
October 10, 2023

Mr. Andrew Leon
City of Mercer Island
Community Planning and Development
9611 SE 36th Street
Mercer Island, WA 98040

Subject: Sears Plat; Mercer Island, WA
Comment Response Letter

Dear Andrew:

Thank you for your review of the Preliminary Short Subdivision and SEPA Review applications permit documents and your comments letter dated August 16, 2023. We at Navix Engineering have prepared comment responses below and hope you find the resolution of the review comments acceptable. Please feel free to contact me with any questions or coordination items you have.

Comments

General

1. Please provide a response to the issues raised in the comment letters provided by neighboring property owners (attached to the email accompanying this letter).

Response: Responses were submitted with the previous submittal and have been accepted per email correspondence with Andrew Leon.

2. Please remove all references to a homeowners' association and the WUCIOA from the plan set. Agreements involving these entities will require separate instruments.

Response: All references to homeowner' association and WUCIOA have been removed.

Planning

1. MICC 19.02.020(A) states that the minimum net lot area for the R-9.6 zone is 9,600 square feet. Net lot area is defined in MICC 19.16.010 as the area contained within the established boundaries of a lot, less any area used for public or private vehicular access easements, excluding the portion of the easement used for a driveway access to the encumbered lot.

The plans and provided easement document show that there is an access easement on the east side of Lot 4 that does not serve as a driveway access to Lot 4. The area of this easement must be subtracted from Lot 4's gross lot area to find its net lot area. Based on my measurement of the site plan, the net lot area of Lot 4 is approximately 9,500 square feet. Please revisit the configuration of Lot 4 to ensure that its net lot area meets the 9,600-square-foot minimum established under MICC 19.02.020(A).

Response: Lot 4 is the only lot where lot area needs to be subtracted. A note has been added to the lot information table on the civil sheet C0.0 showing the net lot area calculation. All net lot areas, including lot 4, are in excess of 9,600 sq. ft. The revised net lot area for lot 4 is now 12,647 sq. ft. The gross lot area is called out for all lots, while lot 4 has the gross and net lot areas called out.

2. The lot sizes shown on Sheets C1.0 through C4.0 of the site plan are not consistent with the lot sizes shown on Sheets 1 through 5 of the survey. Please be sure that the lot sizes are consistent across all application materials.

Response: Lot sizes have been checked to ensure they are consistent with all application materials.

3. Please provide lot width circles for all of the lots of the proposed short subdivision to confirm that the proposed lot widths meet the lot width standards for the R-9.6 zone listed in MICC 19.02.020(A).

Response: Lot width circles have been added to the drawings.

4. MICC 19.09.090(A)(1)(a) requires that building pads shall be located to minimize the removal of trees and impacts to trees and vegetation required for retention. Please revise the building pads to account for impacts to trees and vegetation.

Response: Building Pad Limit lines have been added to the civil plan set to show the area where the building pad could be located. See sheet C2.0.

5. MICC 19.09.090(A)(3) states that no cross-section dimension of a building pad shall be less than 20 feet in width. The provided plans show that the western portion of the building pad on Lot 2 is approximately 19 feet in width. Please revise the building pad of Lot 2 such that its cross-section dimension is not less than 20 feet in width at any point.

Response: The site plan has been significantly revised since the last submittal to save additional significant trees and to adjust the lot sizes to reflect that the 30' easement to the east cannot be used to calculate net lot area. The current building pads on all lots are not less than 20' in width at any point.

Trees, John Kenney

1. The arborist report, tree inventory worksheet, and plan set must all match. The tree table on sheet C1.1 of the plans must be updated to indicate which trees are exceptional by grove status.

Response:

The arborist report, tree inventory, and site plan exhibit are all consistent. I have revised the spreadsheet documenting tree health to include an additional column identifying trees that are in groves and which grove by number. Navix has updated the site exhibit to identify trees in three groves.

2. Please provide a separate Tree Inventory and Replacement Submittal Information form as the one that was provided is cut off and illegible due to how it is formatted.

Response: The formatting error in the document has been corrected. However, the Tree Inventory and Replacement Submittal Information Form is also provided as a separate PDF file.

3. Please provide justification for the removal of exceptional trees 8118 and 8183 under MICC 19.10.060(A)(3). Removing the trees for detention infrastructure is not justification under the code.

Response:

Tree #8183 is now being retained.

The applicant hired "Root Causes" to air-evacuate the soil along the north side of the tree where the access roadway and utilities were proposed to be installed to see if the tree could be retained under the original proposal. I observed the excavation and determined that the tree could not be retained with the number of roots that would be lost. The civil engineers revised the roadway access to the south of tree #8183 so that it could be retained.

