

**SCHEDULE 6
ENVIRONMENTAL OBLIGATIONS**

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**PART 1
GENERAL PROVISIONS**

1.1 Environmental Reference Documents

Project Co shall ensure that the Project Work at all times during the Term complies with all guidelines, policies or practices of an environmental nature applicable to the Project and the Project Work, including but not limited to each of the following Reference Documents:

- (a) Amphibian and Reptile Conservation Guidelines;
- (b) Amphibian and Reptile Salvage BMPs;
- (c) Archaeological Handbook;
- (d) Archaeological Impact Assessment Guidelines;
- (e) BC Ambient Air Quality Objectives;
- (f) Canada-wide Standards for Particulate Matter and Ozone;
- (g) CMT Handbook;
- (h) DBSS 165 *Protection of the Environment*;
- (i) Develop with Care Environmental Guidelines;
- (j) DFO Fisheries Protection Policy Statement;
- (k) DFO Measures to Avoid Causing Harm to Fish and Fish Habitat;
- (l) Dredge Management Guidelines;
- (m) Environmental Best Management Practices for Highway Maintenance Activities;
- (n) Heavy Metal Memorandum of Understanding;
- (o) Instream Works - Standards and Best Practices;
- (p) Instream Work Windows;
- (q) Metro Vancouver Ambient Air Quality Objectives;
- (r) Metro Vancouver Stormwater Design Guidelines;
- (s) Noise Policy;
- (t) Pile Driving BMPs;
- (u) Raptor Conservation BMPs;

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- (v) Riparian Restoration Guidelines;
- (w) Technical Guidance on Contaminated Sites;
- (x) Tree Replacement Criteria;
- (y) VFPA Technical Guidelines - Requests to Conduct Construction Outside of Regular Work Hours;
- (z) VFPA Technical Guidelines - Air Emission Management Plan;
- (aa) VFPA Technical Guidelines - Construction Environmental Management Plan;
- (bb) VFPA Technical Guidelines - Environmental Air Assessment;
- (cc) VFPA Technical Guidelines - Environmental Noise Assessment;
- (dd) VFPA Technical Guidelines - Habitat Assessment;
- (ee) VFPA Technical Guidelines – Lighting;
- (ff) VFPA Project Energy Study Guidelines;
- (gg) VFPA Shore Protection Guidelines;
- (hh) VFPA Technical Guidelines - Stormwater Pollution Prevention Plan;
- (ii) VFPA Transportation Guidelines;
- (jj) VFPA Technical Guidelines - View and Shade Impact;
- (kk) VFPA Record Drawing Standards;
- (ll) Water Quality Guidelines - Aquatic Life, Wildlife & Agriculture;
- (mm) Water Quality Guidelines – Drinking Water;
- (nn) Water Quality Guidelines – Recreation; and
- (oo) Wildlife at Risk - EA Best Practice Guide.

1.2 Project Co's Environmental Obligations

The Project Infrastructure is classified as a “designated environmentally sensitive area” in accordance with DBSS 165.01.04 and as such is subject to all the requirements set out in DBSS 165.

- (a) Project Co shall be responsible for managing all environmental issues associated with the Project, and shall comply with, observe, satisfy and perform all of Project Co's Environmental Obligations. Project Co shall perform the Project Work in full

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compliance with Project Co's Environmental Obligations, including compliance with the following, subject in each case to Section 1.2(b) of this Schedule:

- (i) all applicable Environmental Laws, Permits and relevant requirements under any other applicable Laws and all applicable Reference Documents that are current at the time of the relevant Project Work;
 - (ii) the Environmental Assessment Certificate attached as Part 1 [Environmental Assessment Certificate] of Appendix A to this Schedule, including:
 - (A) its conditions;
 - (B) the Certified Project Description; and
 - (C) any conditions, commitments or requirements arising out of any amendment to the Environmental Assessment Certificate as may be subsequently issued from time to time;
 - (iii) the Port Project and Environmental Permit attached as Part 2 [Port Project and Environmental Permit] of Appendix A to this Schedule, including:
 - (A) its conditions; and
 - (B) any conditions, commitments or requirements arising out of any amendment to the Port Project and Environmental Permit as may be subsequently issued from time to time;
 - (iv) the conditions, commitments, responsibilities and information set forth in this Schedule, including those set out in the Table of Conditions - EAC attached as Appendix B [Table of Conditions - EAC] to this Schedule; and
 - (v) the conditions, commitments, responsibilities and information set forth in this Schedule, including those set out in the Project and Environmental Conditions - PPEP attached as Appendix C [Project and Environmental Conditions - PPEP] to this Schedule; and
 - (vi) a requirement to meet monthly with the Province, or more frequently as the Province deems necessary.
- (b) For greater certainty, Project Co shall be responsible, at its own cost and risk, for complying (and will cause all of its employees, agents, Principal Contractors and Subcontractors and employees of any of them to comply) with all environmental obligations except only for those specifically identified in this Agreement, including in the Table of Conditions, as being the obligation of the Province or not the responsibility of Project Co, notwithstanding that the responsibility for any such environmental obligation may not specifically be an obligation of Project Co.

1.3 Tables of Conditions

- (a) Without limiting the generality of Section 1.2 [Project Co's Environmental Obligations] of this Schedule, Project Co shall at all times comply with and shall do or not omit to do anything necessary to ensure satisfaction of, and will be responsible for the activities set forth in the Table of Conditions – EAC and the Project and Environmental Conditions - PPEP, with the exception only of those conditions, commitments or responsibilities that are expressly identified in the Table of Conditions – EAC or the Project and Environmental Conditions – PPEP as the responsibility of the Province or not the responsibility of Project Co.
- (b) Except as provided in Section 1.4(c) of this Schedule, in order to effect any amendment to be made after the Effective Date to the Table of Conditions – EAC or the Project and Environmental Conditions - PPEP as applicable to the Project, the Province shall issue a Province Change and the provisions of Part 7 [Province Changes and Project Co Proposals] shall apply accordingly.
- (c) In the case of any conflict, ambiguity or inconsistency between or among the Table of Conditions – EAC, the Project and Environmental Conditions - PPEP and any other provision within this Agreement, including within this Schedule and within any of the other Schedules hereto, such other provision will prevail over the Table of Conditions – EAC or the Project and Environmental Conditions – PPEP, as applicable.

1.4 Environmental Impacts and Changes to Environmental Permits

- (a) Project Co shall use all reasonable efforts to keep environmental impacts from the Project within the magnitude and extent identified for the applicable reference concept contained in the Environmental Assessment Application, and the Certified Project Description, in respect of the Environmental Assessment Certificate and the Port Project and Environmental Permit, and where not possible, Project Co shall submit to the Province's Representative in accordance with the Consent Procedure a request for Project Co to make an application for an amended Environmental Assessment Certificate and/or Port Project and Environmental Permit, as required.
- (b) Project Co shall be responsible for addressing the mitigation and compensation of all Project environmental impacts, except where the Province identifies otherwise in writing or as otherwise expressly provided in this Agreement.
- (c) Subject to Section 1.4(d) of this Schedule:
 - (i) any changes or amendments to the Environmental Assessment Certificate and/or the Port Project and Environmental Permit, including any changes to the Table of Conditions – EAC and/or the Project and Environmental Conditions - PPEP, required as a result of Project Co's carrying out of the Project Work or other activities of Project Co, shall be at the cost and risk of Project Co, whether or not the application for such change is made by the Province or Project Co; and
 - (ii) Project Co shall be responsible for obtaining, in accordance with Section 1.6 [Environmental Permits] of this Schedule, all Permits from relevant Environmental Authorities and satisfying all other requirements (including in

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respect of consultations, hearings, reviews, studies and reports and initial and ongoing mitigative works) in connection with or resulting from any change or amendment to the Environmental Assessment Certificate and/or the Port Project and Environmental Permit for which it is responsible under Section 1.4(c)(i) of this Schedule, and for all costs, fees, expenses and delays incurred in connection therewith.

