



January 9, 2018

Mr. Bill Summers
MI Treehouse, LLC
PO Box 261
Medina, Washington 98039



RE: Response to City of Mercer Island Attorney Letter
concerning a proposed development at 5367 East Mercer Way in Mercer Island

Dear Bill:

I am writing to provide a response to the December 26, 2017 letter to Richard Hill from Mercer Island City Attorney Kari Sand. In her letter, Kari provided a list of items that should be addressed before the City reassesses the SEPA determination and Reasonable Use Exemption for the proposed residence at 5637 East Mercer Way.

Item A of this list relates to drainage concerns associated with the downstream watercourse and recommends that an "Additional analysis... of current erosion and sedimentation within the water course, and possible impacts resulting from this project, accompanied by design changes intended to mitigate any identified impacts" be conducted. In 2015, Triad conducted an engineering study of the project's watershed, which we believe covers all of these points.

In our report titled *Mercer Island Tree House Level 1 Downstream Analysis*, dated October 15, 2015, Triad staff conducted field investigations of the site and downstream water course, analyzed a geotechnical study compiled for the site, and reviewed all information made available by the City of Mercer Island including basin studies, GIS data, records of drainage complaints and maintenance records of the downstream properties.

We encourage Kari Sand to review our report (a copy of which is enclosed) and believe that it will answer all questions she presented in 'Item A' of her letter. In short, we documented the maintenance issues at a downstream sediment pond and concluded that mitigation measures, namely flow control in the form of stormwater detention, could be implemented to reduce impacts to the downstream water course.

Properly designed flow control, as described in the King County Surface Water Design Manual, is *"intended to limit the amount of time that erosive flows are at work generating erosion and sedimentation within natural and constructed drainage systems. Such control is effective in preventing development-induced increases in natural erosion rates and reducing existing erosion rates where they may have been increased by past development of the site"*. (p. 1-40)

A hydrologic model of the proposed site which sizes a detention facility is included in our report. The model showed that a flow control facility could be implemented into the project design and could reduce flow rates and durations to pre-development/forested levels.

In conclusion we believe that properly designed and implemented stormwater mitigation measures could allow the site to be developed to provide adequate protection of the downstream watercourse.

Sincerely,



Triad, a Division of David Evans and Associates
Adam Stricker, PE



1/9/2018