

July 20th, 2018

Nicole Gaudette, Senior Planner City of Mercer Island Development Services Group – Building and Planning 9611 S.E. 36th St. Mercer Island, WA 98040

RE: 4346 E. Mercer Way, Critical Area Determination (CAO17-003)

Dear Ms. Gaudette,

Please find attached the 3rd revised Critical Area Study and Watercourse and Wetland Buffer Reduction Report for CAO17-003 originally submitted on March 8, 2017, revised on March 24, 2018, and revised on June 8, 2018.

- *March* 24th, 2018 Revision:
 - The applicant addressed all of ESA's comments provided by ESA on June 20th, 2017 with the exception of the detail of the trail which was subsequently addressed in the revised report submitted on June 8, 2018.
- June 8th, 2018 Revision:
 - The applicant addressed all of the City of Mercer Island and ESAs comments from May 15th, 2018, after a meeting with the City on May 17th to clarify each comment. In particular, it was agreed to increase the setback from the north side of the residence to the piped watercourse from three feet to five feet, to allow for any potential future daylighting (not required by code), and to reduce the buffer to zero, which is allowed by City code MICC 19.07.070.B.1.b. The June 8th Revision reflected what was agreed in the meeting.
- July 15th, 2018 Revision:
 - This updated report addresses the Review Comments provided by the City of Mercer Island on July 9, 2018. I have analyzed and provided evidence in the new report that future daylighting is made possible with the increased setback, with an area of more than 20 feet from the property line to the residence. The length of the area in question is very short (18 ft) with limited slope which provides for easy access by any professional and licensed watercourse professional. I have also analyzed the City's code including its intent as well as best available science to support the proposed and agreed setback.



Please see below summary response to each Comment.

ESA/City of MI Comments		Response
1.	The shoreline management requirements are separate from the wetland and stream buffer reduction requirements so the area within 20 feet of the Ordinary High Water Mark should not be included in the wetland and stream buffer calculations consistent with MICC 19.07.110(9)(d)(i). These areas shall be removed from the mitigation ratio calculations for buffer reduction.	Sheet 2 of 5 in the Critical Areas Study submitted on June 8, 2018 lists the mitigation enhancement area and ratio outside of the area 20 feet from the OHWM. The ratio is listed at 31:1, and 5,896 square feet, for the area more than 20 feet from the OHWM. Both information is shown, as the city previously stated the area must be planted, per the SMP. This is to ensure there is no confusion in future permits, such as the building permit. Further, we have updated the sheet to use a different key for the 20' SMP area for better clarification.
2.	Sheet 5 of 5 shall be revised to include a performance standard specifically for the area 20-feet landward of Lake Washington. Native vegetation must meet or exceed 75 percent cover by Year 5 in the shoreline area.	An exhibit has been added that shows 75 percent coverage for the area, 0 to 20 feet from the OHWM. The following language has also been added to Sheet 5 of 5: Native vegetation must meet or exceed 75 percent cover by Year 5 in the shoreline area.
3.	The 5-foot buffer proposed for the piped portion of the stream adjacent to the eastern side of the residence <u>could inhibit</u> future daylighting of the stream due to its narrowness. A minimum <u>10-foot</u> buffer shall be provided.	Best available science referenced by the City concludes that an open watercourse with a narrow buffer <u>may</u> provide beneficial functions over a piped watercourse with no buffer. I understand the City encourages daylighting per the best available science referenced above. I have analyzed the terrain on-site and positively concluded that the <u>20 foot</u> buffer and five foot setback provided <u>will not inhibit</u> future daylighting. I have analyzed the grade and depth of the watercourse as well as the overall size of the area in question. Please see details in the revised Critical Area Study report. (Today, there is no code requirement that require the ability to daylight a piped watercourse.)
4.	Please provide additional detailed information for the proposed fish blockage removal. Provide the total area of excavation and grading within the stream, the proposed construction sequencing, the engineering design versus conceptual plan, and a statement that the remaining rocks in the stream channel will not block fish passage or removal of the remaining rocks.	 a. The total area of excavation and grading of the watercourse has been added to Sheet 4 of 5. b. The details of construction sequencing has been added to Sheet 4 of 5. c. More detailed design has been added to sheet 4 of 5. d. The following statement has been added to Sheet 4 of 5:



		The remaining rocks in the stream channel will not block fish passage, nor will removal of the remaining rocks.
5.	Given the location of the stream mouth at the transition from the hard stabilization structure and beach, please use soft shoreline stabilization for the shoreline structural stabilization proposed in Details 4.2a and 4.2b of the Buffer Reduction Mitigation Plan.	See above response 4c) where cedar logs have been chosen in the detailed design as soft shoreline stabilization.

Sincerely,

Jeffery S. Jones, Professional Wetland Scientist