- (d) Where Project Co is unable to apply for any change or amendment to the Environmental Assessment Certificate and/or the Port Project and Environmental Permit that is Project Co's obligation or responsibility to obtain under this Section 1.4 without obtaining information, administrative assistance or other assistance from the Province or BCTFA or without submitting the application for such change or amendment in the name of the Province or BCTFA, the Province shall at Project Co's cost provide, or cause BCTFA to provide, such information, administrative assistance and other assistance as Project Co may reasonably request and the Province or BCTFA may reasonably be able to provide and have the legal ability to provide under existing Laws and, if requested, shall execute or cause to be executed such applications as are required to be in its or BCTFA's name to assist Project Co in obtaining such change or amendment.

1.5 Best Management Practices

Project Co shall perform Project Co's Environmental Obligations in accordance with Best Management Practices and shall comply with, at its own cost, the provisions of the Best Management Practices, and will not do or omit or permit to be done or omitted anything which is inconsistent with such Best Management Practices.

1.6 Environmental Permits

- (a) Except as otherwise specifically provided in this Agreement, including in relation to Province Permits, Project Co is required, at its own cost and risk, to obtain all Permits which relate to, or are required under Environmental Laws in connection with the Project and the Project Work, including all Permits necessary for Project Co to fulfill Project Co's Environmental Obligations.
- (b) Without limiting any of its other obligations under this Agreement, Project Co shall observe and comply with the standards, practices and requirements in connection with Province Permits required under Environmental Laws in connection with the Project and the Project Work.

1.7 Inquiries and Reports to Environmental Authorities

- (a) Project Co shall promptly on request provide the Province's Representative with such written authorizations as the Province may require from time to time in order to make inquiries of any Environmental Authorities regarding Project Co or any of the Principal Contractors or Subcontractors or the compliance by Project Co or any of the Principal Contractors or Subcontractors with Environmental Laws.
- (b) Project Co shall promptly forward to the Province's Representative a copy of any report, submission, application or other document relating to environmental matters on or at or affecting the Project Work, the Project Site or the Project Infrastructure that is filed or

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lodged by Project Co (or any person for whom Project Co is in law responsible) with or otherwise provided to any Environmental Authority and which is not otherwise required to be provided directly by Project Co to the Province pursuant to this Agreement.

1.8 Environmental Records

Project Co shall maintain in accordance with the Records Management Protocol all environmental documents and records (including all Permits) relating to the Project Site and the performance of the Project Work relating to environmental matters, including all records required to be maintained pursuant to the Environmental Management Plans but excluding any documents or records retained in the possession of the Province.

1.9 Performance Measures

Project Co shall perform, comply with and satisfy the performance measures set out in this Schedule (indicated by the reference “PE[XXX]” or as otherwise identified in this Schedule) and, without limiting any other provision of this Agreement, the provisions of Part 10 [NCE Points and Default Points] of Schedule 10 shall apply if Project Co fails to perform, comply with or satisfy any such performance measure.

PART 2 ENVIRONMENTAL MANAGEMENT

2.1 Environmental Director

- (a) Project Co’s Environmental Director will, irrespective of such person’s other responsibilities, have defined authority for ensuring the establishment and maintenance of the Environmental Management Plans and auditing and reporting on the performance of the Environmental Management Plans, the Environmental Assessment Certificate, the Port Project and Environmental Permit, and any terms and conditions associated with environmental Permits.
- (b) The Environmental Director shall be a Key Individual subject to the requirements of Section 3.3(b) of Schedule 2 [Representatives, Review Procedure and Consent Procedure].
- (c) The Environmental Director shall have experience on major projects that are comparable in scope, complexity and nature to the Project in:
 - (i) the development, and management of plans and practices to address project environmental requirements;
 - (ii) leading a multidisciplinary environmental team;
 - (iii) environmental regulatory management;
 - (iv) working with regulatory agencies; and
 - (v) environmental quality management.

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- (d) The Environmental Director shall have the following attributes:
 - (i) be a Qualified Environmental Professional;
 - (ii) have an understanding of environmental regulations and legislation; and
 - (iii) have effective communication, conflict resolution and organization skills.
- (e) Without limiting the generality of the foregoing, the job specification and responsibilities of the Environmental Director shall include the following:
 - (i) directing all aspects of Project Co's environmental program for the Project Work, including overseeing the environmental auditing program;
 - (ii) ensuring environmental issues and requirements are met in accordance with this Agreement;
 - (iii) establishing and maintaining working relationships with relevant Environmental Authorities and Interested Parties,
 - (iv) taking a lead role in internal environmental design reviews including development of mitigation and compensation proposals, acceptable to the Province and Environmental Authorities;
 - (v) liaising with the Province's Representative and acting as the single point representative for Project Co on all matters relating to environmental management; and
 - (vi) preparing and submitting to the Province's Representative all plans, reports and documents required under the Environmental Assessment Certificate, the Port Project and Environmental Permit, the Table of Conditions – EAC and the Project and Environmental Conditions – PPEP.

2.2 Environmental Manager

- (a) Project Co's Environmental Manager will, under the direction of the Environmental Director, have defined authority for ensuring the day-to-day implementation of the Environmental Management Plans and auditing and reporting on the performance of the Environmental Management Plans.
- (b) The Environmental Manager will be a Key Individual subject to the requirements of Section 3.3(c) of Schedule 2 [Representatives, Review Procedure and Consent Procedure].
- (c) The Environmental Manager shall also have the same experience as set out in Section 2.1(c) of this Schedule for the Environmental Director and shall have the same attributes as set out in Section 2.1(d) of this Schedule for the Environmental Director.
- (d) Without limiting the generality of the foregoing, the job specification and responsibilities of the Environmental Manager shall include the following:

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- (i) managing all environmental issues associated with the Project on a day-to-day basis, including overseeing the environmental monitoring program;
- (ii) establishing and maintaining working relationships with relevant Environmental Authorities and Interested Parties;
- (iii) effective operation of the Environmental Management Plans on a day-to-day basis; and
- (iv) ensuring environmental issues and requirements are met in accordance with this Agreement.

2.3 Construction Manager - Archaeology

- (a) In addition to the archaeologist specialists required in accordance with Section 2.4 of this Schedule, Project Co shall designate a Construction Manager - Archaeology, who will be a Key Individual subject to the requirements of Schedule 2 [Representatives, Review Procedure and Consent Procedure].
- (b) Project Co's Construction Manager - Archaeology will have demonstrable communication, organizational, and conflict resolution skills and experience in a similar role on successful infrastructure projects comparable to the Project in complexity and scope in relation to construction within areas with known, or potential for, archaeological resources, including experience in relation to the responsibilities in Section 2.3(c) of this Schedule.
- (c) The responsibilities of the Construction Manager - Archaeology will include, but not be limited to, the following:
 - (i) planning, scheduling, and coordinating Project Co's work in relation to archaeological-related construction and monitoring activities on a day-to-day basis;
 - (ii) notifying the Province of requests for archaeological monitors in accordance with Section 2.5(b)(iv) of this Schedule;
 - (iii) implementing Project Co's management plan in relation to archaeological resources and associated mitigation and monitoring work plans in coordination with Project Co's Environmental Director, Environmental Manager and Eligible Consulting Archaeologist;
 - (iv) liaising with Province and Project Co archaeologists and archaeological permit holders;
 - (v) coordinating construction planning and staging implementation with Project Co's construction managers to minimize and avoid impacts to potential archaeological resources, allow archaeological work to be undertaken, and minimize schedule impacts and delays;

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- (vi) maintaining productive working relationships with the Identified Indigenous Groups and representatives; and
- (vii) coordination with Project Co's Indigenous Contracting and Employment Coordinator and other managers to provide input into the planning, development, and implementation of training programs, cultural awareness programs, work plans and other activities in relation to planning and implementation of construction in areas with potential archaeological resources.

