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## memorandum

date December 6, 2018

to Evan Maxim, Interim Development Service Director

from Scott Olmsted, ESA

subject Review of 5637 Mercer Way – Response to Public Comment

Environmental Science Associates (ESA) has prepared this memorandum on behalf of the City of Mercer Island (City). The purpose of this memo is to respond to public comment on the proposed project located at 5637 Mercer Way and the potential need for further site investigation and wetland impact assessment.

On November 15, 2018, Dave Anderson submitted email comments on the proposed development to City staff; below ESA responds to two of the comments as they relate to critical areas regulated by Mercer Island City Code (MCCC) Chapter 19.07 – *Environment*.

Mr. Anderson noted that the proposed grade of the garage floor, as shown on Sheet 1, 2018 Site Plan Wetland & Buffer Disturbance (The Healy Alliance AZ, 2018) is located below existing grade at the southwest corner of the house. The garage floor is located at 179.5 feet, the grade at the southwest house corner is 185 feet, and the grade at the backside of what appears to be a retaining wall is 193 feet. Although not shown on the plans, it is likely that a drainage system will need to be installed on the backside of retaining wall and adjacent to the building foundation to alleviate static pressure on these structures by transporting groundwater down-gradient. The retaining wall drainage system would likely impact wetland hydrology up-gradient of the wall by acting as a groundwater "sink." Similarly, the foundation drainage system would impact wetland hydrology adjacent to the of the building (i.e., southwest). The extent and degree of impact to wetland hydrology is unknown at this time and ESA is not qualified to make this determination. ESA recommends that design plans detail the proposed drainage system for the project and the City consult a hydrogeomorphologist to determine likely impacts to wetland area.

Mr. Anderson also discussed a stormwater detention tank that was depicted on previous plan sheets immediately east of the building, underneath the proposed driveway. The applicant did provide preliminary stormwater calculations for this tank; however, Sheet 1, 2018 Site Plan Wetland & Buffer Disturbance (The Healy Alliance AZ, 2018) does not show a stormwater tank. Mr. Anderson points out that the tank's proximity to the wetland boundary and required excavation to install may have a negative impact on wetland hydrology. The area around the tank may need to be backfilled with coarse material and drainage may need to be provided to address buoyancy of the tank. Should continuous drainage of the area surrounding the tank be required, this project element may act as a "sink" similar to the drainage system discussed above. ESA recommends the applicant provide additional details on the stromwater detention tank to address the potential for indirect impacts to the adjacent wetland.

If you have any questions, please call me at (206) 789-9658 or via email at solmsted@esassoc.com



## **Reference:**

The Healy Alliance AZ. 2018. MI Treehouse, LLC, 5637 East Mercer Way, Mercer Island – 2018 Site Plan Wetland & Buffer Disturbance. Site Plan dated August 9, 2018.