

PER No.:	16-179
Tenant:	Anthem Duncan Developments LTD.
Project:	Sediment Remediation and Dike Construction
Project Location:	41 and 175 Duncan Street in New Westminster, British Columbia
VFPA SID No.:	NEW327
Land Use Designation:	Industrial
Permit Holder:	Anthem Duncan Developments LTD.
Category of Review :	C
Date of Approval:	July 11, 2019
Date of Expiry:	February 28, 2021

PROJECT DESCRIPTION

For the purposes of this project permit, (the Permit), the project is understood to include the following works on Vancouver Fraser Port Authority (VFPA) property:

Phase 1: Sediment Remediation and Water Lot Cleanup

- Removal of a concrete retaining wall and any remaining anthropogenic debris in the water lot;
- Shallow remedial dredging (to approximate depths of one metre below grade) of sediments in three contaminated areas along the intertidal shoreline. These are known as Risk Management Area 1 (approximately 169.4 m³), Risk Management Area 2 (approximately 2,153 m³), and Risk Management Area 3 (approximately 549.4 m³);
- Placement of sediment and debris into interim containers prior to upland disposal. Containers would be removed from the site daily by truck or barge to an approved disposal facility;
- Placement of clean Fraser River sand equal to the volume of removed sediment (approximately 3,000 m³) to backfill dredged areas to pre-dredge bathymetry; and
- Removal of riparian vegetation and one black cottonwood tree.

Phase 2: Dike Construction Activities

- Limited excavation, stock piling, and backfilling activities to support dike construction. All other dike construction activities are outside the port authority's jurisdiction;
- Grading and rip rap installation; and
- Removal of up to seven black cottonwood trees.

PROJECT AND ENVIRONMENTAL CONDITIONS

The VFPA has undertaken and completed a review of the Project in accordance with the *Canada Marine Act* and Section 5 of the Port Authorities Operations Regulations and, as applicable, Section 67 of the *Canadian Environmental Assessment Act, 2012*.

If at any time the Permit Holder fails to comply with any of the project and environmental conditions set out in the Permit below, or if VFPA determines that the Permit Holder has provided any incomplete, incorrect or misleading information in relation to the Project, VFPA may, in its sole and absolute discretion, cancel its authorization for the Project or change the project and environmental conditions to which such authorization is subject.

Pursuant to Section 29 of the Port Authorities Operations Regulations, VFPA may also cancel its authorization for the Project, or change the project and environmental conditions to which such authorization is subject, if new information is made available to VFPA at any time in relation to the potential adverse environmental and other effects of the Project.

The following are the project and environmental conditions that must be followed by the Permit Holder to mitigate potential or foreseeable adverse environmental and other effects.

All VFPA Guidelines and Record Drawing Standards referenced in this document can be located at: <https://www.portvancouver.com/development-and-permits/project-and-environmental-reviews/technical-guidelines/>.

No.	GENERAL CONDITIONS
1.	The Permit Holder must have a valid lease, licence, or access agreement for the Project site prior to accessing the Project site or commencing construction or any other physical activities on the Project site. This Permit shall in no way limit any of the Permit Holder's obligations, or VFPA's rights, under such lease, licence, or access agreement.
2.	The Permit Holder shall at all times and in all respects, comply with and abide by all applicable statutes, laws, regulations and orders from time to time in force and effect, including all applicable environmental, labour and safety laws and regulations.
3.	This Permit in no way endorses or warrants the design, engineering, or construction of the Project and no person may rely upon this Permit for any purpose other than the fact that VFPA has permitted the construction of the Project, in accordance with the terms and conditions of this Permit.
4.	The Permit Holder shall undertake and deliver the Project to total completion in a professional, timely and diligent manner in accordance with applicable standards and specifications set out in the sections above entitled Project Description and Information Sources. The Permit Holder shall not carry out any other physical activities unless expressly authorized by VFPA.
5.	The Permit Holder shall cooperate fully with VFPA in respect of any review by VFPA of the Permit Holder's compliance with this Permit, including providing information and documentation in a timely manner, as required by VFPA. The Permit Holder is solely responsible for demonstrating the Permit Holder's compliance with this Permit.
6.	The Permit Holder shall review the Permit with all employees, agents, contractors, licensees and invitees working on the Project site, prior to such parties participating in any construction or other physical activities on the Project site. The Permit Holder shall be solely responsible for ensuring that all such employees, agents, contractors, licensees and invitees comply with this Permit.
7.	The Permit Holder shall make available upon request by any regulatory authority (such as a Fishery Officer) a copy of this Permit.
8.	Unless otherwise specified, the Permit Holder shall provide all plans, documents, and notices required under this Permit to the following email address: per@portvancouver.com and referencing PER No.16-179 .
9.	Unless otherwise specified, all plans, schedules, and other Project-related documentation that the Permit Holder is required to provide under this Permit must be to VFPA's satisfaction.