2.4 Environmental Specialists

Project Co shall have available, at all times until the Total Completion Date and as required during the Term following the Total Completion Date, a multi-disciplinary team of qualified environmental specialists, including an Eligible Consulting Archaeologist.

2.5 Environmental Management Requirements

- (a) Project Co shall:
 - (i) subject to Section 1.2 [Project Co's Environmental Obligations] of this Schedule, comply with all environmental requirements as set out in the Environmental Assessment Certificate, the Port Project and Environmental Permit, the Table of Conditions – EAC and the Project and Environmental Conditions - PPEP;
 - (ii) prepare all environmental submissions as set out in or required by this Agreement, including Section 2.7 [Environmental Plans and Reports] of this Schedule and Part 3 [Design and Certification Procedure] of Schedule 4;
 - (iii) issue and sign the Design Certificate (Environmental) in accordance with the procedures as set out in Part 3 [Design and Certification Procedure] of Schedule 4; and
 - (iv) organize and hold field reconnaissance meetings with Interested Parties from time to time with a view to ensuring that Interested Parties' concerns are clearly communicated to Project Co to gather input and feedback and to respond to questions and concerns.
- (b) In respect of archaeological work, including monitoring, performed in relation to Permits, including Province Permits, under the *Heritage Conservation Act* (British Columbia) and as required by this Agreement, Project Co shall:
 - (i) be responsible for planning, implementing and overseeing archaeological work and monitoring in accordance with this Agreement and to coordinate with the Construction;
 - (ii) liaise with the Province in relation to Project Co's planning, scheduling and implementation of archaeological monitoring; and

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- (iii) request archaeological monitors by notifying the Province's Representative in writing at least 10 Business Days before Project Co requires the monitors by providing the following information:
 - (A) the date (the "**Required Date**") monitors are required to commence being on the Project Site
 - (B) location(s) and description of planned Construction within the Project Site; and
 - (C) estimated duration of Construction at the identified location(s),

which archaeological monitors will be provided to Project Co by the Province, including archaeological monitors from Identified Indigenous Groups, at the Province's cost, following the receipt by the Province of such a request, provided that Project Co will be solely responsible for any costs resulting from any cancellation or rescheduling of the requirement for an archaeological monitor where notice of such cancellation or rescheduling is provided by Project Co to the Province's Representative less than 3 Business Days prior to the applicable Required Date, and provided further that, in the event of the rescheduling of any requirement for an archaeological monitor, Project Co shall provide to the Province's Representative at least 10 Business Days' notice of the new Required Date.

- (c) Project Co:
 - (i) will not be responsible for obtaining any Permit required pursuant to section 12 of the *Heritage Conservation Act* (British Columbia) for the construction of ground improvements, piles, pile caps and associated excavations in relation to the New Fraser River Bridge within the "South Approach Area" on PBR South Approach Area and as identified in Project Co's drawing submission referred to in Section 3.4.1(j) of Part 2 [Design and Construction Requirements] of Schedule 4; and
 - (ii) shall provide to the Province all information, documentation and other assistance, including cooperation, reasonably requested by the Province in order for the Province to apply for and obtain such Permit.

2.6 Fish Habitat Off-Setting

- (a) Project Co shall:
 - (i) apply for and obtain the Fisheries Authorizations from DFO; and
 - (ii) make all reasonable efforts to minimize the impacts in respect of the Project and the Project Work to the satisfaction of DFO,

and carry out the following (together, the "**Fish Habitat Off-Setting**"):

- (iii) design and construct the habitat off-setting required to address Project related effects to fish and fish habitat to the satisfaction of DFO; and
 - (iv) include in the Design, analysis of the effects of river hydraulics, including scour and sedimentation, to demonstrate the long term functionality of the habitat off-setting sites.
- (b) For Construction in relation to Section 2.6(a)(iii) of this Schedule, Project Co shall provide employment and contract opportunities to be awarded by Project Co or its Principal Contractors or Subcontractors to Identified Indigenous Groups. If available, the Province shall provide Project Co with a list of Identified Indigenous Groups in relation to these employment and contract opportunities.

2.7 Environmental Plans and Reports

- (a) Project Co shall develop, implement, maintain, and update the plans, reports and data listed in Table 2.7:

Table 2.7 Schedule of Plans, Reports and Data (Response Time Measures)

Performance Measure	Deliverable Name	Specification Reference	Due Date	Review Procedure or Consent Procedure
PE 2.7a	Environmental Management Plans excluding the Demolition Environmental Management Plan (First Submissions)	2.7	45 days from the Effective Date	Consent Procedure
PE 2.7b	Environmental Management Plans (Updates)	2.7	As soon as completed when required, and in any event no later than June 1st annually	Review Procedure
PE 2.7c	Demolition Environmental Management Plan	2.7	120 days prior to SC1 Substantial Completion Date	Consent Procedure
PE 2.7e	Environmental Work Plans	2.7	30 days prior to commencement of activity for which the Environmental Work Plan is required	Review Procedure
PE 2.7f	Monthly Environmental Reports	2.7	Within 14 days of the end of the month for which the report prepared	Review Procedure

Performance Measure	Deliverable Name	Specification Reference	Due Date	Review Procedure or Consent Procedure
PE 2.7g	Annual Environmental Reports	2.7	December 1 st annually	Review Procedure
PE 2.7h	Environmental Completion Report	2.7	Within 30 days of Total Completion Date	Review Procedure
PE 2.7i	Weekly Environmental Monitoring Reports	2.7	Within 1 week of the previous one week period of monitoring	Review Procedure
PE 2.7j	Annual Certificate of Compliance with All Environmental Laws	2.7	December 1 st annually	Review Procedure
PE 2.7k	Independent Environmental Site Assessment and/or Environmental Audit	2.7	Within 60 days of audit being requested by the Province's Representative	Review Procedure

- (b) The documents referred to in Table 2.5 that are indicated to be subject to the Consent Procedure or the Review Procedure shall be submitted to the Province's Representative for acceptance or review, as applicable, in accordance with the Consent Procedure or the Review Procedure, as the case may be, pursuant to Schedule 2 [Representatives, Review Procedure and Consent Procedure].
- (c) Project Co shall develop, implement, maintain and update Environmental Management Plans in accordance with the Environmental Assessment Certificate, the Port Project and Environmental Permit, the Table of Conditions – EAC, the Project and Environmental Conditions - PPEP and the terms set out in this Agreement, each of which shall, in addition to meeting all applicable requirements set out in this Agreement:
- (i) identify applicable roles and responsibilities of Project Co's environmental team;
 - (ii) identify monitoring and reporting requirements;
 - (iii) comply with all of Project Co's Environmental Obligations, including those set forth in the Environmental Assessment Certificate and the Port Project and Environmental Permit; and
 - (iv) be submitted to the Province's Representative:
 - (A) in the case of an initial plan not previously submitted and accepted by the Province under this Agreement, in accordance with the Consent Procedure prior to submitting such plan to any other Interested Party,

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including any appropriate Environmental Authority or Identified Indigenous Group; or

- (B) in the case of a plan which is an update to a plan previously submitted and accepted by the Province under this Agreement, in accordance with the Review Procedure prior to, or at the same time as, submitting such plan to any appropriate Environmental Authority,

or as otherwise expressly specified in this Agreement.

