October 5, 2022

Molly McGuire
Assistant Planner
Community Planning & Development
City of Mercer Island
9611 SE 36th Street
Mercer Island, WA 98040
Molly.McGuire@mercerisland.gov

## RE: Comment Letter for Proposed Demolition and Rebuild of 6950 SE Maker Street Permit No. 2207-019

Dear Ms. McGuire,

Please accept these comments on the permit application for the proposed demolition and rebuild of the home located at 6950 SE Maker Street (the "Strand Property") pending under Permit No. 2207-019 (the "Permit"). I own the home immediately to the west of the Strand Property at 7030 SE Maker Street. As a long-time resident, I am familiar with the geologic conditions and critical areas on and surrounding my property.

I reviewed the permit application materials including the "Geotechnical Engineering Study and Critical Area Study" ("Geotech Study") dated March 21, 2022. I am deeply concerned about disturbances from excavation and construction to the rockery wall that lies immediately between my property and the Strand property.

I respectfully request that the City review the geotechnical conclusions closely, and ensure the construction plans comply with the geotechnical recommendations. These recommendations are necessary to avoid adverse impacts to the stability of the slope and the neighboring properties, including my own. These recommendations do not appear to have been incorporated into the project plans.

The majority of the Strand Property is mapped to lie within a seismic hazard area, and the entire property is mapped within both a potential landslide hazard area and an erosion hazard area. The tiered rockery along the western edge of the Strand property (which straddles my property) is a "steep slope" under the City of Mercer Island Code, and consists of loose fill soils that are unstable. The slope stability analysis included in the Geotech Study found a potential deep-seated slope failure that reaches the western edge of the proposed residence. It has static

<sup>&</sup>lt;sup>1</sup> Geotech Study at page 2.

<sup>&</sup>lt;sup>2</sup> Geotech Study at page 4. The grade drops approximately 14.5 feet over 30 horizontal feet (for an inclination of 49 percent), rising from the toe of the western rockery.

<sup>&</sup>lt;sup>3</sup> Geotech Study at page 4.

and seismic safety factors greater than 1.5 to 1.2, and the rockeries on the west side of the lot are at risk of shifting or failing in the future.<sup>4</sup>

For these reasons, the Geotech Study recommends the following:<sup>5</sup>

- No filling should take place above the existing grade to the west of the new residence in order to avoid decreasing stability of the filled area further;
- No fill or substantial disturbance (including clearing, utility installation, or construction staging) within 20 feet of the existing western rockery;
- No new structures, including patios or decks should be constructed west of the new residence;
- No staging of materials for construction should occur west of the residence footprint;
- The proposed structure should be within the prescriptive minimum 25-foot buffer for shallow seated landslide areas, unless slope issues are mitigated and then the residence should be 20 feet from the western rockery,
- An extensive slope stabilization system is necessary to prevent future movement of the fill and western rockeries;
- No sprinkler system should be installed in the western yard due to potential for leakage and failure.

The Geotech Study states that "detailed plans were not available at the time" of the Geotech Study.<sup>6</sup> And, to date it is unclear from the permit plans whether additional analysis of the detailed project plans took place. For instance, parts of the proposed structure are closer than the 25 foot (and even the 20 foot) recommended buffers, and construction and staging will likely occur within the west side of the project. It is also unclear whether an adequate slope stabilization system will be implemented.

For background, these stability issues are not new. I am attaching a letter from a previous owner of 6950 SE Maker Street dated October 16, 1981. This letter describes a washout of the rockery retaining wall after excavation and rainfall at the property.

I respectfully request the City review these issues closely and ensure any construction or design plans incorporate the Geotech recommendations to protect the safety of neighboring homes.

Sincerely,

Lynn Michael 7030 SE Maker Street Mercer Island

<sup>&</sup>lt;sup>4</sup> Geotech Study at page 4.

<sup>&</sup>lt;sup>5</sup> Geotech Study at pages 4-8.

<sup>&</sup>lt;sup>6</sup> Geotech Study at page 1.