

August 30, 2022

City of Mercer Island
9611 SE 36th St
Mercer Island, WA 98040-3732

Re: #CAO21-006 – 7345 SE 38th Street – Building Permit Intake

Below are our responses relating to questions that came up from our Critical Area Review 2.

1. *Please have the arborist discuss the tree impacts of the project and describe how the code requirements of MICC 19.10.080(B)(1) and (2) are met. This process should take place for Exceptional Trees 23, B, D, and E. A full description for any encroachment into these trees' limits of allowable disturbance is required. Please be sure to provide information about how the excavation for footings will be performed and how the concrete for the site access will be poured without impacting the trees.*

Exceptional Tree 23:

- *Arborist Bob Layton addresses the tree impacts, code requirements and encroachments in his attached report.*
- **Brief Description:** Based on feedback from John Kenney and team discussions between the owner Paul Bosveld, Architect Wittman Estes, Structural Engineer Joshua Welch and Arborist Bob Layton, we decided to remove the two closest footings that had been 4 feet from the face of Tree 23. The closest footing is now 8'-6" feet from the face of the tree, and is not expected to be near roots based on air spading done in the area. The chain link tree protection fencing will now be at about 8' from the face of the tree, instead of 4'.
- **Construction Plan:** Heavy equipment shall be limited to only those areas that are outside of the fenced protection areas and defined limit-of-disturbance (LOD). Exposed LOD areas outside of the fenced protection area will be protected by covering the ground surface with a protective covering of 6 to 8-inches of arborist wood chip mulch. Foundation and footing concrete will be poured via a chute extending from a truck parked within the limits of the new proposed driveway. The majority of the excavated soil is expected to be moved off-site due to a lack of storage space.
 - We will have an Arborist on-site during excavation within the dripline
 - The two footing pads within the limit-of-disturbance boundaries will be hand-excavated only.
 - For the house foundation (which lies outside the LOD of Tree 23), excavation will be done with a crawler excavator. Excavation in the area south of Tree 23 will be done towards the dripline of Tree 23. For over-excavation (~2 feet from the face of the foundation), and the slope requirement of 1V:1H above 4 feet of excavation depth, a small amount of entry in the dripline may be expected in this area. Based on an air excavation trench made at this location, only one 2" root was found which will be cut as instructed by the Arborist.
 - For the utility trench, which will pass within of the LOD of Tree 23, an air spade will be used. Routing of the utilities will be adjusted to avoid or go below roots if any roots >2" in diameter are found at the depth of the utilities.

Large Trees B, C & D:

- *Arborist Bob Layton addresses the tree impacts, code requirements and encroachments in his attached report.*

- **Brief Description:** Based on feedback from John Kenney and team discussions between the owner Paul Bosveld, Architect Wittman Estes, Structural Engineer Joshua Welch and Arborist Bob Layton, we decided to remove the closest footing that had been about 8' from the face of Tree C. The closest footing is now about 10' from the face of the tree, and not expected to be near roots based on air spading done in the area. The chain link tree protection fencing will now be at about 8' from the face of the tree.
- **Construction Plan:** Heavy equipment shall be limited to only those areas that are outside of the fenced protection areas and defined limit-of-disturbance (LOD). Exposed LOD areas outside of the fenced protection area will be protected by covering the ground surface with a protective covering of a 6 to 8-inch layer of arborist wood chip mulch. Foundation and footing concrete will be poured via a chute extending from a truck parked within the limits of the new proposed driveway.
 - We will have an Arborist on-site during excavation within the dripline
 - The carport footing at the edge of the limit-of-disturbance boundaries will be excavated towards the dripline of Trees B, C and D. Although not expected based on the air spading done and the revisions described above, any roots under 2" found will be cut as instructed by the Arborist.

Exceptional Tree E:

- *Arborist Bob Layton addresses the tree impacts, code requirements and encroachments in his attached report.*
- **Brief Description:** The closest foundation is +/-16 feet from the face of the tree, and is at the edge of the limit-of-disturbance. With over-excavation of +/-2 feet we may slightly enter the limit of disturbance.
- **Construction Plan:** No heavy equipment will be used within the limit-of-disturbance of Tree E.
 - We will have an Arborist on-site during any excavation within the dripline
 - For the house foundation (which lies at the edge of the LOD of Tree E), excavation will be done with a crawler excavator. Excavation in the area west of Tree E will be done towards the dripline of Tree E. We will minimize over-excavation near Tree E, which should not exceed 2 feet from the face of the foundation (so +/- 13 feet from the face of Tree E), a small amount of entry in the dripline may be expected in this area. Any roots under 2" found will be cut as instructed by the Arborist.

Large Tree 34:

- *Arborist Bob Layton addresses the tree impacts, code requirements and encroachment in his attached report.*
- **Brief Description:** There is a single deck footing located about 8' from the face of Tree 34.
- **Construction Plan:** No heavy equipment will be used within the limit-of-disturbance of Tree 34. We will have an Arborist on-site during excavation within the driplines:
 - The footing pad within the limit-of-disturbance boundaries will be hand-excavated. Any roots under 2" found will be cut as instructed by the Arborist.

Utility Trenching (storm drain near Exceptional Tree 13 and Large Tree 3; sewer near Exceptional Tree 15):

- *Arborist Bob Layton addresses the tree impacts, code requirements and encroachment in his attached report.*
- *Revisions to the routing of the Storm Drain and Sewer to increase distance from trees are shown on the attached Civil Engineering drawings from G2 Civil.*

- **Brief Description:** The storm drain trench has been adjusted to pass as far as possible from Exception Tree 13 (+/-11 feet) and Large Tree 3 (+/-11 feet).
 - **Construction Plan:** No heavy equipment will be used within the limit-of-disturbance of Trees 13, 3 or 15. Only a tracked mini excavator will be used in this area of the property. We will have an Arborist on-site during excavation within the driplines:
 - The trenching will be done with a tracked mini excavator. Hand- or air-excavating will be used for the trench adjacent Tree #13 depending on access, to preserve any roots greater than 2-inches in diameter.
2. *Please have the arborist comment on whether the foundation and storage unit modification shown on sheet A1.0 will have impacts to Trees B and 23.*

Arborist report memo has been updated to comment on the modifications to the foundation and their impacts on Tree 23 and Tree B.

3. *Please call out the following on the tree plan:*
- a.) The distance from the face of the trees to the tree protection*
 - b.) The chain link fence for all saved trees*

Fencing shown on the attached Tree Retention & TESC Plan on Sheet C2.0 has been revised to call out chain link fencing and now includes the distances from the fencing to the face of the trees.

As the homeowners, we are highly motivated to maintain the health of the trees on our land - to meet code requirements - and for the safety of our home and family, along with preserving the natural beauty the many large and exceptional trees bring to our land and project.

Please feel free to reach out with any questions.

Sincerely,

Paul Bosveld
Homeowner
c. 9549186271
paulbosveld@gmail.com