- (d) Project Co shall, promptly upon their production by or on behalf of Project Co or upon their coming into the possession or control of Project Co, provide the Province's Representative with copies of all environmental site assessments, audits, reports and test results relating to the Project Site, including all assessments, audits, reports and tests at any time whether before or after the Effective Date.

PE 2.7e Environmental Work Plans shall be prepared by Project Co and submitted to the Province's Representative as supplementary to the Environmental Management Plans, and will include site-specific mitigation measures to be implemented to address Construction or other Project Work;

PE 2.7f Project Co shall prepare and submit to the Province's Representative and Environmental Authorities, during any period during which Construction is undertaken, a monthly environmental report that:

- (i) outlines the Design and Construction undertaken as part of the Project Work during the period, as well as future activities, key environmental issues, monitoring activities, mitigation measures (successes and failures), resolutions to environmental impacts, and how Project Co was able to comply with all applicable Permits;
- (ii) provides an update on the status of the Table of Conditions – EAC and the Project and Environmental Conditions – PPEP;
- (iii) describes any consultation with any other Interested Parties, including appropriate Environmental Authorities or Identified Indigenous Groups, on issues pertaining to the Project; and
- (iv) has appended thereto all notes of meetings with Interested Parties, including action items, environmental sub-consultant reports, environmental incident reports and specific mitigation plans for that period.

PE 2.7g Annual environmental reports, which will be inclusive of all Design and Construction periods of the Project, shall be prepared by Project Co and submitted to the Province's Representative to provide a Project wide state of the environment summary.

PE 2.7h An environmental completion report shall be prepared by Project Co and submitted to the Province's Representative prior to the Total Completion Date.

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PE 2.7i Weekly environmental monitoring reports shall be prepared during Construction and submitted to the Province's Representative. Weekly environmental monitoring reports shall include, as a minimum, the following information:

- (i) Project area;
- (ii) name(s) of environmental monitor(s);
- (iii) period covered by report;
- (iv) date report submitted; overall weather conditions;
- (v) report recipient(s);
- (vi) contractor(s) undertaking work;
- (vii) description, photos and status of Construction by area, including within environmentally sensitive areas;
- (viii) environmental meetings and key issues discussed;
- (ix) key communications with Environmental Authorities;
- (x) description of outstanding environmental issues and/or non-compliances and corrective actions required; and
- (xi) physical and/or biophysical sampling data collected during reporting period, as required by Environmental Authorities.

PE 2.7j Project Co shall, at the request of the Province's Representative from time to time where there are reasonable grounds for making such request and in any event not less frequently than annually, provide the Province's Representative with a certificate signed by Project Co's Environmental Director certifying that Project Co has complied with all Environmental Laws and with all of its obligations under this Agreement in respect of environmental matters, providing full and complete particulars of such compliance and all documentation in connection therewith (or if any occurrence of non-compliance has taken place, providing full and complete particulars thereof and all documentation in connection therewith).

The certificate is to confirm that (to the best of the knowledge, information and belief of the Environmental Director, having made reasonable inquiry) no adverse environmental occurrence has taken place on or at or affecting the Project Site or any part thereof (or, if any such occurrence has taken place, providing full and complete particulars thereof and all documentation in connection therewith).

PE 2.7k Project Co shall, at the request of the Province's Representative from time to time where there are reasonable grounds for making such request, obtain and submit to the Province's Representative pursuant to the Review Procedure, from an independent environmental consultant (the identity of which has been accepted by the Province's Representative pursuant to the Consent Procedure), an environmental assessment of the

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Project Site (or any part or parts thereof) and/or an environmental audit of the Project Work, such compliance with any such request to be at Project Co's own cost, including obtaining any additional investigations recommended by the environmental consultant.

2.8 Specific Environmental Requirements

Prior to commencing Construction, Project Co shall conduct high-resolution air quality modelling of the Design and submit an air quality modelling report to the Province's Representative in the Final Design submission in accordance with the Review Procedure. The model design, including a dispersion modelling plan, shall be developed in consultation with Metro Vancouver. The air quality modelling report shall include, as a minimum:

- (a) record of consultation with Metro Vancouver;
- (b) modelling inputs and assumptions, including the dispersion modelling plan;
- (c) number and location of receptors (receptor grid); and
- (d) model outputs.

PART 3 CONTAMINATION AND HAZARDOUS SUBSTANCES

3.1 Waiver of Site Profile

Project Co waives the requirement, if any, for the Province to provide a site profile to Project Co for the Project Site under the *Environmental Management Act* (British Columbia) and acknowledges that it may obtain from the Environmental Authorities site profiles for any site listed in the Site Registry at <http://www2.gov.bc.ca/gov/content/environment/air-land-water/site-remediation/contaminated-sites/information-about-sites>.

3.2 No Use of Hazardous Substances

- (a) Project Co shall not use or permit to be used on the Project Site or any part thereof for the sale, storage, manufacture, disposal, handling, treatment, generation, use, transport, refinement, processing, production, remediation or Release of, or any other dealing with, any Hazardous Substance without the prior approval of the Province unless:
 - (i) the Province normally conducts or permits such activities in the case of other "controlled access highways" as defined in the *Transportation Act* (British Columbia); or
 - (ii) in the case of Hazardous Substances addressed in the Heavy Metal Memorandum of Understanding, such sale, storage, manufacture, disposal, handling, treatment, generation, use, transport, refinement, processing, production, remediation or Release of, or any other dealing with, such Hazardous Substances is in compliance with the Heavy Metal Memorandum of Understanding.
- (b) Approval may be granted or withheld in the Province's discretion, and then only in compliance with all Environmental Laws.

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3.3 Dealing with Hazardous Substances

Project Co shall:

- (a) deal with all Hazardous Substances on the Project Site in accordance with all Environmental Laws and, in the case of Hazardous Substances addressed in the Heavy Metal Memorandum of Understanding, in accordance with the Heavy Metal Memorandum of Understanding; and
- (b) at all times comply with and cause all persons for whom Project Co is responsible to comply with all Environmental Laws, and, where applicable, the Heavy Metal Memorandum of Understanding, in respect of the Project Site and the performance of the Project Work.

3.4 Notification to Province

PE 3.4a Project Co shall promptly, and in any event within 24 hours, notify the Province's Representative of:

- (i) any Release of a Hazardous Substance or any other occurrence or condition involving Hazardous Substances at or affecting the Project Site that could cause Contamination of the Project Infrastructure, the Project Site or any other lands in their vicinity or subject Project Co, the Province or BCTFA to any fines, penalties, orders, investigations or other proceedings under any Environmental Laws, together with full particulars of such Release, occurrence or condition including the location, time, agencies involved, damages suffered or caused and remedial action taken;
- (ii) all charges, orders, investigations or notices of violation or non-compliance issued against Project Co or relating to the performance of the Project Work or the Project Site under any Environmental Laws; and
- (iii) any notice, claim, action or other proceeding by any person against Project Co or relating to the performance of the Project Work or the Project Site concerning the Release or alleged Release of any Hazardous Substance.

