



Memorandum

date July 28, 2023

to Molly McGuire, City of Mercer Island

from Maggie Bradshaw, ESA

subject Luther Burbank Park – Luther Burbank Shoreline Project; SHL22-023, SHL22-024, SHI22-025, SEP22-019, CAO22-018

Environmental Science Associates (ESA) has prepared this memorandum on behalf of the City of Mercer Island (City). The purpose of this memo is to provide peer review of the updated application materials for the City's proposed Luther Burbank Park waterfront improvements project, located on the shoreline of Lake Washington at 2048 84th Avenue SE on Mercer Island. The proposed project includes multiple improvements to the waterfront plaza structures in the central area of the park, shoreline and beach enhancements, and in-water work to repair existing docks and construct an overwater platform. The 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 project location within 200 feet of Lake Washington, a shoreline of statewide significance. Additionally, this project has submitted variance permits (subject to Washington Administrative Code [WAC] 173-27-170) and requires compliance with Shoreline Conditional Use Permit Criteria (WAC 173-27-170). Geologically hazardous critical areas addressed in the following documents were not included as part of the review.

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

- *Luther Burbank Waterfront Improvements Project (SHL22-023, SHL22-024, SHL22-025, CAO22-018, SEP22-019) Request for Information Response Letter* (Prepared by the City of Mercer Island Community Planning and Development and Dated April 17, 2023, hereinafter referred to as the Response Letter)
- *Luther Burbank Waterfront Improvements Project Description* (Prepared by Anchor QEA and dated April 2023, hereinafter referred to as the Project Description)
- *Luther Burbank Waterfront Improvements Critical Areas Study* (Prepared by Anchor QEA and dated April 2023 hereinafter referred to as the Critical Areas Study [CAS])
- *Shoreline Substantial Development Permit, Shoreline Conditional Use Permit, and Shoreline Variance Request for the Luther Burbank Park Waterfront Improvements Project* letter (Prepared by Anchor QEA and dated April 13, 2023, hereinafter referred to as the Shoreline Variance Letter)
- *Luther Burbank Park Waterfront Improvements Project Luther Burbank Park Comprehensive Waterfront Improvements 60% project design sheets* (Prepared by KPFF and dated April 14, 2023)

- Biological Evaluation for Informal Consultation with the U.S. Army Corps of Engineers document (Dated October 2022, hereinafter referred to as Biological Evaluation)
- Washington State Joint Aquatic Resource Permit Application (JARPA) materials
- State Environmental Policy Act (SEPA) checklist (dated October 24, 2022)

ESA reviewed previous versions of the above documents and conducted a site visit on December 7, 2022. Findings and recommendations were presented to the City in a technical memorandum titled *Luther Burbank Park – Luther Burbank Park Shoreline Project; SHL22-023, SHL22-024, SHL22-025, SEP22-019, CAO22-018* (dated January 19, 2023, hereinafter referred to as the January 2023 memo).

Report Review of Luther Burbank Waterfront Improvements Project Description and Luther Burbank Waterfront Improvements Critical Areas Study (Prepared by Anchor QEA and dated April 2023)

The CAS was prepared to support the Mercer Island permitting process for the project consistent with the critical areas reporting requirements listed in MICC 19.07.110 and, due to the project’s location within shoreline jurisdiction, MICC 19.07.010 through MICC 19.07.190, Ordinance 19C-05. Critical areas regulated by the City in MICC 19.07 and addressed by the CAS include wetlands, watercourses, fish and wildlife habitat conservation areas (FWHCAs), and geologically hazardous areas. An assessment of bald eagle presence and habitat was also conducted, as required by MICC 19.07.010.

As recommended in the January 2023 memo, the CAS addresses that vegetation will be replaced at a ratio of less than 1:1 (though there is no prescriptive mitigation ratio given in MICC 19.07 for vegetation removal within a FWHCA), however the beach enhancement will increase the beach area by 204 square feet. The increased beach area and re-planted nearshore area will provide increased and improved habitat opportunities for migrating juvenile salmon. Additionally, public access to the water will be significantly increased.

The CAS now includes a Tree Report, prepared by City of Mercer Island Public Works Department, and attached as Appendix F. The tree report provides a description of each tree proposed to be removed as well as the species and quantity of trees that will replace them. Twelve trees are planned to be removed and replaced with 20 trees, which is fewer than the 28 trees that would be required to be replaced based on the diameters listed in MICC 19.10.070 Table A. However, per MICC 19.10.070.B.4, the city arborist may reduce the number of replacement trees if the removed tree is hazardous, undesired, or short-lived and is replaced with healthy new trees; or if there is supplemental restoration of critical tree areas with other native vegetation. The table included in the Tree Report details the reasons for reducing required replacement trees. The Tree Report also includes details on the timing and minimum size requirement for replacement trees, as required by MICC 19.10.070.B. In the January 2023 memo ESA recommended replacing one nonnative oak (*Quercus palustris*) with native vegetation. However, as described in the Response Letter, the oak was chosen to fit design constraints, especially being long lived-and to tolerate flooded conditions. The oak was chosen to provide long-term habitat potential and provide shade to nearshore habitat. There is no requirement that this tree be a native species, and the explanation provided is adequate. ESA agrees that the species and quantity of replacement trees is adequate for the project.

Report Review of Variance Request for the Luther Burbank Park Waterfront Improvements Project letter (Prepared by Anchor QEA and dated October 24, 2022, hereinafter referred to as the Shoreline Variance Letter) and included permit documents.

