



Arborist Report

September 6th, 2021

Prepared for:

Kumar Residence
4034 85th Ave SE
Mercer Island, Wa

Prepared by:

Seattle Tree Consulting
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Discussion

Arborist report for the Kumar Residence. 4034 85th Ave. SE. Mercer Island Washington. September 1, 2021. 1 PM. Thank you for having us out to assess the condition of the trees on the site. The client informed us prior to the site visit that they need an arborist report that details the condition of the existing significant trees at this site in order to present to the city of Mercer Island. There are some proposed developments to this site most of which involve replacing the existing home with a new primary structure at this address. It is our understanding that only one significant tree system at this site needs to be removed to facilitate the construction process.

There are six significant tree systems at this site as well as several significant tree systems on the neighboring lots. Most of these trees will not be affected by the proposed construction process.

The eastern portion of this property has a lot of impervious surfaces that were put down for the sake of developing a sports court. There is an Elm tree in the northeast corner of the property, adjacent to the sport court, and there is also a Deodar Cedar in the southeast corner of the lot. Just over the property line in the southeast corner of the lot are two more large Deodar Cedars in the South neighbor's property. I did not have access to this lot to measure these trees but both of them have an estimated diameter at standard height of 30 inches. On the east neighbor's lot, also close to the southeast corner of the Kumar residence, is a large Douglas fir system with an approximate diameter at standard height reading of 40 inches. The other significant tree system that is on one of the neighbor's properties that overlaps my client's address is a Magnolia tree that is coming over from the north neighbor's property. This is a Saucer Magnolia that is in nice condition and is just to the northwest of the basketball hoop. None of the trees on the eastern portion of this lot or any of the trees on the adjacent lots will be adversely affected by the proposed developments to this site. Demolition of concrete that occurs within the root zones of the trees needs to be done with hand tools and tree protection fencing should be installed as soon as the debris is clear.

There are four tree systems in the front yard at this site.

One of the trees that is scheduled to be removed to facilitate the construction process is a three stem European White Birch. The stems have diameter at standard height readings of 7 inches, 9 inches, and 12.5 inches. There is quite a bit of dead material in the upper canopy of this tree and it is apparent the tree is struggling with an infestation of the Bronze Birch Borer. This tree is already in a stressed condition and is not likely to endure significant disturbances to its root zone. Removal of this tree is a good idea as it is close to the existing structure, overlapping walkways, and already presenting hazards because of the declining nature of the upper canopy.

There is a Deodar Cedar in the northwest corner of the front yard with a diameter at standard height reading of 32 inches. The critical root zone of this tree should be protected during the construction process. Instructions for how to protect trees during construction are included at the bottom of this report. This Deodar Cedar does have quite a few stems and some compression

between them. That being said, the tree did not appear to be in need of pruning at the time of the site visit, with the exception of providing proper clearances for the adjacent utility pole.

In the southwest corner of the lot there are two exotic trees and that are worth putting on the inventory. One is a three stem Japanese Maple with diameter at standard height readings of 5 inches, 7 inches, and 4.5 inches. This tree is in fine condition but too close to the proposed driveway to retain. Just to the west of the maple is an Eastern Dogwood with two stems that measure 7.5 inches and 6 inches. This tree is also in fine condition.

The rest of the vegetation on this site is either too small to be considered significant or is comprised of plants that are considered shrubs. There are Dwarf Alberta Spruce, Pfitzer Juniper, Viburnum, Flax, Hollywood Juniper that has been sheared, some Pyramadalis along the northern side of the structure, and also a well-established English Laurel hedge that runs along the north property line. Some of the smaller front yard plants will likely need to be removed to facilitate the construction process. Most of the vegetation at this site appears as though it can be easily preserved.

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 CRZ for utilities is not permitted (tunneling is the preferred method).
- Grade changes in the CRZ 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 monitored.
- The CRZ or critical root zone needs to be protected. The Inner CRZ is 50% of the radius of the CRZ and there should be zero disturbance in this zone. A disturbance of up to 33% of the Outer CRZ is 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 CRZ can be larger than the Drip Line Radius.

