STRUCTURAL CIVIL SEISMIC ENGINEERING

July 26, 2016

Jim Romano Conard Romano Architects 514 28th Ave E Seattle, WA 98112

RE NFH Residence, Mercer Island Preliminary Storm Water

Dear Jim:

The NFH Residence site on the north end of Mercer Island, at 8000 SE 20th St, will redevelop the existing 0.86-acre parcel with a new house and landscaping. The east side of the parcel has an existing piped watercourse in a private storm pipe. The piped water course carries collected storm water from this site, other adjacent properties and public streets to Lake Washington. The project is applying to reduce the buffer on this historic watercourse.

This narrative describes basic storm water practices to be used in the course of construction and for final site stabilization. A specific design will developed for construction documents. Final design will be consistent with Chapter 15.09 MICC, and other city standards.

Temporary Erosion and Sediment Control

During construction soils and water will be controlled by conventional, city standard, Temporary Erosion and Sediment Control (TESC) measures to keep soils and dirty water from leaving the site.

- Exposed soils will be limited to those needed to regrade, and cut foundations for the new construction.
 Soils not in work will be covered, either temporarily or when final grades have been achieved, by permanent pavements or landscape.
 - Temporary cover measures may include; plastic sheeting, mulch, hydro-seed, or other approved applications over bare soils.
- Storm drain inlets will have inlet protection applied to them to filter sediments from water that may enter them. Filters will be monitored and emptied when sediment accumulates.
- Silt fences or straw wattles will be used at the lower limits of disturbed areas to filter sediment laden water from leaving the work areas.
- Where possible, existing vegetation will be left in place and maintained to filter water that flows across
 it.
- Where possible, the water course and other sensitive areas of the site will be fenced off and no work
 or construction related activity (storage, staging, parking) will be allowed to occur in the buffer or water
 course.

Permanent Storm Water Design

The finished site will have all disturbed areas of the site covered by structures, pavements or landscape. No bare soils will be left that could erode and foul downstream water courses or the lake.

- All permanent storm water design shall meet the current adopted codes of the City of Mercer Island.
- As this site has direct discharge to Lake Washington, no flow control measures are required.
- Low impact measures will be considered and applied where appropriate to the site. Measures in consideration include:
 - Green roof



- o Porous pavement
- Water collected off pollution generating surfaces (vehicle use pavements) under 5,000-SF will be
 routed through a storm catch basin with an oil/water separation Tee per City standards. The current
 site design will direct the discharge from this oil/water separation device to a different piped outfall
 than the piped water course in question.
- If pollution generating surfaces on the site exceed 5,000-SF in the developed site design then per city code, more extensive water quality treatment measures will be implemented on site. These measures will be selected from state and city approved standard designs, options include:
 - o StormFilter cartridge filter systems
 - o Bioswale
 - Filtering rain garden.

Please let me know if you have other questions or would like further detail on any of these measures and how they may be applied to the developed site design.

Sincerely,

COUGHLIN PORTER LUNDEEN, INC.

Civil Project Manager

Kenneth A. Wiersema P.E.