10.	VFPA shall be entitled to visit and inspect the Project Site at any time and without notice. The Permit Holder shall provide such access to VFPA, and cooperate with VFPA during the course of the visit or inspection.	
11.	The Permit Holder must maintain and retain any records associated with, or produced by, actions or activities undertaken to achieve compliance or that indicate non-compliance with project permit conditions. These records must be made available at the request of VFPA.	
12.	The Permit Holder shall prepare and submit a self-report form to VFPA demonstrating compliance with conditions at each of the following project phases: <ul style="list-style-type: none"> a) A self-report shall be submitted a minimum of 15 business days prior to the commencement of construction, or any physical activities, to a maximum of 90 business days prior to construction, or any physical activities). b) A self-report shall be submitted at 50% of Project completion. c) A self-report shall be submitted within 60 business days of completion of construction. 	
13.	The Permit Holder shall provide a Project schedule to VFPA and any interested Indigenous groups showing the anticipated start dates for all major phases of the Project as identified by VFPA. The Permit Holder shall notify VFPA of any material changes to the Project schedule and, upon request, shall provide an updated Project schedule.	
14.	The Permit Holder shall strictly comply with all enforcement actions issued by VFPA in response to the Permit Holder's failure to comply with this Permit.	
15.	All conditions in this Permit which expressly or by their nature survive expiration or termination of this Permit will remain in effect after the expiration or termination of this Permit.	
	CONDITIONS - PRIOR TO COMMENCING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES	SUBMISSION TIMING (business days)
16.	The Permit Holder shall submit Issued For Construction (IFC) drawings signed and sealed by a Professional Engineer licensed to practice in the Province of British Columbia.	5 business days before commencing construction or any physical activities
17.	The Permit Holder shall provide a draft construction notice to VFPA's satisfaction in accordance with VFPA's Public Consultation Guidelines.	20 business days before commencing construction or any physical activities
18.	The Permit Holder shall distribute an approved construction notice to residents and businesses to an area to VFPA's satisfaction. The Permit Holder shall notify VFPA when such distribution has been completed.	10 business days before commencing construction or any physical activities

19.	The Permit Holder shall submit a final Construction Environmental Management Plan, to VFPA's satisfaction. The Permit Holder shall carry out the Project in accordance with the Construction Environmental Management Plan provided by the Permit Holder, and any subsequent amendments approved by VFPA. The Construction Environmental Management Plan shall include details on the installation and maintenance of erosion and sediment control measures, including sediment curtains; the management and stabilization of sediment prior to transport; and turbidity monitoring.	10 business days before commencing construction or any physical activities
20.	The Applicant shall notify the Harbour Master and VFPA Environmental Programs, email: Harbour_Master@portvancouver.com and EnvironmentalPrograms@portvancouver.com.	2 days before commencing construction or any physical activities
21.	<p>The Permit Holder shall submit a marine construction and staging plan to VFPA's satisfaction, which includes:</p> <ul style="list-style-type: none"> (a) Staging areas; (b) Dates and hours of operations; (c) Description of activities taking place; (d) Participating equipment and vessels (dimensions must be included); (e) Method of preferred communications; (f) Special requests and/or additional information. <p>The Permit Holder shall carry out the Project in accordance with the marine construction and staging plan, including any subsequent amendments approved by VFPA.</p>	20 business days prior to commencing construction activities
22.	Prior to the commencement of any vessel-related activities, the Permit Holder must contact the appropriate Canadian Coast Guard (CCG) Marine Communications and Traffic Services (MCTS) centre regarding the issuance of a Navigational Warning (NAVWARN) to advise the marine community of potential hazards associated with the Project.	As per Coast Guard requirements
23.	If there is potential to affect birds and/or their active nests and eggs, the Permit Holder shall conduct nest surveys. For any nests identified in surveys, a qualified environmental professional shall confirm that the nest is not occupied by a species protected at that time of year under applicable legislation. To reduce the risk of Project-related harm, the Permit Holder should avoid certain physical activities during the general bird breeding season, which falls between April 1 and July 31, or outside of this time span if occupied nests are present. Immediately prior to activities with the potential to affect birds and/or their active nests and eggs.	Immediately prior to activities with the potential to affect birds and/or their active nests and eggs.

