



## **Arborist Report**

**February 27th, 2024**

**Prepared for:**  
Aspen Homes

**Site Address:**  
2956 72nd Ave SE  
Mercer Island, Wa

**Prepared by:**  
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Arborist notes for Aspen Homes at 2956 72nd Ave. SE., Mercer Island Washington. Time of site visit: Thursday, February 22, 2024. 10 AM.

Thank you for having me out to assess the condition of the trees on the site.

## **Introduction and Assignment**

It is my understanding that there are some proposed improvements to this address. Previous to the site visit, I was provided an as-built survey map that had most of the trees accurately located. During the site visit, I attached numbered plaques to all of the significant trees at this address and collected up-to-date inventory information about species, size, drip line radius, and condition.

I will be providing my client a report that has all of the pertinent information about the trees contained in a spreadsheet along with photographs and a description of the site.

## **Observation and Discussion**

This site is accessed by a long driveway that comes from the west. There are some trees on the south property line adjacent to the driveway that are in reasonable condition, but not thriving because of the limited access to soil volume and all of the compaction from vehicles driving just to the north of the root flares.

Just north of the driveway entrance is a large specimen of Big Leaf Maple (*Acer macrophyllum*) on one of the neighboring sites that is in excellent condition.

East of the existing one story house at this address and north of the garage building is a specimen of Western Red Cedar (*Thuja plicata*) that is large enough to be considered Exceptional in The City of Mercer Island. To the east of that tree are three Douglas Firs (*Pseudotsuga mensiezii*), one of which was not included on the survey map that I was provided.

East of the existing garage structure is a native Ash that is very close to the house with a drip line that extends over the existing structure.

At the southeast corner of the lot there is a two stem Western Red Cedar that is part of a hedge that lines the southern property line that is comprised of multiple species.

There is a significant amount of English Laurel (*Prunus laurocerasus*) lining the southern portion of the driveway that was not included in the inventory.

Both of the European White Birch (*Betula pendula*) that are on the south property line are struggling with an infestation of the Bronze Birch Borer and have significant defects in their upper canopies. On the survey map that I was provided, the two birch trees are portrayed as one specimen. These two trees are separated by several feet at the bases and are two distinct systems.

## Tree #2430

I was provided a map that shows the proposed improvement to the site. The new house will occupy the same footprint as the existing and the new structure will not have an adverse effect on the health or the stability of any of the trees. The proposed paver installation on the east side of the proposed new structure appears as though it will encroach on the Tree Protection Zone of Exceptional Tree #2430. This Western Red Cedar is an Exceptional tree and over 36" DSH, giving it high-retention value in the city. The client will need to place the TPZ data on the map around this tree so that we can gauge the extent of the disturbances on this tree. It is possible that the paver patio will need to be modified to protect the root zone of this tree. The city will require fencing to be installed at the Drip Line of the tree and to remain in place for the duration of the project. Excerpt from the city's website regarding Exceptional Tree Preservation:

**Exceptional Trees** are a tree or group of trees that because of unique historical, ecological, or aesthetic value constitutes an important community resource. An exceptional tree is 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 (see MICC 19.16.010) are considered exceptional trees.

When making the effort to preserve a tree, you will be required to temporarily fence the tree at the dripline, defined by the outermost leaves on a tree. The area within the dripline contains the most critical roots and should not be disturbed. Remember, the bigger the tree, the further out the dripline and roots extend.

The existing driveway and the garage structure are remaining and the rest of the trees on the site can be protected with fencing at the drip line.

The client is not requesting to remove any existing trees from the site.

## **Tree Inventory**

DSH-Diameter at Standard Height (DSH's of multi-stemmed trees obtained by taking the square root of the sum of the squares of the individual stems), DLR-Drip Line Radius or Limit of Disturbance, TPZ-Tree Protection Zone

## **Condition Ratings**

6 = Excellent condition, 5 = Good, 4 = Fair, 3 = Poor, 2 = Very Poor, and 1 = Dying/Dead