Tree #8118 is a 40.5" DBH Bigleaf maple originally assessed as being marginally viable. It is proposed to be removed under MICC 19.10.060(A)(3)a Structurally, it has several co-dominant leaders with included bark, and is covered in ivy to 70'. It has several dead scaffolds and large diameter branches that over-hang the powerlines. The tree, in its current condition poses a high risk to the powerlines and roadway access to the site and should be removed. I have not reduced the overall tree health, because currently it is marginally protected by surrounding trees however the removal of surrounding trees and grading will exacerbate wind exposure to a structurally compromised tree.*

Tree # 8261 is a 56.6" DBH Western red cedar also in marginal, declining health. The dripline of the tree has been used as an immediate driveway to the garage, and as a result, the soil is very heavily compacted. Recent toxicology studies have revealed that the soil around the base of the tree is contaminated with arsenic.

*As a species, the western red cedars root system is comprised of very fine, relatively shallow roots. Removal of the compacted, contaminated soil would be unlikely without the use of heavy equipment or invasive (use of water or air) techniques. I consulted with several state environmental agencies to determine if there were any other methods to remove or mitigate the toxin in the soil without removing it. There was not a solution whereby the applicant could air-evacuate the soil (which would put the toxins back into the air), manually removing the soil to replace it, (tree is in declining health and would not survive the root loss), nor for obvious reasons, encapsulating the soil in concrete or treating it chemically; for public safety the removal of the arsenic contaminated soil, requires the removal of the tree. Code exception required to remove a tree with a DBH greater than 24" is found in MICC 19.10.060(A)(3)α**

4. Please provide further analysis on whether tree 8314 can be retained or further justification of why it must be removed.

Response: It is now being retained.

5. Trees 8127, 8233, 8277, 8318, and 8325 are said to be in poor condition. Please provide a risk assessment that speaks to MICC 19.10.060(A)(3) to justify their removal.

Response: The ISA Tree Risk Assessment Form has been condensed into the salient points in the comment section of the spreadsheet for each tree. I have added copies of the forms to the Discussion section of the report on pages 35-44. The PDFs are also included as a separate document.

6. Please provide a preliminary replacement plan to confirm the number of replacement trees that can be planted on site. This plan would also confirm whether fee in lieu would be needed and its amount. If a fee in lieu is required, a bond or assignment of funds would be required at the completion of a site development permit. If exceptional tree removal is justified according to the other tree comments in this letter, 167 replacement trees would be required.

Response: The revised site proposal has enabled an increase in the tree retention number which in turn has reduced the tree mitigation to 112 trees. The preliminary tree replacement plan has not been provided pending notification that proposed site development can be approved. (Per confirmation email between John Kenney and Wes Giesbrecht on October 10th, 2023 @ 11:22.)

7. Please explain how the limits of allowable disturbance for each tree near disturbance were obtained. Please update the plans once the limit of allowable disturbance for each tree is confirmed.

Response: Because these trees have grown in a natural forested site, the roots are confined more specifically to the area immediately around the tree; therefore, I used the dripline as the critical root zone (CRZ) and 50% of the dripline to be the interior critical root zone (iCRZ)- and this became the standard maximum allowed LOD.

* MICC 19.10.060(A)(3): Retention of exceptional trees. Development proposals specified under subsection (a)(1) of this section shall retain exceptional trees with a diameter of 24 inches or more. Exceptional trees with a diameter of 24 inches or more that are retained shall be credited towards compliance with the retention requirements of subsection (A)(2) of this section. Removal of exceptional trees with a diameter of 24 inches or more, shall be limited to the following circumstances:

a. Retention of an exceptional tree(s) with a diameter of 24 inches or more will result in an unavoidable hazardous situation.

Fire, Jeromy Hicks

1. No Parking Fire Lane signs and/or paint curbs must be added to the access road. Please indicate the location of the signs or markings on the plans.

Response: No Parking/Fire Lane markings have been added to the plans. See sheet C2.0.

Civil Engineering, Ruji Ding

1. Please show and call out the private storm drainage and private utility easement on all sheets.

Response: The private storm drainage and private utility easement have been added to and called out on all civil sheets.

Mr. Leon, should you have any questions regarding the comment responses contained herein, please do not hesitate to contact me at 425.458.7900 or at my email address below. Thank you for your review.

Sincerely,

Navix Engineering, Inc.



Garrett Goudy, P.E.
Project Engineer II

Ggoudy@navixeng.com