Engineering

File: PER 19-218

April 16, 2020

Darcy Paslawski
Vancouver Fraser Port Authority
100 The Pointe, 999 Canada Place
Vancouver, BC
V6C 3T4

Dear Darcy,

Subject: **PER 19-218 City of Delta New Stormwater Outfall - 8600 Block of River Road**

I am writing to you in regards to the City of Delta's application for a new stormwater outfall at the 8600 Block of River Road in Delta, BC. The proposed outfall will provide significant benefit to Delta's stormwater conveyance system and strengthen our flood resilience in the area.

Currently, the storm runoff from this catchment flows east through a network of very flat pipes, culverts, and ditches for up to 2 kilometers to Gravel Ridge Pump Station (96 Street and River Road). Due to long length of conveyance to the nearest pump station, occasional flooding occurs in the low lying areas when high tides coincide with major storms. More frequent flooding may occur in future due to sea level rise and increase in rainfall intensity with anticipated future climate change. The proposed outfall will capture runoff from a 15 hectare catchment that is significantly higher in elevation than the existing dike and divert the stormwater directly to the Fraser River by gravity. This outfall will alleviate flooding concern in the downstream low lying catchment area. Runoff generated from the proposed outfall's 15 hectare catchment will be primarily clean roof runoff. Stormwater from parking lots will be treated onsite using appropriate stormwater Best Management Practices (BMPs). Use of infiltration BMPs as suggested by the Port in the initial project feedback is not recommended for this catchment as it is a closed landfill site.

The Port of Vancouver approved construction of a new outfall on a temporary basis at this location for the purpose of conveying dredged sand from the Fraser River. One of the two steel pipes installed by Wesgroup for dredging purposes can serve as a permanent outfall. Relocating the existing temporary gravity outfall pipe to a different location may not be prudent as it will require construction of a new drainage pump station. In addition to significant construction cost, a new pump station will delay potential development of industrial land; increase emissions during construction and operation of the pump station; further disturb the area in the vicinity of new outfall location during construction; and will result in more long term erosion due to high velocity of pumped discharge as compared to a gravity outfall. So, Delta respectfully requests the Port of Vancouver to approve the application to maintain this outfall on a permanent basis at this location.

City of Delta
4500 Clarence Taylor Crescent
Delta, BC V4K 3E2
604.946.4141
www.delta.ca

As requested, attached is a preliminary inspection report on the current condition of the restoration works that were undertaken in relation to the temporary outfall installation. Delta staff is working with the developer to obtain approvals required under the new Fisheries Act for a permanent outfall.
Please feel free to contact myself by email at sshergill@delta.ca or telephone at 604.946.3265, if you have any questions or require further information. We look forward to meeting with the project team soon at the preliminary meeting to discuss the project in more detail.

Sincerely,

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Suman Shergill, P.Eng, Manager of Utilities

CC: Doreann Mayhew, Acting Deputy Director of Community Planning & Development
Mike Brotherston, Manager of Climate Action and Environment
Harvy S. Takhar, EIT, Engineering Project Technologist

HST/ss

Attachment: *8576 River Road, Delta, BC – Preliminary Inspection of Restoration, Envirowest Consultants*