## **Tree Protection**

- For the trees being retained, tree protection fencing should be installed at the outer edge of the drip line or as close to it as is practically possible.
- Fencing should be installed prior to construction activities and remain in place for the duration of the project. Fencing should only be moved temporarily if minor disturbances must occur within the drip line and the fencing should be replaced immediately once that portion of the work is completed.
- The tree protection area is designated to be an area of no impact, no storing of materials, no encroachment and no staging of debris.
- The tree protection fencing should have signs every 8' facing access that indicate the area is a tree protection zone.
- Trenching through the TPZ for utilities is not permitted (tunneling is the preferred method).
- Grade changes in the TPZ are not permitted.
- Vehicle maintenance and washing of equipment (especially concrete), is not permitted.
- No attaching anything to the tree with cinching knots or hardware.
- Root flare should be protected with chips so that lawn maintenance equipment does not have to work close to the system.
- Proper clearances should be maintained.
- The TPZ or critical root zone needs to be protected. The Inner TPZ is 50% of the radius of the TPZ and there should be zero disturbance in this zone. The Outer TPZ surrounds the ITPZ. A disturbance of up to 33% of the Outer TPZ is sometimes permissible provided that any heavy digging equipment works toward the tree, and that any roots encountered that are over 1" in diameter are excavated around with hand tools and cut clean with a sharp saw behind the excavation zone so that the root can bifurcate and continue to grow. In some cases, if excessive pruning has been done, the TPZ can be larger than the Drip Line Radius.

Tree Number	Common Name	Latin Name	Diameter at Standard Height in inches (obtained with fabric D-Tape). DSH of multi-stemmed trees is obtained by taking the square root of the sum of the squares of the individual DSH measurements.	Tree Protection Zone Radius in feet (determined by analysis of DSH measurement, drip line radius, and access to soil volume) See report for details on how to interpret Inner TPZ and Outer TPZ radii	Drip Line Radius in feet	Size of Inner Tree Protection Zone Radius in feet (often based on the DLR plus 1/2 of the DSH)	Condition Ratings 6 = Excellent condition, 5 = Good, 4 = Fair, 3 = Poor, 2 = Very Poor, and 1 = Dying/Dead	Exceptional on Mercer Island?
2430	Western Red Cedar	Thuja plicata	39	18 (drip line radius plus the distance to the center of the trunk)	16	8	5	Yes
2431	Douglas Fir	Pseudotsuga menziesii	10	10	10	5	6	No
2432	Douglas Fir	Pseudotsuga menziesii	6	8	8	4	6	No
2433	Douglas Fir	Pseudotsuga menziesii	10	12	12	6	6	No
2434	Oregon Ash	Fraxinus latifolia	12	19	18	10	4	No
2435	Western Red Cedar	Thuja plicata	(13/15)=20	15	14	8	4	No
2436	European White Birch	Betula pendula	13	11	10	6	3 (Borer infestation)	No
2437	European White Birch	Betula pendula	16	16	15	8	3 (Borer infestation)	No
2438	Big Leaf Maple	Acer macrophyllum	19	17	16	9	5	No
2439	Big Leaf Maple	Acer macrophyllum	24	26	25	13	3 (topped)	No
2440	Common Hawthorne	Crataegus monogyna	(8/6)=10	14	14	7	4	No
2441	Douglas Fir	Pseudotsuga menziesii	13	14	13	7	4	No
2442	Big Leaf Maple	Acer macrophyllum	33 (estimated/off-site)	27	26	14	5	Yes



