From: paulnikolaevich
To: Robin Proebsting
Date: Friday, January 25, 2019 12:41:13 AM

Hi Robin, regarding the neighbors coments:

As far as the road concerns If you take a look at Michael Xue, Senior Geotechnical Engineer, from PanGeos letter dated May 2, 2018 he talks about the private drives condition. He said " *PanGEO personnel visited the site several times in the last winter to observe the conditions along the private street and the slopes along the street. Some cracks were observed on the asphalt pavement surface. These cracks are approximately parallel to the roadway. In our opinion, the pavement cracks were likely caused by a combination of poor pavement subgrade condition, pavement fatigue, and slow creep of roadway subgrade. It is also our opinion that the pavement cracks are likely developed over a long period of time.*"
He also says *"The proposed construction will require truck traffic to export the excavated soils and import the structural fill if needed. Concrete trucks will also need to use the private street. In order to reduce the potential impacts on the street, we recommend the trucks accessing the subject site on the private street have a maximum load of 5 yards each truck. In our opinion, based on the anticipated truck traffic, the reduced truck load may potentially cause minor additional roadway subgrade creep and pavement cracks or enlarging the existing cracks. However, it is our opinion that the anticipated truck traffic with reduced truck load will not likely have adverse impacts on the stability of the roadway and slopes along the road.* "
He Also states *"In summary, it is our professional opinion that the anticipated truck traffic with reduced truck load will not likely adversely impact the stability of the private street and surrounding steep slopes. Furthermore, it is also our opinion that the potential minor additional roadway subgrade creep and pavement cracks will not constitute alteration of the steep slopes as defined in Chapter 19.16 MICC.*"
It is under Michaels professional opinion that the road will be minimally impacted. If for some reason the road is impacted with new cracking, we have stated in our construction management plan that we will be repairing the road. As stated in CMP *" If any extra damage occurs from the hauling and usage of the private drive, the CC will contact the neighbors the same day or within 24hours of incident for an agreement of repair. We will repair at least 12" beyond new pavement cracking, and remove pavement full depth, and replace with equal thickness (2" minimum). If new multiple cracking occurs within 3ft of each other the CC will repair in one single patch 12" beyond the multiple cracking."*
Michael Xue will be on site to monitor the road,wile hauling,with pins(for measurements).
There was also a concern about the wood wall located on the private drive, Michael Xue also comments in his May 2, 2018 letter *"A wood wall about 4½ feet is located about 20 feet to the east property line on 4640 East Mercer Way property. The proposed construction area is located approximately 30 feet outside of the 1H:1V line projected from the bottom of the wood wall. Based on the soil conditions at the site, the distance of the wood wall and the proposed construction area, it is our professional opinion that the proposed construction will not have adverse impacts on the existing wood wall and the adjacent property to the east.* "
We will also have monitoring points on the wood wall, during earthwork, by Michael Xue
Michael Xue's letters are more current than any studies that were given by hired lawyers, or geotechnical engineers from neighbors. It should also be noted that per Average monthly precipitation charts, for the Seattle area, November being the rainiest of months with December following into 2nd place, January as 3rd place and February as 4th place. We do not plan to excavate until begging of march which is even further reduced in average rain fall, which will help elimnate any concerns of wet season complications.
Tree Arborist concerns. Per Arborist letter dated August 24,2015 and plan set page 3 of 6 on the TESC plan ,we will be using an air spade where any grading is required within the drip line of tress and any root exposure will require saturated burlap covering the roots.
There was also a concern regarding the vegetation being disturbed by the placement of the drainage in the 5ft easement. Please refer to sheet 3 of TESC with updated plan to have an above ground 6" pipe. Also noted is the pipe will be aligned to avoid existing trees and roots systems.
Regarding the neighbors concerns about the drainage and watercourse.
Keith Litchfield, civil engineer, has written a letter dated January 22, 2019 better explaining

the water drainage plans.

He states "*Surface drainage from the water course tributary basin would technically be considered intermittent. Periods during the wetter months, or extreme storm events, channel flow can be observed. During the summer months the open channel is dry. The Four Seasons development will not increase the natural drainage that can be periodically observed within the water course. Since all drainage from the developed site will be tight-lined to Lake Washington, an actual decrease in channel flow from the Four Season property will be realized.*

To insure that channel flow remains unrestricted the outfall pipe will be elevated where it crosses the stream channel. The actual location of the elevated crossing will be field located at the time of construction by the project field biologist. No reduction in the channel capacity will occur as a result of the Four Seasons development.

The pipe will be anchored along its' planned alignment (within the drainage easement) to Lake Washington. The point of discharge, and end of the pipe, will be into a constructed concrete channel. The outfall (i.e. end of the pipe) will be located 9' from the existing bulkhead and the concrete outfall structure will be rock-lined, 3' wide, 18" high, and 10' long. The discharge pipe will be anchored to the outfall structure. A cap will be placed over the concrete channel to insure the discharged water remains within the channel prior to discharge into the lake.

*The King County Runoff Time Series (KCRTS) hydrologic model was utilized to calculate the 100-year storm event of 0.0071 CFS from the Four Seasons project. The capacity of a 6" HDPE pipe flowing full using Manning's formula is 0.86 CFS at a slope of 2.0%. Based on this analysis a factor of safety of 121 is provided for the Four Season's private tight-line system. A 6" pipe system is more than adequate to safely convey the developed drainage from the project site to Lake Washington. " " **Conclusion:** Drainage from the proposed project will be collected and conveyed in a tight-line system to Lake Washington. Although it is likely minor landscape areas may bypass the on-site collection points, these areas are expected to be insignificant to the project's overall drainage control. All hard surfaces such as roof, patio, driveway, walks, etc. will be collected and safely discharged to the lake. Upon completion of the project drainage system and landscaping, no drainage related issues or problems are expected to result from development of the property as planned."*

Thank you,

Paul Maksimchuk
Four Seasons Homes LLC
www.fshomes.net
P:253-334-9209