3.5 Notification to Environmental Authorities

PE 3.5a Project Co shall, as required pursuant to and in accordance with Environmental Laws, notify the relevant Environmental Authorities of any Release of any Hazardous Substance at or from the Project Site.

Failure to provide such notice means the Province may, but will not be obliged to, notify the relevant Environmental Authorities of any Release of any Hazardous Substance.

3.6 Removal and Remediation

- (a) Project Co shall:

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- (i) promptly at any time, if requested by the Province or by any other Environmental Authority pursuant to Environmental Laws; and
- (ii) in any event upon the expiry or earlier termination of this Agreement,

remove from the Project Site or remediate or manage any and all Hazardous Substances to the numerical or risk-based standards required or permitted by Environmental Laws or, in the case of Hazardous Substances addressed in the Heavy Metal Memorandum of Understanding, in compliance with the Heavy Metal Memorandum of Understanding, and otherwise in accordance with Environmental Laws to the extent applicable.

- (b) Project Co shall remediate by removal any Contamination of any lands in the vicinity of the Project Site resulting from Hazardous Substances brought onto, used at or Released at or from the Project Site or by Project Co or any person for whom Project Co is responsible.
- (c) Upon encountering any Contamination on the Project Site, Project Co shall prepare and submit to the Province's Representative pursuant to the Consent Procedure a plan for the remediation, removal or management of such Contamination, if such remediation, removal or management is required in accordance with this Agreement and, following the acceptance of such plan by the Province, or sooner if required by Environmental Laws, Project Co shall commence and complete any required remedial, removal or management work in accordance with such plan and all Environmental Laws to the extent applicable, provide the Province's Representative with full information with respect to any such remedial, removal or management work, and comply with the reasonable requirements of the Province with respect to any such remedial, removal or management work.

3.7 Hazardous Substances Brought onto Project Site

Notwithstanding any Laws or any other provision in this Agreement to the contrary, all Hazardous Substances and materials, goods or other items containing Hazardous Substances brought onto and used at or Released at or from the Project Site by Project Co or any person for whom Project Co is in law responsible shall be and remain the sole and exclusive property of Project Co and shall not become the property of the Province or BCTFA, notwithstanding their incorporation into or affixation to the Project Site or the Project Work and notwithstanding any termination or expiration of the Term.

SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS

**APPENDIX A
ENVIRONMENTAL PERMITS**

PART 1: ENVIRONMENTAL ASSESSMENT CERTIFICATE

See attached.

PART 2: PORT PROJECT AND ENVIRONMENTAL PERMIT

See attached.

In the matter of the
ENVIRONMENTAL ASSESSMENT ACT
S.B.C. 2002, c. 43
(the Act)

and

in the matter of an
Application
for an
Environmental Assessment Certificate
(Application)

by

MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
(Proponent)

for the

PATTULLO BRIDGE REPLACEMENT PROJECT

ENVIRONMENTAL ASSESSMENT Certificate # T19-01

Whereas:

- A. The Proponent proposes to construct and operate the Project described in Schedule A to this Certificate (the "Project");
- B. On November 9, 2016, a Project Lead of the Environmental Assessment Office issued an Order under Section 10(1)(c) of the Act stating that an Environmental Assessment Certificate was required for the Project and that the Proponent could not proceed with the Project in the absence of an assessment;
- C. The assessment of the Application was conducted from August 14, 2018 to April 4, 2019, and included consultations with Indigenous groups and the public respecting the Application;
- D. Compliance with this Certificate, including its conditions, will be monitored by the staff of the Environmental Assessment Office, partner agencies and others who have been authorized to inspect under the Act;
- E. On April 4, 2019 pursuant to Section 17 of the Act, the Executive Director referred the Application, the assessment report dated April 4, 2019 and his recommendations to the undersigned dated April 4, 2019; and
- F. The undersigned have considered the Application, the summary assessment report, the assessment report, submissions from Tsleil-Waututh Nation and Musqueam Indian Band, responses to the submission from Musqueam Indian Band by the Proponent and the EAO, and the recommendations of the Executive Director.

Now Therefore,

We issue this Environmental Assessment Certificate to the Proponent for the Project as described in the Certified Project Description (Schedule A), subject to the conditions set out in the Table of Conditions (Schedule B).

Duration of Certificate

For the purpose of Section 18(1) of the Act, the deadline is five years from the date set out below.



Honourable George Heyman
Minister of Environment and
Climate Change Strategy



Honourable Selina Robinson
Minister of Municipal Affairs and Housing

Issued this 29th day of April, 2019

**PATTULLO BRIDGE REPLACEMENT
PROJECT**

SCHEDULE A

**CERTIFIED PROJECT DESCRIPTION
FOR
AN ENVIRONMENTAL ASSESSMENT CERTIFICATE**

April 04, 2019

INTERPRETATION

In this Certified Project Description, terms that are capitalized but not defined have the same meaning as those terms defined elsewhere in the Certificate, including in the Table of Conditions.

This Certified Project Description describes the Project authorized by this Certificate, but does not obligate the Holder to construct or operate any aspect of the Project unless otherwise stated.

DEFINITIONS

Holder	The Proponent or, if this Certificate has been transferred in accordance with the conditions below, the person to whom this Certificate has been transferred in accordance with such conditions.
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ABBREVIATIONS

Bridge	New 4-lane bridge
Certificate	Environmental Assessment Certificate
PER	Project and Environmental Review
Project	Pattullo Bridge Replacement Project
VFPA	Vancouver Fraser Port Authority

1. OVERVIEW

The Pattullo Bridge Replacement Project (Project) replaces the Pattullo Bridge with a new 4-lane bridge (Bridge) across the Fraser River to connect Columbia Street/East Columbia Street in New Westminster, British Columbia to King George Boulevard and Highway 17 in Surrey, British Columbia. The existing Pattullo Bridge will be demolished when the Bridge is completed.

Unless otherwise specified in this Certified Project Description, Project Components and Activities as described below are located within the Certified Project Boundary, shown in the Certified Project Area drawing included in **Appendix A**.

2. PROJECT COMPONENTS AND ACTIVITIES

Project Components and Activities comprise:

- Bridge and approaches;
- Demolition of the existing Pattullo Bridge; and
- Temporary activities.

2.1 New Bridge and Approaches

The Project includes:

- A 4-lane bridge over the Fraser River (the Bridge), with a multi-use path for cyclists and pedestrians on each side that connect to existing bike, pedestrian, or multi-use pathways in Surrey and New Westminster;
- An entrance ramp to the Bridge from Columbia Street or East Columbia Street;
- Exit ramps from the Bridge to East Columbia Street and Highway 17;
- Reconfiguration and modification of existing roads and intersections, including, but not limited to the following:
 - McBride Boulevard, Royal Avenue, East Columbia Street and Columbia Street in New Westminster;
 - King George Boulevard, at approximately 112th/111 A Avenue and Bridge Road in Surrey;
 - Intersection of Bridgeview Drive and King George Boulevard in Surrey; and
 - Grade separation of Highway 17 and Old Yale Road in Surrey;
- Connections between the multi-use pathways on the Bridge and multi-use path systems in Surrey and New Westminster; and
- A safety and security fence on all exterior sides of the Bridge.

The multi-use pathways for cyclists and pedestrians on the Bridge will be separated from motorized traffic by a fixed barrier.

The Bridge will have a maximum of four (4) in-river piers. All in-river piers will be located outside of the Navigation Protection Zone defined by Vancouver Fraser Port Authority in the *Project and Environmental Review (PER) Project Permit* for the Project.