CONDITIONS - DURING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES	
24.	All general construction and physical activities related to the Project shall be conducted from Monday to Saturday between the hours of 7:00 am and 8:00 pm. No construction and physical activities shall take place on Sundays or holidays. These hours shall not be modified without prior approval of VFPA. To request permission to conduct activities outside these hours, the Permit Holder must submit a written request no less than 20 business days prior to the desired start date.
25.	The Permit Holder shall notify VFPA of any complaints received from the community and stakeholders during construction and indicate how the Permit Holder has responded to such complaints.
26.	If the Permit Holder encounters, expects to encounter, or should expect to encounter an actual or potential archaeological resource, the Permit Holder shall follow the procedures of the Chance Find Protocol prepared by Archer CRM Partnership and submitted to VFPA on November 22, 2018.
27.	The Permit Holder shall submit an Archaeological Impact Assessment Report to VFPA's satisfaction. This report shall summarize archaeological monitoring and findings of the Archeological Impact Assessment that will occur during Project construction.
28.	The Permit Holder shall provide opportunities for interested Indigenous groups to monitor and be present on the Project site at all times during ground disturbing activities with the potential to intrude into native soils.
29.	Without limiting the generality of permit condition #2, the Permit Holder shall not, directly or indirectly: (a) deposit or permit the deposit of a deleterious substance of any type in water frequented by fish in a manner contrary to Section 36(3) of the <i>Fisheries Act</i> ; or (b) adversely affect fish or fish habitat in a manner contrary to Section 35(1) of the <i>Fisheries Act</i> .
30.	There shall be no in-water activity during the fisheries sensitive period from March 1 to June 15, inclusive. All works will occur during Fisheries and Oceans Canada's least risk window for the area.
31.	The Permit Holder shall not permit barges or other vessels used during the Project to ground on the foreshore or riverbed or otherwise disturb the foreshore or riverbed (including disturbance as a result of vessel propeller wash), excepting only such disturbance as is reasonably required resulting from the use of barge spuds.
32.	The Permit Holder shall immediately cease work and notify VFPA if the Permit Holder has reasonable grounds to believe that the Project has harmed fish or fish habitat, including observation of distressed, injured, or dead fish. The Permit Holder shall not resume work until authorized by VFPA.
33.	The Permit Holder shall not disturb the riverbed or intertidal area outside the Project site.
34.	The Permit Holder shall repair and/or remediate any damage or erosion resulting from disturbance to the intertidal foreshore outside of the Project site.
35.	Rip rap shall be clean and free of fines and shall be lowered through the water column and deposited near the riverbed and not dumped or deposited from above or near the water surface.
36.	Without limiting the generality of permit condition No. 2, materials brought onto the Project site to be used for infilling, site preparation, or other uses shall be from sources

