

Existing Condition

This project is located at 5660 E Mercer Way. The site has about 31% slope. This property is currently under interior remodeling and is unoccupied. The city issued a stop work order for the construction activities on the critical slope few months ago. Stackable block retaining walls were built in the backyard; which, is a critical area without approved plans and permits. These walls were constructed on site during the past two years and a majority of the walls have been completed. The contractor did not have any plans to construct all these walls. It is unknown if there are any wall under-drain pipes connected to the existing drainage system at this point. As the most updated survey plan indicated, there were four stackable block retaining walls with a staircase built at critical the slope area, these walls varied between 3'- 6' in height. There is no vegetation present on the construction area. Plastics are currently used as BMPs to covered the entire steep slope site to protect slope. Storm water collected at the slope toe was conveyed via a drain pipe connecting with existing storm pipe.

In addition, an existing construction site is below the subjected property. There is a vertical cut 20-30' in depth with 30-40' in width adjacent to this property which is approximately 20-30 foot from the slope toe. With raining season on going, under the current site conditions and adjacent property ongoing construction impact, this property critical slope area may be a hazard.

Proposal

The property owner will apply for critical area determination to comply with the City of Mercer Island codes requirements for the wall constructions, site improvement, etc. Under the current site conditions, removing all built wall backings to the original slope conditions is not feasible at all. It will further disturb the existing slope stability and undermine the slope, causing an erosion or landslide.

In order to address all of the wall and slope safety concerns, property owner has hired a geotechnical and structure engineer to assess the site, conduct soil property investigations, inspect all walls for design adequate, and provide recommendations to fix the existing walls and site conditions.

The proposed site improvement will be removed all existing block walls and reconstruct all the block walls per geotechnical engineer recommendations to meet the city of Mercer Island codes. Landscape will be implement on the steep slope area after walls installation completing.

Temporary Erosion and Sediment Control will be implemented on the site to protect slope stable prior wall reconstructions.