From: Elisabeth Green <lisgreen@gmail.com>
Sent: Wednesday, October 5, 2022 6:19 PM
To: Molly McGuire
Subject: Letter regarding 6950 SE Maker St, Permit 2207-019
Attachments: 6950 SE Maker St Letter Elisabeth Green.pdf

Dear Ms. McGuire,

Please see the attached letter regarding the proposed development at 6950 SE Maker St.

All the best, Elisabeth Green October 5, 2022

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

## Comment Letter for Proposed Redevelopment of 6950 SE Maker Street, Permit 2207-019

Dear Ms. McGuire:

My name is Elisabeth Green. I have worked as a geologist in the environmental field for 15 years, and was asked by my brother, Dan Grove, to provide an analysis of the elevations of the development proposal at 6950 SE Maker Street.

By way of background, I hold a B.S. in Geology from Rice University and a Ph.D. in Earth and Planetary Science from the University of California, Berkeley.

Mr. Grove has done exhaustive research into historical documentation for the topography of the land prior to development in this area, and has uncovered a number of different resources that aid in the determination of the original topography of the land in the vicinity of the proposed development. Many of the tools he has used are widely used in the environmental field to uncover historic topography and/or land use, including aerial photography, topographic maps, and presence or absence of fill material in boreholes. While I cannot comment specifically on whether the proposed development meets (or does not meet) the requirements set out by the Mercer Island City Code, I have analyzed the cross sections and interpolations presented by Mr. Grove in his submission for internal consistency and scientific accuracy.

It is my opinion that the various historic maps, surveys, and soil borings that Mr. Grove has compiled paint an accurate picture of the original Existing Grade of the property in question. Particularly compelling are the elevation cross-sections that are shown in Figure 2A and 2B of Mr. Grove's letter. It is clear from the northern-most and southern-most cross-sections that the ground surface originally had a fairly consistent decline in elevation from east to west across the property, and that the ground surface in the middle of the property was altered substantially to support the construction of the existing building. In addition, the elevation of SE Maker St., as determined from historical aerial photographs and the existing elevation of the street, gives a good indication as to the elevation at the southern end of the property. Mr. Grove has recreated the original existing grade in the middle of the property, based on the multiple lines of evidence that he collected, as accurately as is possible. With the lack of a detailed, original topographic map of the property prior to development, Mr. Grove's approach is a reasonable method for determining the existing grade, and appears to have been executed in a way that provides a reliable, accurate depiction of the original grade of the property in question. I fully support his analysis, and the conclusions it draws, with regards to the original, existing grade of this property.

Thank you for your close attention to these important matters.

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Elisabeth Green, PhD lisgreen@gmail.com