	demonstrated to be clean and free of environmental contamination, invasive species and noxious weeds. The Permit Holder shall maintain records to verify this.
37.	Trees shall be felled by a qualified professional.
38.	The Permit Holder shall use reasonable efforts to retain existing native riparian vegetation and native soil. Disturbance or clearing of vegetation shall be staged and strictly limited to that required for the Project.
39.	The Permit Holder shall submit a Riparian Vegetation Compensation Plan for all moderate and high productivity riparian vegetation that is impacted prior to any vegetation removal. The Plan shall include the proposed species, number or area, methods, and location of vegetation to be replanted, as well as the proposed schedule for replanting and post-planting assessments, to the satisfaction of VFPA.
40.	<p>The Permit Holder shall not permit sediment, sediment-laden waters, or other deleterious substances to enter the water during the Project. The Permit Holder shall carry out all physical activities in a manner that prevents induced sedimentation of foreshore and near shore areas and induced turbidity of local waters, and the release of sediment, sediment-laden waters, and turbid waters to the aquatic environment. The Permit Holder shall manage turbidity in compliance with the following water quality criteria:</p> <p style="padding-left: 40px;">(a) when background is less than or equal to 50 nephelometric turbidity units (NTU), induced turbidity shall not exceed 5 NTU above the background values; and</p> <p style="padding-left: 40px;">(b) when background is greater than 50 NTU, induced turbidity shall not exceed the background values by more than 10% of the background value.</p> <p>For the purposes of this condition, "background" means the level at an appropriate adjacent reference site that is affected neither by physical activities at the project site, nor sediment-laden or turbid waters resulting from physical activities at the project site.</p>
41.	The Permit Holder shall conduct all activities involving the use of concrete, cement, mortars and other Portland cement or lime-containing construction materials in a manner that shall not deposit sediments, debris, concrete (cured or uncured), and concrete fines into the aquatic environment, either directly or indirectly. Water that has contacted uncured or partly cured concrete or Portland cement or lime-containing construction materials (such as the water that may be used for exposed aggregate wash-off, wet curing, equipment and truck washing) shall not be permitted to enter the aquatic environment. The Permit Holder shall provide containment facilities at the site for the wash-down water from concrete delivery trucks, concrete pumping equipment, and other tools and equipment, as required.
42.	The Permit Holder shall use an environmentally clean excavator bucket. The bucket and any portion of the excavator arm that will be in contact with or near the water shall be cleaned of any residual hydrocarbons or other contaminants prior to the start of works.
43.	Without limiting the generality of permit condition #2, the Permit Holder shall ensure that dredged, excavated, and anthropogenic material that is intended for upland placement complies with all applicable legislation and regulations. The Permit Holder shall appropriately manage any contamination associated with the dredged material and maintain records of off-site disposal.
44.	<p>During any vessel-related activities, the Permit Holder shall:</p> <p style="padding-left: 40px;">a) Position vessels and equipment associated with the Project in such a manner so</p>

	<p>as not to obstruct line of sight to navigational aids or markers;</p> <p>b) Exhibit the appropriate lights and day shapes at all times;</p> <p>c) Monitor the VHF channel used for MCTS communications in the respective area at all times and participate as necessary;</p> <p>d) Be familiar with vessel movements in areas affected by the Project.</p> <p>e) Plan and execute the Project in a manner that will not impede navigation or interfere with vessel operations; and,</p> <p>f) During night hours, unless working 24 hours per day, ensure that the rig and associated equipment is moored outside the navigation channel and lit in accordance with all applicable regulations.</p>	
45.	The Permit Holder shall engage a qualified environmental professional to monitor the Project in order to ensure that the works are carried out in compliance with this Permit. Monitoring events shall take place as required by the environmental monitor, the Construction Environmental Management Plan, or VFPA, provided that monitoring will be no less than weekly and will be full time when works are underway that have the potential to adversely affect fish or fish habitat.	
46.	The Permit Holder shall provide bi-weekly environmental monitoring reports to VFPA or more frequently if VFPA requires. In addition, a summary report for the whole monitoring period shall be forwarded to VFPA within 30 days of the conclusion of the monitoring period.	
	CONDITIONS - UPON COMPLETION	SUBMISSION TIMING (Business Days)
47.	The Permit Holder shall notify VFPA upon completion of the Project.	Upon substantial completion
48.	The Permit Holder shall submit proof of meaningful completion of works associated with the Riparian Vegetation Compensation Plan.	Within 40 business days of completion
49.	The Permit Holder shall provide signed and sealed record drawings in accordance with VFPA's Record Drawing Standards, in both AutoCAD and Adobe (PDF) format to VFPA, including a Project site plan that clearly identifies the location of works.	Within 40 business days of completion
VFPA reserves the right to rescind or revise these conditions at any time that new information warranting this action is made available to VFPA.		
LENGTH OF PERMIT VALIDITY		
The Project must be completed no later than February 28, 2021 (the Expiry Date).		

AMENDMENTS
<ul style="list-style-type: none">• Details of any material proposed changes to the Project, including days and hours when construction and any physical activities will be conducted, must be submitted to VFPA for consideration of an amendment to this Permit.• For an extension to the Commencement Date, the Permit Holder must apply to VFPA in writing no later than 30 days prior to that date.• For an extension to the Expiry Date, the Permit Holder must apply in writing to VFPA no later than 30 days prior to that date. <p>Failure to apply for an extension as required may, at the sole discretion of VFPA, result in termination of this Permit.</p>

PROJECT AND ENVIRONMENTAL REVIEW DECISION

Project Permit PER No. 16-179 is approved by:

Original Copy Signed

CARRIE BROWN
DIRECTOR, ENVIRONMENTAL PROGRAMS

July 11, 2019

DATE OF APPROVAL

CONTACT INFORMATION

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