



memorandum

date June 24, 2020

to Lauren Anderson, Planner – City of Mercer Island

from Scott Olmsted, Senior Ecologist – Environmental Science Associates

subject 4006 E Mercer Way (Tax Parcel 4131900005) Critical Areas Determination (CAO21-001) Third Party Review

Environmental Science Associates (ESA) has prepared this memorandum on behalf of the City of Mercer Island (City). The purpose of this memo is to verify the accuracy of the critical areas report submitted as part of the development application for the property located at 4006 E Mercer Way (King County Tax Parcel 4131900005). The proposed project would remodel the home interior, build a garage addition, and expand an outdoor patio area. The proposed project requires critical areas review (Mercer Island City Code [MICC] 19.07 – Environment) and compliance with the Mercer Island Shoreline Master Program (MICC 19.13) standards due to the presence of an onsite wetland and the project location within 200 feet of Lake Washington, a shoreline of statewide significance.

At the request of the City, ESA reviewed the following documents:

- Critical Areas Report for *4006 E. Mercer Way – Shoreline Modification* (report), prepared by The Watershed Company and dated June 2021,
- *Mounger Residence Shoreline Mitigation Plan*, prepared by The Watershed Company and dated June 7, 2021, and
- Project Design Plans prepared by Sturman Architects and dated June 2, 2021.

A site visit was conducted on June 16, 2021 by ESA biologist Scott Olmsted.

Report Review

According to the report, a regulated lake-fringe wetland is located at the eastern extents of the parcel, along the shoreline of Lake Washington. The Category III wetland scored three habitat points using Ecology’s Wetland Rating System. City GIS Portal maps a Protect Slope Area on the western parcel extents and the entire parcel is mapped within a landslide area. No other critical areas are identified on the project site.

The proposed project will install 1,292 square feet (SF) of impervious surfaces within the 200-foot shoreline jurisdiction of the lake. To comply with MICC 19.13.050.K.4.i and compensate for the addition of more than

1,000 SF of hardscape, the applicant proposes to enhance 75 percent of the onsite shoreline within 20 feet of the Lake Washington's ordinary high water mark (OHWM), which equates to 1,251 SF and includes 481 SF of wetland and 770 SF of wetland buffer.

To facilitate project construction and avoid impacts to wetland buffers and disturbance within the 10-foot building setback line, the applicant proposes to apply a 60-foot wetland buffer according to MICC 19.07.190.C.1 by implementing applicable minimization measures listed in MICC 19.07.190(D)(3). The 60-foot wetland buffer complies with the shoreline master program, which regulates wetland buffers located within the shoreline jurisdiction (MICC 19.13.010.D.6).

Additional project activities include partial replacement of a non-functioning stormwater system, installation of oil/water separator to collect driveway runoff, and construction of tight-line for roof runoff and driveway runoff. Trenchless pipe installation under the wetland and buffer will avoid impacts to these features during tight-line construction.

Two trees removed as part of the project will be replaced according to MICC 19.10 – Tree Protection and Replacement Plan.

Review and Site Findings

Based upon the site visit, ESA generally agrees with the location of the onsite wetland and the OHWM of the lake as depicted in the report. The topography of the parcel slopes down from west to east and the wetland is topographically constrained to the toe of the slope and by the OHWM of the lake located to the east. The OHWM of the lake is regulated by the Corps of Engineers, who manage lake elevations throughout the year.

The wetland is primarily composed of lawn with a few invasive species located near the OHWM, including yellow flag iris and reed canarygrass. The covered boat dock, boat ramp, concrete access path, and pump facilities that were noted in the report were also observed in the field.

Conclusion and Recommendations

Based on our review of the report, mitigation plans, and our observations made during the June 16, 2021 site visit, ESA believes the proposed project complies with MICC 19.07 and MICC 19.13 and that enhancement of the onsite wetland/shoreline setback will result in no-net-loss of functions. ESA agrees with the Category III wetland rating and application of a 60-foot buffer with implementation of measures that minimize disturbance to critical areas. The mitigation plant palette, plant quantity, installation specifications, and monitoring proposal are appropriate for the site and the bond quantity estimate appears sufficient.

ESA noted a few errors in the critical areas report that should be corrected for completeness, but we do not need to review the report at a later time due to the minor nature of the errors.

- Section 6 discusses the removal of “100 feet” of concrete path within the wetland buffer, which should be modified to 100 **square** feet for clarity.
- Table 2 should account for the removal of concrete path within the 50-foot shoreline setback.

- Section 8 indicates that the 171 SF boat ramp will be removed; however, other text and figures indicate the boat ramp is 124 SF.