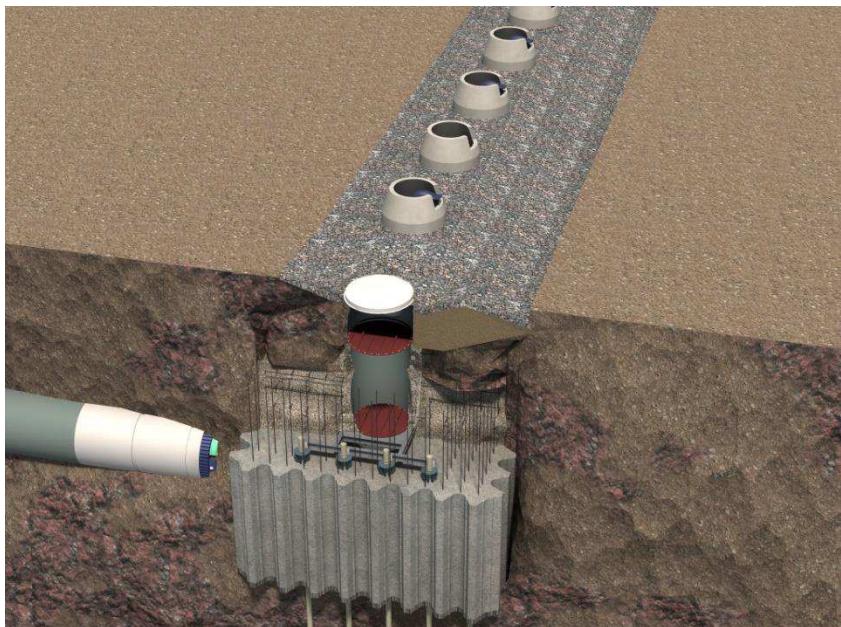


## APPENDIX L HABITAT ASSESSMENT

### L.3: DFO Correspondence

**Annacis Island WWTP New Outfall System**

**Vancouver Fraser Port Authority  
Project and Environmental Review Application**



 **metrovancouver**  
SERVICES AND SOLUTIONS FOR  
**A LIVABLE REGION**

**CDM  
Smith**

envirowest

This page intentionally left blank



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Pacific Biological Station  
Ecosystem Management Branch  
3190 Hammond Bay Road  
Nanaimo, BC  
V9T 6N7

October 04, 2017

*Your file*      *Votre référence*

*Our file*      *Notre référence*  
17-HPAC-00609

Ken Masse  
Senior Project Engineer  
Greater Vancouver Sewerage and Drainage District  
4330 Kingsway  
Burnaby, BC  
V5H 4G8

Via Email: [Ken.Masse@metrovancouver.org](mailto:Ken.Masse@metrovancouver.org)

Dear Mr. Masse:

**Subject: Additional information is required for the review of your request.**

The Fisheries Protection Program (the Program) of Fisheries and Oceans Canada received your proposal on June 8, 2017.

Your proposal has been reviewed to determine whether it is a work, undertaking or activity that results in serious harm to fish that are part of a commercial, recreational or Aboriginal fishery, or to fish that support such a fishery which is prohibited under subsection 35(1) of the *Fisheries Act*, or by sections 32, 33 and 58 of the *Species at Risk Act* that apply to aquatic species.

Based on the information provided, the Program is of the view that your proposal could potentially result in serious harm to fish; however, as discussed during our Oct 03<sup>rd</sup> 2017 conference call, in order for us to complete the review of your proposal and determine whether serious to fish is likely, the following information is necessary in order for the Program to conclude their review:

## 1. Description of Project

1.1 As discussed, a determination of the potential effects of a project on fish and fish habitat must consider the known or potential effects, as well as the severity and likelihood of those effects occurring. The specific timing of those works can have a significant influence on the anticipated or potential serious harm to fish and fish habitat, and the resulting mitigation measures required to reduce the risk of that effect from occurring. This is due to the variability of fish species transiting the area, fish usage of habitats within or in the vicinity of the project, and the sensitivity of the species or life stages present during different times of the year.

Therefore, it is important to provide a detailed construction schedule to assist the Program in understanding what the potential effects to fish and fish habitat may be as a result of the proposed works and the timing of those works.

At this time, and despite the extensive in water works proposed, a detailed construction schedule and sequencing of works has not been provided. Based on our conversation on Oct 03<sup>rd</sup> 2017, the Program understands that you intend to provide this, paired with potential fisheries impacts and mitigation measures discussed below, as soon as possible.

- 1.2 In relation to the above, please ensure that the schedule/sequencing of works related to the coffer dam installation, as well as, details on the equipment, methodology, materials (e.g. pile materials and diameter), and associated footprints are also provided. Information related to mitigation measures associated with these activities is discussed below.

## 2. Potential Effects of the Proposed Project

- 2.1. Please provide the Construction Environmental Management Plan referred to in the Request for Review submission. As discussed, this should tie in the construction activities, with the anticipated or potential serious harm to fish or fish habitat, and any proposed avoidance or mitigation measures that will be applied to reduce or eliminate that anticipated or potential risk.
- 2.2. Further to our call on Oct. 03<sup>rd</sup> 2017, please provide further details on the residual effects, and the likelihood of those residual effects, specific to the conversion of the sandy substrate habitat of the Fraser River to hard-armouring (i.e. riprap and diffuser infrastructure). More specifically, in consideration of the variable degree and frequency of exposure of the riprap and diffuser dependent upon natural causes or that of dredging, can you estimate the average residual footprint ( $m^2$ ) 'conversion' from native sand substrate to hard-surfacing (e.g. riprap and diffuser) under normal conditions and that of 'abnormal' conditions arising from dredging adjacent substrates.
- 2.3. As discussed, DFO has recommended a lower risk instream work window from Nov. 1<sup>st</sup> through Feb. 28<sup>th</sup> for higher risk in-water works such as dredging and pile-driving. These works may pose a higher risk of potential serious harm to fish and fish habitat and would be more appropriately carried out during this time frame so as to avoid adult salmon migration, and reduce the risk of a fish kill or disruption of upstream migration. This modified timing is also anticipated to reduce potential conflict with white sturgeon usage of the area.

Based on our conference call of Oct 03<sup>rd</sup> 2017, it is the Programs understanding that this timing window cannot be adhered to for all works due to the nature and extent of works that must be completed within in the wetted perimeter of the Fraser River. Therefore, as per 1.1, please ensure that a clear quantification and

qualification of anticipated serious harm to fish and fish habitat is provided and, that this assessment is considerate of the particular species and or life history functions being carried out within, or in the vicinity of the project, during each phase of construction outlined in the above noted construction schedule.

Thank-you again for taking the time to meet with us and review the outstanding information requirements associated with your project.

If you have any questions, please contact Larissa Chin at our Vancouver office at 604-666-2057, or by email at [Larissa.Chin@dfo-mpo.gc.ca](mailto:Larissa.Chin@dfo-mpo.gc.ca). Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,



*FOR:*

Holly Pulvermacher  
Senior Fisheries Protection Biologist  
Coastal Linear Unit  
Fisheries Protection Program  
Fisheries and Oceans Canada

Cc: John E. Newby, CDM Smith Canada, Via Email: [NewbyJE@cdmsmith.com](mailto>NewbyJE@cdmsmith.com)

**CDM**  
**Smith**  
cdmsmith.com