



November 20, 2020

Maple Grove Project – Bastawrous Residence
4909 East Mercer Way
Mercer Island, WA 98040

Project Narrative

The focus of this project is to stabilize an existing, failing slope and to enlarge the useable area of the rear yard using a new retaining wall system.

The existing rear slope along the southeast portion of the lot is supported by a poorly constructed railroad tie retaining wall. There are visible cracks forming in the soil above the retaining wall along a section that is visibly bowed. Some of the timber members are rotted through and portions of the wall are being held in place by existing trees. The approximate height of the wall varies from two to six feet approximately and it is located on top of an existing slope. There is a neighboring residence located approximately 60 feet away on the downslope side of the failing timber retaining wall.

SCJ Studio provided a number of schematic options that included a retaining wall system that would avoid removal of the two existing fir trees and a cantilevered deck that would surround a third existing exceptional tree. We consulted with an arborist for a visual impact assessment for the viability of the trees as well as a landscape contractor and a pile contractor to determine the financial feasibility of our plans.

Our arborist could not guarantee that any of trees would survive excavation for the footing of the retaining wall because of the location of the fill slope and the size of the footings required for the new wall. The landscape contractor and the pile contractor's estimates for the improvements were well outside of our clients anticipated budget. The reasons associated for the high cost are due mostly to access restraints. These access restraints also limit the size and reach of the equipment available to drive the piles needed to support the wall. The equipment required to make the reach for the wall piles would require the construction of a very large temporary access road and the cost incurred for constructing and mitigating the road would be outside the financial scale of any typical homeowner.

After our careful consideration our project team was able to realize that removal of the three trees in question would make our project both constructible and financially feasible. We then consulted with a Geotech and Structural engineer to devise a retaining wall method that would minimize excavation. We also worked with the pile driver and landscape contractor to come up with a plan to use smaller excavation and pile driving equipment so we could build a much smaller access road.

We are prepared to provide the required amount of replacements for the trees that we are proposing to demolish, and we will furnish a restoration plan for the trees as the City of Mercer Island requests. We plan to build stairs for safer access to the new terrace and propose to provide railing systems for the entire length of the wall.

In conclusion, we would like to demonstrate that our project team has worked to satisfy the needs and desires of our client while balancing what we believe is a responsible solution to existing problems related to the failing retaining wall and the existing trees. It is our intent to shore up the slope and to replant trees as required in other landscape areas where they will be unaffected by future events. The result of our design is constructible, financially feasible, and we have taken into consideration the sensitivity of Mercer Island's desire to preserve its existing tree canopy.