Photos of the Site



Tree #3



Tree #4



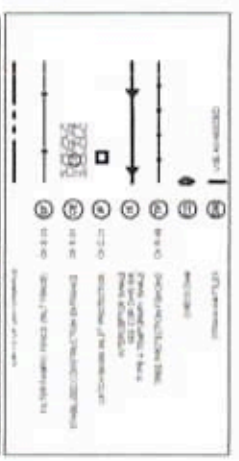
Tree #1



Tree #2



EROSION CONTROL LEGEND



SOIL AMENDMENT REQUIRED
 COMPOST AMENDMENT SOIL REQUIRED IN ALL UNAMENDED AREAS AFTER CONSTRUCTION

DATE: 04/02/2021	PROJECT: KUMAR RESIDENCE	PROJECT NO: 2021-001	DATE: 04/02/2021	DRAWING NO: C1.0
DESIGNED BY: J. J. JONES	PROJECT NO: 2021-001	PROJECT NO: 2021-001	DATE: 04/02/2021	PROJECT: KUMAR RESIDENCE
DRAWN BY: J. J. JONES	PROJECT NO: 2021-001	PROJECT NO: 2021-001	DATE: 04/02/2021	PROJECT: KUMAR RESIDENCE
CHECKED BY: J. J. JONES	PROJECT NO: 2021-001	PROJECT NO: 2021-001	DATE: 04/02/2021	PROJECT: KUMAR RESIDENCE
APPROVED BY: J. J. JONES	PROJECT NO: 2021-001	PROJECT NO: 2021-001	DATE: 04/02/2021	PROJECT: KUMAR RESIDENCE
CIVIL ENGINEERING ESSENTIAL ENGINEERING 1000000000000000 1000000000000000				
TESC PLAN TREE RETENTION PLAN KUMAR RESIDENCE 424 85th AVENUE SE, MERCER ISLAND, WA 98040				

Kumar Residence-4034 85th Ave SE

Tree Number	Common Name	Latin Name	Diameter at Standard Height in Inches (obtained with fabric D-Tape). Multi-stemmed trees are calculated by taking the square root of the sum of the squares of the individual DSH Measurements.	Critical Root Zone Radius (obtained by looking DSH measurements versus drip line radius and access to soil volume)	Condition Ratings 1-Natural structure with good proportions, expected amounts of vigor and deadwood, sound attachments, pedestal in good condition, and adequate root zone 2-Acceptable overall structure but in need of minor pruning or cabling to enhance health and safety threshold 3-Declining specimen in need of serious corrective work and support or a potential candidate for removal 4-Tree is at a critical point and must be reduced to a safe habitat snag or removed	Remove/Retain	Over 24" DSH
1	European White Birch	Betula pendula	17	17	3	Remove	No
2	Deodar Cedar	Cedrus deodara	32	32	1	Retain	Yes
3	Japanese Maple	Acer palmatum	10	10	1	Remove	No
4	Eastern Dogwood	Cornus Florida	10	10	1	Retain	No
5	Siberian Elm	Ulmus pumila	12.5	12.5	2	Retain	No
6	Deodar Cedar	Cedrus deodara	19	19	1	Retain	No

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.

The consultant/appraiser shall not be required to give testimony or attend court by reason of this report unless subsequent contractual arrangements are made, including payments of additional fees for such services as described in the fee schedule and contract engagement.

Loss or alteration of any of this report invalidates the entire report.

Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any person other than to whom it is addressed, without prior written consent of the consultant/appraiser.

Neither all nor any part of the content in this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media, without the prior expressed written consent of the consultant/appraiser--particularly as to value conclusions, identity of the consultant/appraiser, or any reference to any professional society or institute or to any initialed designation conferred upon the consultant/appraiser as stated in his qualification.