## EXCEPTIONAL TREE TABLE

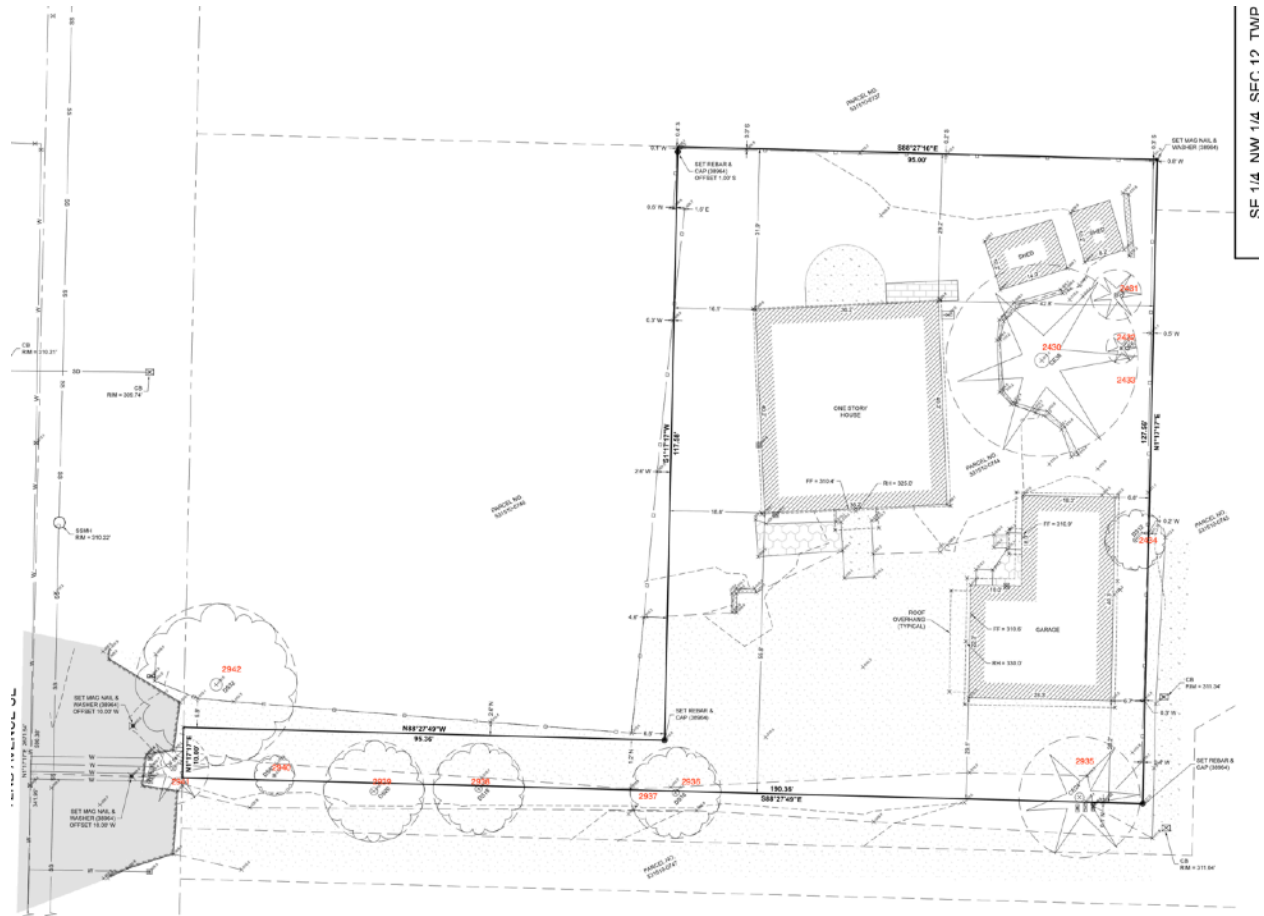
9611 SE 36<sup>th</sup> Street | Mercer Island, WA 98040