The Bridge will have a length of up to 1.5 kilometres, abutment to abutment, and a minimum vertical navigational clearance that accommodates the Navigation Protection Zone subject to the requirements of the *Navigation Protection Act*.

The Bridge and approaches will be located within the Certified Project Boundary. A maximum of nine (9) piers will be located within the South Mainline Approach Area shown in the Certified Project Area drawing included in **Appendix A**.

2.2 Demolition of the Existing Pattullo Bridge

Project components and activities associated with demolition of the Pattullo Bridge include the following:

- Demolition and removal of utilities and electrical systems located on/connected to the existing Pattullo Bridge and approaches and associated rights-of-way; and
- Demolition and removal of the Pattullo Bridge.

In-river piers of the existing bridge must be removed such that any remaining portions, retained to minimize potential impacts on stability of the riverbed, do not obstruct or impede safe navigation as per the requirements of the *Navigation Protection Act*.

2.3 Temporary Activities

The Project includes the following temporary components and activities during Construction and Demolition:

- Site office(s);
- Temporary barge anchoring, loading and unloading;
- Laydown areas;
- Temporary trestle to provide access to in-river construction areas;
- Access roads;
- Preloading and associated retaining walls; and
- Other ancillary components and activities.

With the exception of temporary barge anchoring, loading and unloading, site offices, and laydown areas, the above temporary components and activities will be located within the Certified Project Boundary.

Barge loading and unloading facilities will not be located within the Barge Facility Exclusion Zone shown in the Certified Project Area drawing included in Appendix A.

APPENDIX A:

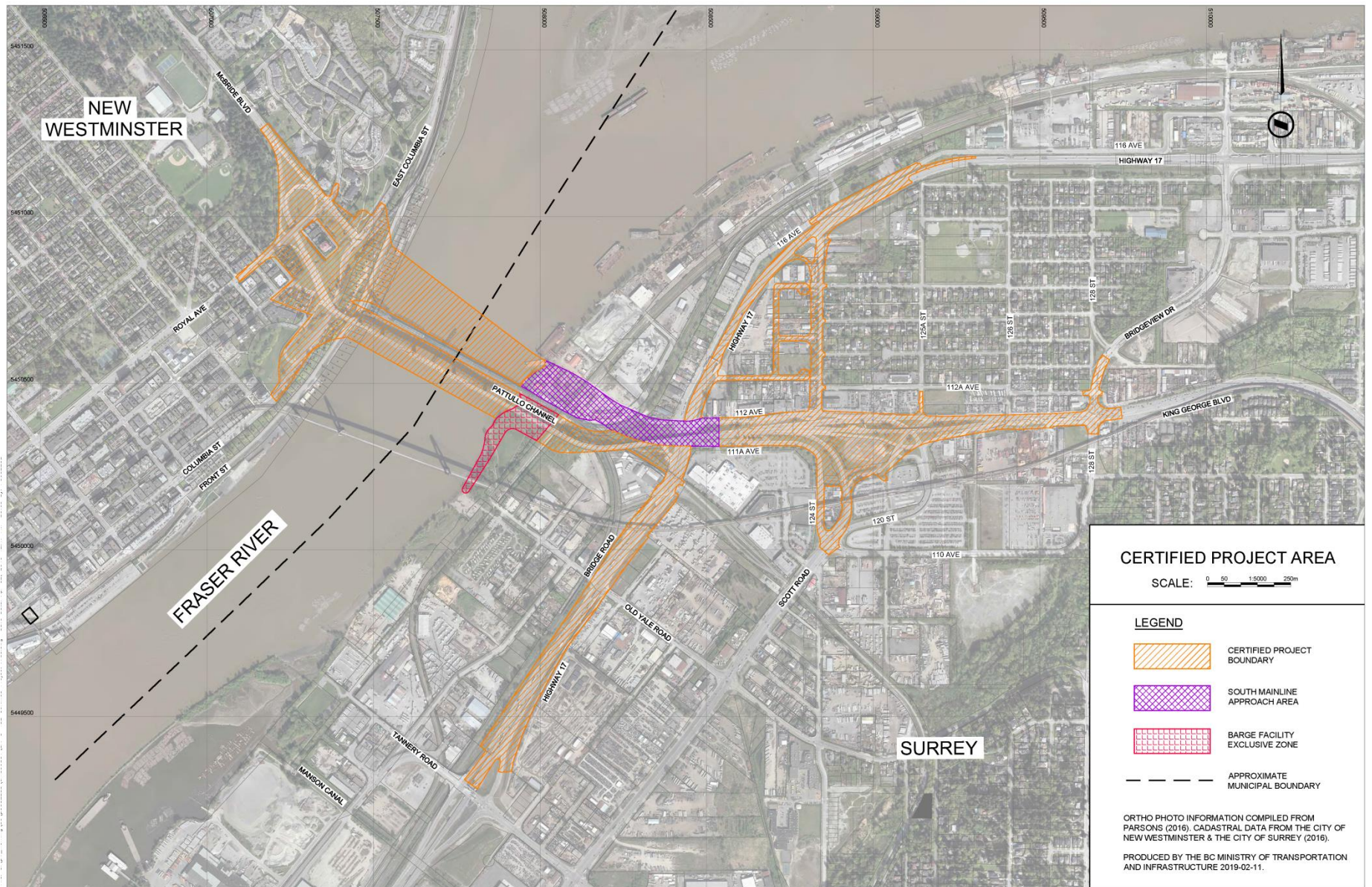


Figure 1: Certified Project Area

PATTULLO BRIDGE REPLACEMENT PROJECT

SCHEDULE B

TABLE OF CONDITIONS

FOR

AN ENVIRONMENTAL ASSESSMENT CERTIFICATE

DEFINITIONS

Indigenous Groups:	<p>Refers to the Indigenous Groups identified in Schedule B in the Section 11 Order:</p> <ul style="list-style-type: none"> • Cowichan Tribes; • Halalt First Nation; • Katzie First Nation; • Kwantlen First Nation; • Kwikwetlem First Nation; • Lake Cowichan First Nation; • Lyackson First Nation; • Musqueam Indian Band; • Penelakut Tribe; • Semiahmoo First Nation; • Squamish Nation; • Stz'uminus First Nation; • Tsawwassen First Nation; and • Tseil-Waututh Nation.
Application	<p>Application submitted by the British Columbia Ministry of Transportation and Infrastructure to the Environmental Assessment Office on August 14, 2018 applying for an Environmental Assessment Certificate, pursuant to Section 16 of the <i>Environmental Assessment Act</i>, and accepted for review on August 14, 2018.</p>
Certificate	<p>Environmental Assessment Certificate</p>
Construction	<p>The phase of the Project during which the new bridge and associated infrastructure, are constructed, including in-river work, physical alteration of land, vegetation or any other aspect of the natural environment, occurs. For the purposes of this Schedule B, Construction does not include any activities conducted solely for investigative purposes under a valid permit or authorization.</p>
Demolition	<p>The phase of the Project during which the existing Pattullo Bridge is demolished resulting in in-river work, the physical alteration of land, vegetation, or any other aspect of the natural environment.</p>

Holder	The British Columbia Ministry of Transportation and Infrastructure or, if this Certificate has been transferred in accordance with the conditions below, the entity to which this Certificate has been transferred in accordance with such conditions.
Operations	The phase of the Project commencing when the new bridge and approaches are open to public traffic.
Project	The Pattullo Bridge Replacement Project as described in the Certified Project Description (CPD) attached as Schedule A to this Certificate.
Qualified Professional	A person who has training, experience and expertise in a discipline relevant to the field of practice set out in the condition, and who is registered with the appropriate professional organization in British Columbia, is acting under that organization's code of ethics and is subject to disciplinary action by that organization. The EAO may update this definition in order to maintain consistency with Provincial policy or practice regarding Qualified Professionals.
TransLink	The South Coast British Columbia Transportation Authority

