

TO: Mr. Jintao (Addison) Cui

REFERENCE: Arborist Response to City Review Comments RE: SUB22-009 (Cui Preliminary Short Subdivision)

SITE ADDRESS: 4833 90th Ave SE, Mercer Island, WA

DATE: 8/9/2023

PREPARED BY: Katie Hogan, ISA Certified Arborist PN-8078A
ISA Tree Risk Assessment Qualified

This report also addresses the City of Mercer Island's comments dated June 5th, 2023:

1. *A description of how the tree retention requirements set forth in MICC 19.10.060(A)(2) is required.*
 - a. **This project proposes to retain 10 viable trees of the 22 viable trees on the site for a total of 45% tree retention. Of the 12 viable Exceptional trees, 5 are proposed for retention. The additional 7 Exceptional trees are requested for removal due to meeting the criteria in MICC 19.10.060(A)(3). For a complete explanation and discussion of how this project meets the required tree retention standards, see the Arborist Report titled "Arborist-Report_4833-90th-Ave-SE_08.04.2023".**

2. *Trees numbered 6, 14, and 23 were previously cut down without a permit. Please provide the reason for their removal. Please provide the diameter of the trees at 4.5 or a stump diameter. Appraisal for the value of trees 6, 14, and 23 is required even if the appraisal is retroactive with only the stump left. Sheet C-2.1 refers to tree 6 in poor condition, but the arborist report does not. The arborist shall determine the viability of the trees. Please update the plan set and arborist report. Include trees 6, 14, and 23 in the tree inventory worksheet calculation if they were removed in the last five years.*
 - a. **Response: Tree #s 6, 14, and 23 were assessed as being in poor condition and potentially hazardous at the time of removal. A detailed analysis of the remaining tree parts, Google imagery, and real estate photographs was used to reach this conclusion. For detailed information, including an appraisal valuation, see the separate report titled "Tree-Removal-Assessment_4833-90th-Ave-SE_07.17.2023".**

3. *Tree 36 is shown for retention on the plans but is listed as removed in the Tree Inventory. The plans and the Tree Inventory must match. Please confirm that this is the case for all trees.*
 - a. **Response: Tree #36 is proposed for retention and protection. See Tree Retention Plan for more information.**

4. *Replacement is required for any trees that are removed according to the replacement ratios set forth in MICC 19.10.070. It appears that most of the property is an exceptional grove. All exceptional trees and exceptional grove trees (even those below 24 inches) must be replaced with six trees. At least half of the trees need to be native to the Pacific Northwest (please see this Native Plant Guide for more information). The trees need to be at least 10 feet apart from each other, structures, fences, and utilities. A fee in lieu of replanting is available upon request after retention requirements are met. A tree watering plan must also be submitted to ensure the trees survive long-term.*
 - a. **Response: This project proposed to replant 90 trees, 52 of which are native tree species. See Tree Planting Plan for more details.**

5. *Please update the tree report with designation of trees being a part of an exceptional grove according to the following definition: “Tree, grove: A grove means a group of eight or more trees each ten inches or more in diameter that form a continuous canopy. Trees that are part of a grove shall also be considered exceptional trees, unless they also meet the definition of a hazardous tree.”*
 - a. **Response: Due to the declining condition of many of the trees on this lot, there are no contiguous areas of viable trees that meet this definition of a Grove on the site. See pages 6 to 8 of the Arborist Report titled “Arborist-Report_4833-90th-Ave-SE_08.04.2023”.**

6. *Several exceptional trees are on site and must be retained and protected at arborist-provided tree protection zones unless the removal is justified under MICC 19.10.060(A)(3). It appears that most of the property is an exceptional grove. The removal of any exceptional trees must be justified under MICC 19.1.0600(A)(3). Trees 26, 27, 33, 55, and 63 are all exceptional, over 24 inches, and in at least fair condition. These trees should be prioritized for protection unless their removal is justified. This exceptional grove information must be provided by the arborist.*
 - a. **Response: There are 23 total trees that meet the Exceptional size criteria. Of those trees, 12 are in viable condition (i.e., are in good to fair health and/or structural condition). The additional 11 trees were in a state of decline or had substantial structural defects and were determined to be in poor health and/or structural condition. For complete information on each non-viable Exceptional tree, please refer to the Arborist Report titled “Arborist-Report_4833-90th-Ave-SE_08.04.2023” and the included Tree Inventory Table.**
 - b. **As mentioned under comment #5, there are no Exceptional groves on the site due to the declining condition of the trees.**

7. *The following trees are shown as retained but not protected at their dripline: 3, 4, 5, 9, 10, 11, 23, 36, 56, 62, 65, 66, and 69. All retained trees must be protected under MICC 19.10.080 in such a way that they will not be damaged and will remain viable long term. The project arborist must address this code section when encroachment into driplines is proposed. The trees would be considered removed because of root damage. Please update the Tree Submittal Checklist according to MICC*

19.10.090. After the limits of allowable disturbance are determined by the project arborist, these limits must be included on the tree protection plan. Any excavation within the driplines of exceptional trees or other trees required to be retained must be concluded not to damage the trees. This will require advanced root analysis and excavation under arborist supervision. The limits of allowable disturbance must be confirmed to locate the building pads. A preliminary civil plan with access and utilities should be created to confirm trees proposed for retention can indeed be protected.

- a. **Response: 10 viable trees are proposed for retention on the site (#s 3, 4, 5, 36, 40, 41, 43, 49, 50, 69). Please refer to the table below, Tree Retention Plan, and Arborist Report titled “Arborist-Report_4833-90th-Ave-SE_08.04.2023” for complete tree protection specifications and recommendations.**

Proposed Impact / Tree Numbers	Specifications
General – all retained trees	<ol style="list-style-type: none"> 1. Tree Protection Fence: shall be installed as shown on the Tree Protection Plan and consist of 6-foot tall chain-link fencing. Fencing shall be installed on concrete footings and securely attached by clamping the panels together. 2. Tree Protection Signage: plastic laminate signs shall be affixed to the fencing in 15 foot intervals using zip ties or wire stating “Tree Protection Area – Keep Out”. 3. No work, excavation, trenching, material storage, cleaning or dumping shall occur behind the tree fencing. 4. All invasive and other vegetation removed within the driplines of the trees shall be done mainly by hand or using small machinery only. 5. Under no circumstances shall the grade be lowered within the Tree Protection Fencing area.
Tree #s 3, 4, 5 Construction of Lot 3 building foundation Removal of existing vegetation	<ol style="list-style-type: none"> 6. Excavation within the driplines of these 3 trees shall be done using pneumatic excavation or hydro-excavation under supervision by the Project Arborist. 7. The Project Arborist shall document and instruct construction crews to cleanly cut all encountered roots. 8. Roots that are exposed shall be covered in wet burlap until the foundation is poured and the trench is backfilled.
Tree #s 40, 41, 43, 49, 50, 69 Construction of Lot 2 building foundation Removal of existing vegetation	<ol style="list-style-type: none"> 9. Soil protection shall be installed along the south side of the building footprint to protect from heavy machinery (see Tree Protection Plan). Soil protection shall consist of three-quarter inch plywood on top of 5-inches of woodchip mulch. 10. Excavation for the building foundation within the dripline of trees shall be done using a flat-fronted bucket to avoid unnecessary ripping/tearing of roots. 11. Roots encountered that are greater than 2-inches diameter shall be documented and cleanly cut. 12. The stumps of tree #s 47, 51, 52, 54 shall be left in place and not ripped from the ground with heavy machinery.