[www.mercerisland.gov](http://www.mercerisland.gov) | (206) 275-7605

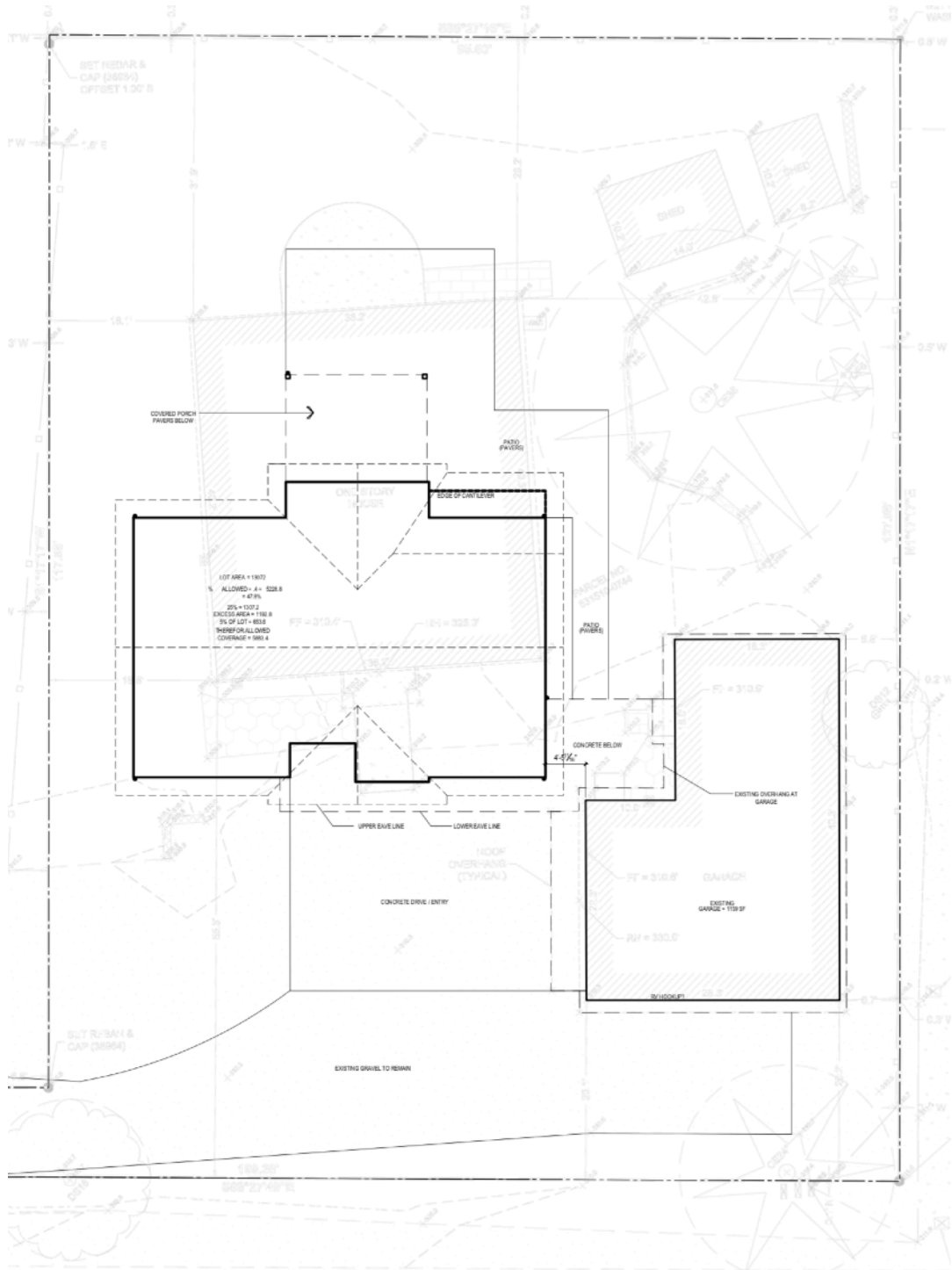
### NATIVE SPECIES

Species	Threshold Diameter	Species	Threshold Diameter
Big Leaf MAPLE ( <i>Acer macrophyllum</i> )	2 ft 6 in	Pacific YEW ( <i>Taxus brevifolia</i> )	6 in
Black HAWTHORN ( <i>Crataegus douglasii</i> )	6 in	Paper BIRCH ( <i>Betula papyrifera</i> )	1 ft 8 in
CASCARA ( <i>Rhamnus purshiana</i> )	8 in	Quaking ASPEN ( <i>Populus tremuloides</i> )	1 ft
Douglas FIR ( <i>Pseudotsuga menziesii</i> )	2 ft 6 in	Shore PINE ( <i>Pinus contorta 'contorta'</i> )	1 ft
Dwarf or Rocky Mountain MAPLE ( <i>Acer glabrum</i> var. <i>Douglasii</i> )	6 in	Sitka SPRUCE ( <i>Picea sitchensis</i> )	6 in
Grand FIR ( <i>Abies grandis</i> )	2 ft	Vine MAPLE ( <i>Acer circinatum</i> )	8 in
Lodgepole PINE ( <i>Pinus contorta</i> )	6 in	Western HEMLOCK ( <i>Tsuga heterophylla</i> )	2 ft
MADRONA ( <i>Arbutus menziesii</i> )	6 in	Western Red CEDAR ( <i>Thuja plicata</i> )	2 ft 6 in
Oregon ASH ( <i>Fraxinus latifolia</i> )	2 ft	Western SERVICEBERRY ( <i>Amelanchier alnifolia</i> )	6 in
Oregon White or Garry OAK ( <i>Quercus garryana</i> )	6 in	Western White PINE ( <i>Pinus monticola</i> )	2 ft
Pacific CRABAPPLE ( <i>Malus fusca</i> )	1 ft	WILLOW (All native species) — <i>Salix</i> sp. ( <i>Geyeriana</i> var <i>meleina</i> , <i>eriocephala</i> ssp. <i>mackenzieana</i> , <i>Hookeriana</i> , <i>Piperi</i> , <i>Scouleriana</i> , <i>sitchensis</i> )	8 in
Pacific DOGWOOD — <i>Cornus nuttallii</i>	6 in		

# Layout of the Trees



# Map of the Proposed Improvements



**Photos of the Site**



**Looking north at 2430**





**Looking east at 2430**



**Looking east at 2431 and 2432**



**Looking NE at 2431, 2432, and 2433**



**Looking south at 2434**



**Looking north at 2434**



**2435 is buried in the hedge**



**Looking SW at 2436 and 2437 (distinct trees)**



2438





2439



2440



**Looking SW at 2441**



**Looking NE at 2442**



**Looking west at 2442**

## **Assumptions and Limiting Conditions**

Any legal description provided to the consultant/appraiser is assumed to be correct. Any titles and ownership to any property are assumed to be good and marketable. No responsibility is assumed for matters of legal character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.

It is assumed that any property is not in violation of any applicable codes, ordinances, statutes, or other government regulations.

Care has been taken to obtain all information from reliable sources. All data has been verified so far as possible, however, the consultant/appraiser can neither guarantee nor be responsible for accuracy of information provided by others.

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