ACRONYMS AND ABBREVIATIONS

AIA	Archaeological Impact Assessment
ATK	Aboriginal Traditional Knowledge
CPD	Certified Project Description
DFO	Fisheries and Oceans Canada
EAO	Environmental Assessment Office
FLNRORD	Ministry of Forests, Lands, Natural Resource Operations and Rural Development
IEM	Independent Environmental Monitor
MOTI	Ministry of Transportation and Infrastructure
QP	Qualified Professional
TC	Transport Canada
TUS	Traditional Use Study
VFPA	Vancouver Fraser Port Authority

TABLE OF CONDITIONS

No.	Condition
1.	<p>Document Review and Implementation</p> <p>Where a condition of this Certificate requires the Holder to provide a plan, program or other document, the Holder must provide the plan, program or other document to the Environmental Assessment Office (EAO) in the timeframe referenced in such condition, unless otherwise approved by the EAO. The EAO may, within 45 days of receiving a copy of such plan, program or other document, advise that:</p> <ul style="list-style-type: none"> a) The Holder may proceed to implement the plan, program or other document with or without revisions; or b) A revised plan, program or other document must be provided for approval of the EAO prior to a specified activity or milestone. <p>If the EAO advises pursuant to paragraphs (a) or (b) that changes are required to the plan, program or other document, then the Holder must follow the instructions of the EAO in that regard.</p> <p>If the EAO does not advise on a) or b) within 45 days of the EAO receiving a plan, program or other document, the Holder may proceed to implement the plan, program or other document.</p> <p>The Holder may, or the EAO may require the Holder to, revise any plan, program or other document if the Holder or the EAO determines that the implementation of the plan, program or other document is not:</p> <ul style="list-style-type: none"> c) Meeting one or more objectives of the plan, program or other document set out in the relevant condition of this Certificate; d) Having the effects contemplated or intended, as set out in the plan, program or other document itself; e) Consistent with the Certificate; or f) Consistent with changes in industry best practices or technology.
2.	<p>Plan Development</p> <p>1. Where a condition of this Certificate requires the Holder to develop a plan, program or similar document, any such plan, program or document must, at a minimum, include the following information:</p> <ul style="list-style-type: none"> i) Purpose and objectives of the plan, program or other document; ii) Roles and responsibilities of the Holder, project personnel and contractors; iii) Names and if applicable, professional certifications and professional

No.	Condition
	<p>stamps/seals, for those responsible for the preparation of the plan, program or other document;</p> <ul style="list-style-type: none"> iv) Schedule for implementing the plan, program or other document throughout the relevant Project phases; v) Means by which the effectiveness of the mitigation measures will be evaluated including the schedule for evaluating effectiveness; vi) Adaptive management plan to address effects of the Project if the monitoring conducted under section 2 of this condition shows that those effects: <ul style="list-style-type: none"> i. Are not mitigated to the extent contemplated in the Application; or ii. Are not predicted in the Application; vii) Schedules and methods for the submission of reporting to specific agencies, Indigenous Group(s) and the public, and the required form and content of those reports; and viii) Process and timing for updating and revising the plan, program or other document, including any consultation with agencies and Indigenous Groups that would occur in connection with such updates and revisions. <p>2. Where a plan, program or other document includes monitoring requirements, the plan, program or other document must include:</p> <ul style="list-style-type: none"> i) Description of baseline information that will be used to support monitoring of the effectiveness of mitigation; ii) Methodology, location, frequency, timing and duration of monitoring; and iii) Scope, content and frequency of reporting of the monitoring results.
3.	<p>Consultation</p> <p>Where a condition of this Certificate requires the Holder to consult a particular party or parties regarding the content of a plan, program or other document the Holder must, to the satisfaction of the EAO:</p> <ul style="list-style-type: none"> a) Provide written notice to each such party that: <ul style="list-style-type: none"> i) Includes a copy of the plan, program or other document; ii) Invites the party to provide its views on the content of such plan, program or other document; and iii) Indicates: <ul style="list-style-type: none"> i. If a timeframe providing such views to the Holder is specified in the relevant condition of this Certificate, that the party may provide such views to the Holder within such time frame; or ii. If a timeframe providing such views to the Holder is not specified in the

No.	Condition
	<p style="text-align: center;">relevant condition of this Certificate, specifies a reasonable period during which the party may submit such views to the Holder;</p> <ul style="list-style-type: none"> b) Undertake a full and impartial consideration of any views and other information provided by a party in accordance with the timelines specified in a notice given pursuant to paragraph (a); c) Provide a written explanation to each party that provided comments in accordance with a notice given pursuant to paragraph (a) as to: <ul style="list-style-type: none"> i) How the views and information provided by such party to the Holder have been considered and addressed in a revised version of the plan, program or other document; or ii) Why such views and information have not been addressed in a revised version of the plan, program or other document; d) Maintain a record of consultation with each such party regarding the plan, program or other document; and e) Provide a copy of such consultation record to the EAO, the relevant party, or both, promptly upon the written request of the EAO or such party.
4.	<p>Compliance Verification and Reporting</p> <p>The Holder must provide any document, data or information requested by the EAO for the purposes of compliance inspection and verification.</p> <p>The Holder must submit a report to the attention of the EAO and Indigenous Groups on the status of compliance with this Certificate at the following times:</p> <ul style="list-style-type: none"> a) At least 30 days prior to the start of Construction; and b) On or before January 31 in each year after the start of Construction, until three years after the start of Operations. <p>The reports must be in a form satisfactory to the EAO. The EAO may adjust or extend this reporting requirement by providing written notice to the Holder.</p>
5.	<p>Project Status Notification</p> <p>The Holder must notify the EAO, Vancouver Fraser Port Authority (VFPA) and Indigenous Groups in writing that the Project is under construction, under demolition, and when it is operational. The notification must be received by the EAO, VFPA, and Indigenous Groups within three months of the commencement of Construction, Demolition and Operations.</p>

No.	Condition
	<p>Should the primary contact for the Project change, the Holder must notify the EAO, VFPA and Indigenous Groups, in writing, within 30 days of such change and provide the physical address, email address and phone number(s) of the new primary contact.</p>
6.	<p>Compliance Notification</p> <p>The Holder must notify the EAO, VFPA and Indigenous Groups:</p> <ul style="list-style-type: none"> a) As soon as practical; and b) In any event, no more than 72 hours, <p>after the Holder determines that the Holder has not, or may not have, fully complied with this Certificate.</p>
7.	<p>Independent Environmental Monitor</p> <p>The Holder must retain the services of an Independent Environmental Monitor (IEM). The Holder must develop the qualification requirements and evaluation criteria for the selection of the IEM in consultation with Indigenous Groups.</p> <p>The IEM must be a Qualified Professional (QP), unless otherwise approved by the EAO, with a minimum of five years experience in monitoring construction in British Columbia. The IEM will:</p> <ul style="list-style-type: none"> a) Observe and record for, and report to, the EAO on compliance with the Certificate; and b) Provide information to the EAO, Indigenous Groups, Ministry of Forests, Lands and Natural Resource Operations and Rural Development (FLNRORD) and VFPA, <p>as directed by the EAO. Subject to any exceptions set out in the terms of engagement for the IEM, when providing information or reports to the EAO, the IEM must not provide such information or reports to the Holder in advance of providing such information or reports to the EAO, Indigenous Groups, FLNRORD and VFPA.</p> <p>The Holder must retain the IEM throughout Construction and Demolition and for three years after the completion of Demolition.</p> <p>The Holder must develop the terms of engagement for the IEM in consultation with Indigenous Groups, FLNRORD and VFPA:</p> <ul style="list-style-type: none"> c) 45 days prior to the planned commencement of Construction, the Holder must: <ul style="list-style-type: none"> i) Submit to the EAO for review the name, organization and qualifications of the proposed IEM and the IEM terms of engagement; and ii) Provide notice to Indigenous Groups of the name, organization and