The Shoreline Variance Letter was prepared to provide information about the project and request a Shoreline Substantial Development Permit, Shoreline Conditional Use Permit, and Shoreline Variance from the City under MICC Chapter 19.13 – Shoreline Master Program. The City Development Application form and JARPA were not attached to the Shoreline Letter as it was previously submitted. However, the previously submitted JARPA was reviewed for this memo to confirm project consistency.

As recommended in the January 2023 memo, the Shoreline Letter addresses each point of MICC 19.13.050(B)(4) for new structural stabilization measures. However, the letter does not discuss compliance with each point of MICC 19.13.050(B)(2) – *New structures for existing primary structures*, MICC 19.13.050(B)(5) – *New structural stabilization measures to protect projects for the restoration of ecological function*, or of MICC 19.13.050(B)(6), and MICC 19.13.050(B)(7). The Shoreline Letter indicates that the purpose of the sheet pile wall, and rock revetment at the north beach expansion area, and the rock terraces along the south on-grade trail is to address scour from waves rather than upland conditions (as described by the *Luther Burbank Marina Design: Wave and Wake Modeling* report, Shoreline Letter Attachment 1), and that the steep slope limits nonstructural measures such as planting native vegetation to address the erosion. The Shoreline letter also indicates that these features will protect the proposed American Disabilities Act (ADA)-accessible public access trail and restoration areas. No filling is proposed below the OHWM. Where possible, the shoreline will be stabilized with large woody debris to provide improved fish habitat opportunities. The justification for these structural stabilization measures is consistent with WAC 173-27-160 – *Review criteria for conditional use permits*.

The Shoreline Letter describes the request for a variance for the light transmittance conditions of the dock per MICC 19.13.050(H)(5) which requires 40% light transmittance over 100% of the surface area. A portion of the dock would not meet this requirement due to the structural components that allow the wave attenuator to work and adequately protect the shoreline from erosion. The recommendation from the January 2023 memo, that the applicant confirm that the justification to reduce light transmittance in the grated surface of the central wave attenuator is due to the nature of the site rather than from the design or materials of the proposed dock, was not addressed.

The project is also requesting variance permits for the height and width of the dock in order to meet ADA-accessibility for public access and allow for proper function of the wave attenuator. However, the need for these variances based on the features of the site is not addressed.

The Shoreline Letter includes an additional variance request from MICC 19.13.050(H)(7) to allow for piles spaced less than 18 feet for a portion of the dock where it turns at an angle, and to allow for 18-inch diameter steel piles, which exceed the maximum diameter of 12 inches. The Shoreline Letter indicates that closer spacing of the piles is necessary due to the constraints of the design of the dock that is being replaced, and that 18-inch diameter piles are necessary due to geological conditions at the site. As described in the CAS, the project involves a net reduction of piles from the existing dock configuration.

Conclusion and Recommendations

The CAS and Project Description have addressed comments and recommendations included in the January 2023 memo. However, to be in compliance with MICC 19.13.050- *Shoreland development standards* and WAC 173-

27-170 – *Review criteria for variance permits*, ESA recommends the following be addressed in an updated Shoreline Variance Letter(s).

- The analysis of the compliance of the shoreline stabilization measures should discuss how the proposed rock revetment and sheet pile wall is either consistent with or not applicable to each of the points listed in MICC 19.13.050(B)(2) and MICC 19.13.050(B)(4) through MICC 19.13.050(7). While some of these requirements are repeated, for example in MICC 19.13.050(B)(4) and MICC 19.13.050(B)(5), consistency with each point should be listed separately for the clarity of the application.
- The submitted Shoreline Variance Permit should be revised to include only one of the requested variances (for example, MICC 19.13.050(H)(4) Dock width requirements). Additional separate Shoreline Variance Permits, each with their own analysis and demonstration of compliance with WAC 173-27-170(1) and (2) – *Review criteria for variance permits*, should be submitted for each requested variance. The justification for each variance should not be related to any other project element, but rather should be specifically linked to the demonstration of hardship related to the property that “is a result of unique conditions such as irregular lot shape, size, or natural features and the application of the master program, and not, for example, from deed restrictions or the applicant’s own actions”.
 - In the request for variance for the width of the dock, the hardship faced should be tied more closely to the specific limitations of the site, rather than to the purpose of the project.
 - In the request for variance for the light transmittance condition of the dock, the hardship faced should be tied to the specific limitations of the site, rather than to the design or materials of the proposed dock. A specific alternative design should be provided as a part of this variance request.
 - In the request for variance for the height of the dock, the applicant may describe how the topography of the shoreline limits access to the dock, or other applicable reasoning, as the hardship faced based on the limitations of the site.
 - In the request for variance for pile spacing and pile diameter, the hardship faced should be more closely tied to the geological conditions at the site, rather than to the design of the dock. A table of pile sizes and distances would be helpful to clarify the exact number and spacing of piles with the requested variance.
- While the Wave Report was reviewed as a part of the Critical Areas Report submittal, a more thorough geotechnical review may be required.

ESA agrees that once the project meets the conditions outlined above, the project will comply with MICC 19.13.040 for allowed activities, including public parks and open space, and restoration of ecological functions including shoreline habitat and natural systems enhancement.

If you have any questions, please contact Maggie Bradshaw at (310) 938-8658 or MBradshaw@esassoc.com

Sincerely,
ESA

Maggie Bradshaw

Biologist