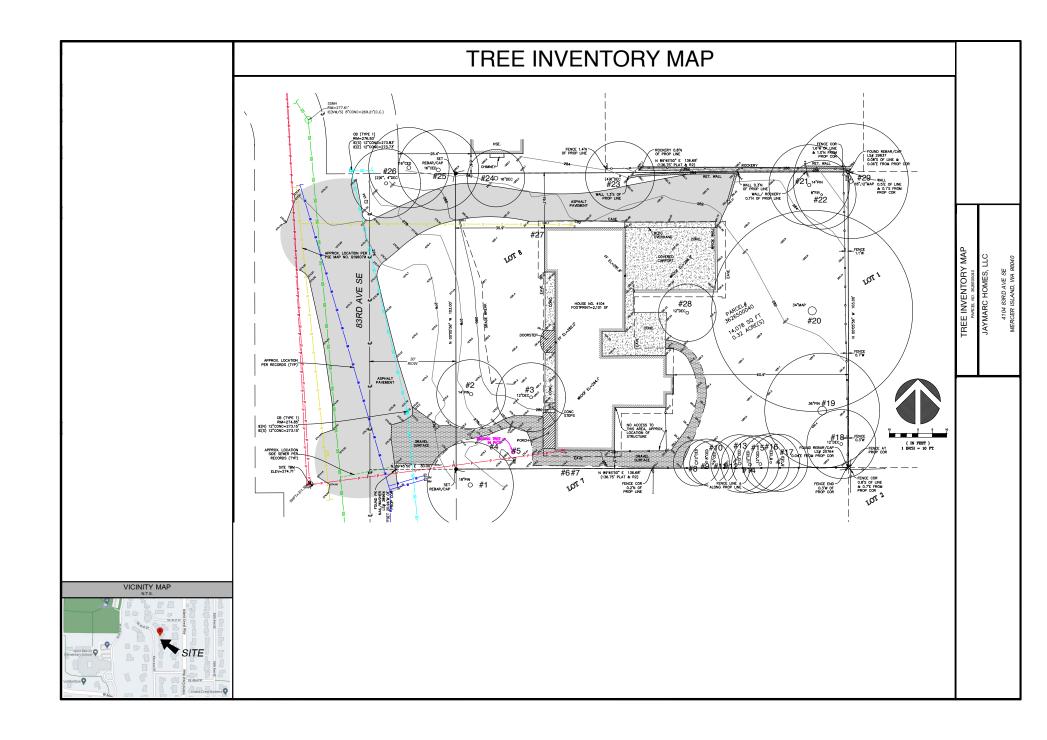
Rating Condition rating: 1=Good condition and health, young and vigorous; 2=Generally good condition and health;

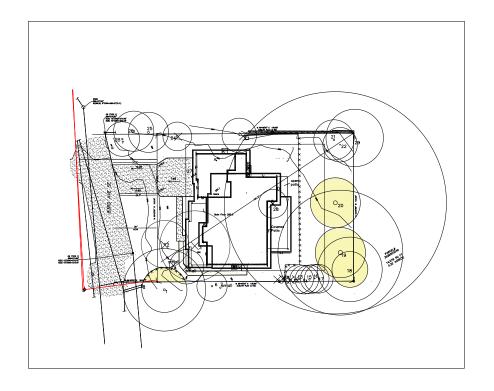
3=Fair condition and health, some health and defect concerns; 4=Poor condition and/or health.

LOD Limits of development in radial feet from trunk for on site trees. For off-site trees, protection distance onto the property.

Condition Notes Notes on conditions specific to each tree if

Status To be retained or removed





-	ONSITE		TREE TABLE		Limit of		
					Development		
	Species	Dbh	Dripline	Classification	LOD	RETAIN	REMOV
1	Ponderosa Pine	18	28	Significant	15		
2	Blue spruce	12	16	Significant	10		12
3	Flowering cherry	14	24	Significant	14		14
4	Laceleaf Maple	3	5	Not significant	N/A		3
5	Mugo Pine	5	8	Not significant	N/A		5
8	Leyland cypress	12	18	Significant	10		12
9	Levland cypress	5	8	Not significant	N/A		5
10	Leyland cypress	4	6	Not significant	N/A		4
11	Leyland cypress	4	6	Not significant	N/A		4
12		<u> </u>					_
	Leyland cypress	3	6	Not significant	N/A		3
13	Leyland cypress	10	12	Significant	10		
14	Leyland cypress	10	14	Significant	10		
15	Leyland cypress	10	14	Significant	10		
16	Leyland cypress	6	8	Significant	10		
17	Leyland cypress	6	8	Significant	10		
18	Hawthorn	10	22	Significant	12		
19	Douglas-fir	40	42	Exceptional	116		
20	Big leaf maple	46.0	79	Exceptional	16		
21	Douglas-fir	8	16	Significant	10		
22	Douglas-fir	14	30	Significant	16		
23	Goldenchain tree	18		Significant	28		18
24	Vine Maple	10	18	Significant	28		10
				Percentage Saved	1	71.4%	
	OFFSITE						,
Repeat of #1	Ponderosa Pine	18	28 16	Significant	15		_
- 1	Saucer magnolia Holly	4	16	Significant Not significant	N/A		_
Not a tree - remove	Holly	N/A	N/A	Not significant N//A	N/A		_
28	Hawthorn	10	18	Significant	10		
28	Evergreen Magnolia	6	10	Significant	14		
		18	18	Significant	18		_

JayMarc Homes, LLC 7525 SE 24th St. #487 Mercer Island, WA 98040 425 281 2706

Site Plan 4104 83rd Ave SE Mercer Island

Drawn by Gary Upper 2-7-24

A2.0