



April 27, 2023

Kati Eitzman
 Sturman Architects
 9-103rd Ave NE #203
 Bellevue, WA 98004

Kati@sturmanarchitects.com

Re: Tree 1005:2212-079 5214 Forest Ave SE

Kati:

At your request I have reviewed the revised Lot 2 site plan and the proposed grading and retention wall within the defined root zone of tree No. 1005 on Lot 1 of the Forest Ave project. The revised Tree Plan attached shows the excavation impacts and proposed wall location. The proposal calls for excavation within about 13-feet of the face of the tree, severing about 23% of the root zone on the north side.

The subject tree is in good condition with a 60-percent live green crown.

The pertinent tree data is:

Tree #	Species	DBH (in)	Root Zone (radius)		Distance tree face to:	Impacted Root Zone (%)*	Comment	Impact
			Outer (ft)	Inner (ft)	Excavation (ft)			
1005	Douglas-fir	41.2	24	12	12'-11"	22.7	Excavation	Moderate

Typical Best Management Practices (Methany and Clark, 1998) suggest a root protection zone of about 31-feet for this tree ($.75 \times 41' = 30.75'$). However, this tree is already perched on the north and west sides at about the dripline with no visible roots at the dripline or former excavation limits. Best Management Practices, based on my experience indicates that encroachment that preserves at least 30-percent of the root zone is acceptable provided the tree has no other conditions that might render it susceptible to failure.

In my opinion the tree could withstand the proposed encroachment with the construction of the retaining wall understanding that no other impacts to the tree will occur with the development of lot one. And of course, there is no guarantee that any tree in any condition or circumstance will survive.

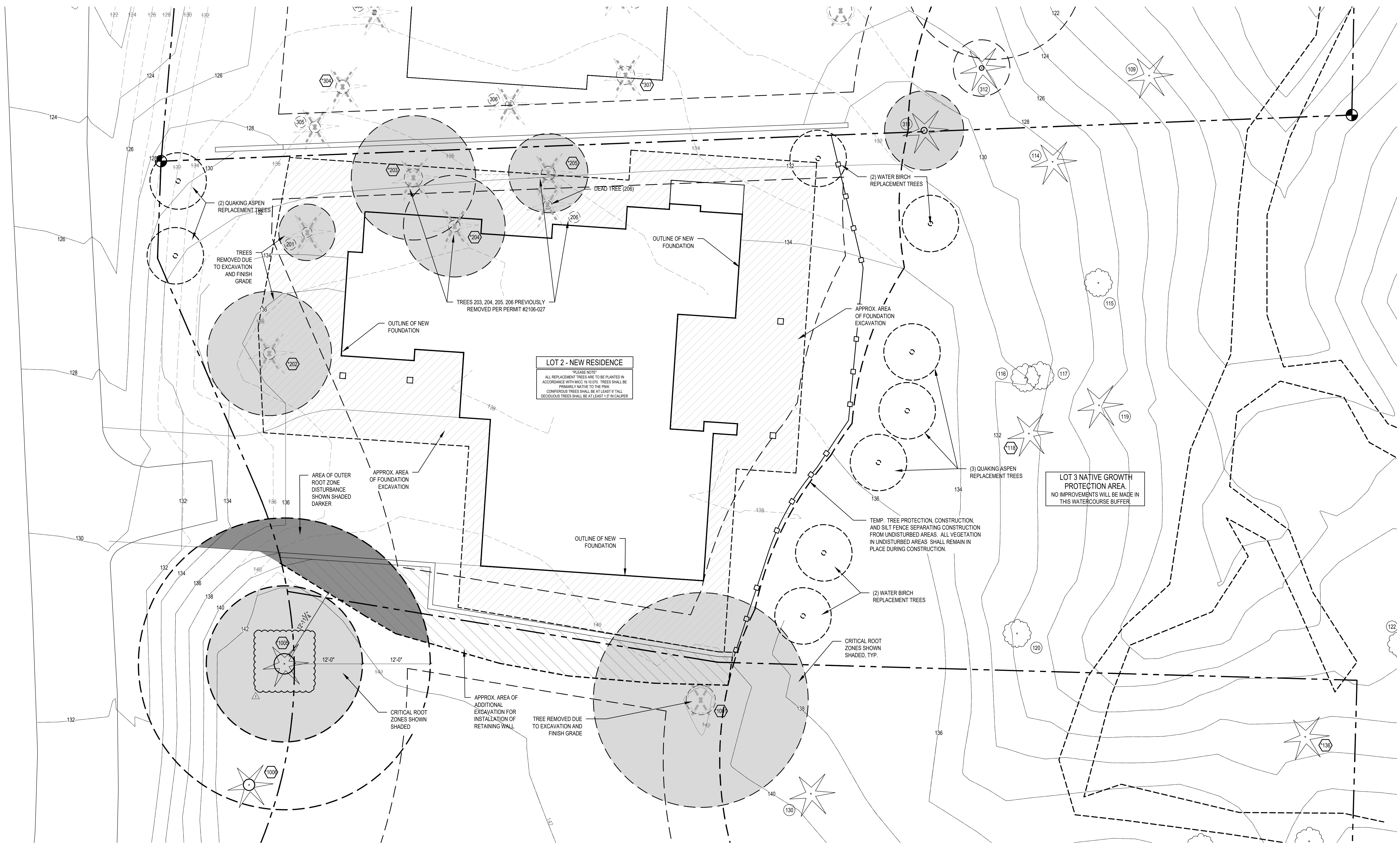
Best Regards,



Tom Hanson
CA 23136
PN0426A
Tree Risk Assessment Qualified

Encl: Tree Plan

1005	Douglas-fir	41.2	X		24	12	12'-11"		22.7	Lot 2 Excavation	Moderate
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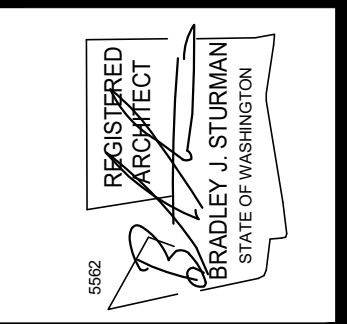
3 LOT 2 TREE PLAN
SCALE: 1/8" = 1'-0"



REPLACEMENT TREES:

WATER BIRCH = 3
QUAKING ASPEN = 6
TOTAL REPLACEMENT TREES = 9

PLEASE NOTE
FOR THE DEVELOPMENT OF PARCEL 1410300059 ("LOT 2"), ANY TREES REMOVED FROM ADJOINING PARCEL 1410300057 ("LOT 1") WILL NOT BE INCLUDED IN ANY TREE DENSITY CALCULATIONS FOR "LOT 2." ALL REQUIRED REPLACEMENT TREES FOR TREES REMOVED FROM "LOT 1" WILL BE NOT BE INCLUDED WITH REQUIRED REPLACEMENT TREES FOR "LOT 2." ALL "LOT 1" REPLACEMENT TREES WILL BE SHOWN ON THE PLAN SET FOR "LOT 1."



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FOREST CREEK ESTATES LOT 2 PERMIT SET
5214 FOREST AVE S.E.
MERCER ISLAND, WA 98040

LOT 2 REPLACEMENT TREE PLAN

REVISIONS:	
DRAWN BY:	KE
CHECKED BY:	BJS
SHEET	

A1.2