No.	Condition
	<p style="text-align: center;">qualifications of the proposed IEM.</p> <p>The Holder must not start Construction until the selection of the IEM and the terms of engagement have been approved by the EAO.</p> <p>The terms of engagement must include, at a minimum, the following:</p> <ul style="list-style-type: none"> d) The role, responsibilities and qualifications of the IEM; e) The roles, responsibilities and qualifications of any staff or other persons including Indigenous monitors who will assist the IEM with performing the IEM's roles and responsibilities (each an "IEM Support"); f) The nature and frequency of monitoring; g) The process whereby the IEM or an IEM Support will make recommendations to the Holder to take mitigative or corrective actions to address any non-compliance or potential non-compliance with this Certificate; h) The process by which the recommendations in section g) above will be communicated to the EAO and the Holder; i) The situations in which the IEM will have the authority to stop work on part of or all of the project if the IEM determines that: <ul style="list-style-type: none"> i) The Holder has not, or may have not, complied fully with the requirements of this Certificate; and ii) Stopping work is necessary to prevent or reduce Project-related adverse effects as determined by the IEM or any IEM support; j) The details of a report to be submitted to the EAO and Indigenous Groups upon completion of Construction and Demolition, and three years following the completion of Demolition. The report must be written by the IEM and include, but not necessarily be limited to: <ul style="list-style-type: none"> i) A record of all non-compliances with this Certificate; ii) A record of the recommendations made by the IEM to the Holder to prevent or address any non-compliance with this Certificate; iii) A record of whether any such recommendations from the IEM were implemented and the corresponding outcome of implementation; iv) A record of all stop-work orders issued to prevent or address a non-compliance with this Certificate and any other Provincial or Federal legislation or authorization applicable to the Project; and, v) Assessment of the effectiveness of Project mitigation measures for Construction and Demolition and for three years after completion of Demolition. k) A requirement that a detailed work plan for Construction, Demolition and for the first three years after the completion of Demolition be submitted to the EAO for approval 60 days prior to the start of Construction. The work plans must describe

No.	Condition
	<p>the frequency of inspections and rationale for that frequency, the manner in which IEM-identified non-compliances will be communicated to the EAO, the Holder and Indigenous Groups, and the format and frequency of IEM reports, on an annual basis.</p>
8.	<p>Indigenous Group Monitoring Plan</p> <p>The Holder must, to the satisfaction of the EAO, offer opportunities for members or representatives of Indigenous Groups to participate in monitoring activities during Construction and Demolition, including, but not limited to, monitoring of Construction and Demolition activities that may affect traditional use and related environmental values.</p> <p>The Holder must prepare an Indigenous Group Monitoring Plan in consultation with Indigenous Groups and the EAO. The plan must include at least the following:</p> <ul style="list-style-type: none"> a) The methods for communicating monitoring opportunities to Indigenous Groups and their members b) The roles and responsibilities of Indigenous monitors, including: <ul style="list-style-type: none"> i) The nature and frequency of the monitoring activities that will be conducted; and ii) The means and methods by which monitoring activities will be undertaken; c) Protocols for access to the Project and access to monitoring locations by Indigenous Group Monitors; and d) The training, equipment and support that will be provided to the monitors to support the monitoring activities. <p>The Holder must provide the plan to Indigenous Groups and the EAO for review a minimum of 60 days prior to the planned commencement of Construction.</p> <p>The plan, and any amendments thereto, must be implemented prior to Construction and during Construction and Demolition, and to the satisfaction of the EAO.</p>
9.	<p>Construction Environmental Management Plan</p> <p>The Holder must retain one or more Qualified Professionals to develop a Construction Environmental Management Plan. The plan must be developed in consultation with FLNRORD, TC, VFPA, Metro Vancouver, City of New Westminster, City of Surrey and Indigenous Groups.</p> <p>The plan must apply to all components of the Project, including any work sites external to the Certified Project Area. The plan must include, at a minimum, component plans to address:</p> <ul style="list-style-type: none"> a) Air quality management;

No.	Condition
	<ul style="list-style-type: none"> b) Construction health and safety management; c) Construction staging, laydown, and any work sites external to the Certified Project Area; d) Contaminated sites management; e) Emergency response and spill prevention; f) Erosion and sediment control; g) Hazardous materials management; h) Standing heritage resources such as Woodlands wall and heritage buildings and houses within the Certified Project Area; i) Non-hazardous waste management; j) Lighting Management, including but not limited to the means by which the potential attraction of birds will be mitigated; k) Noise and vibration; l) Soil management; m) Stormwater management and pollution prevention; n) Surface water management; o) Water quality monitoring for in-river works; p) Vegetation and invasive species management, including but not limited to: <ul style="list-style-type: none"> i) Rare plant surveys; ii) Culturally significant plant surveys; and iii) Revegetation plans to restore and enhance the potential of permeable surfaces of the site to function effectively as fish, wildlife, and migratory bird habitats; q) Wildlife and wildlife habitat management including but not limited to: <ul style="list-style-type: none"> i) Pre-construction bird and wildlife surveys; and ii) Pre-construction shoreline mammal habitat surveys. <p>The plan must include a description of how Indigenous traditional knowledge and Indigenous traditional use information, shared with the Holder by Indigenous Groups, has been incorporated into the plan.</p> <p>The Holder must complete the surveys required by p) and q) of this condition prior to the planned commencement of Construction. Survey results must be shared with the EAO, FLNRORD, TC, VFPA, Metro Vancouver, City of New Westminister, City of Surrey and Indigenous Groups prior to Construction and must inform the development of the plan.</p> <p>The Holder must provide this plan to the EAO, FLNRORD, TC, VFPA, Metro Vancouver, City of New Westminister, City of Surrey and Indigenous Groups for review a minimum of 60 days prior to the planned commencement of Construction.</p>

No.	Condition
	The plan, and any amendments thereto, must be implemented to the satisfaction of the QP(s) throughout Construction and to the satisfaction of the EAO.
10.	<p data-bbox="233 344 909 378">Demolition Environmental Management Plan</p> <p data-bbox="233 428 1429 583">The Holder must retain one or more QPs to develop a Demolition Environmental Management Plan. The plan must be developed in consultation with FLNRORD, TC, VFPA, Metro Vancouver, City of New Westminster, City of Surrey, and Indigenous Groups.</p> <p data-bbox="233 638 1487 751">The plan must apply to all components of the Project, including any work sites external to the Certified Project Area. The plan must include, at a minimum, component plans to address:</p> <ul style="list-style-type: none"> <li data-bbox="282 764 675 798">a) Air quality management; <li data-bbox="282 806 782 840">b) Health and safety management; <li data-bbox="282 848 1455 919">c) Demolition staging, laydown, and any work sites external to the Certified Project Area; <li data-bbox="282 928 805 961">d) Contaminated sites management; <li data-bbox="282 970 922 1003">e) Emergency response and spill prevention; <li data-bbox="282 1012 750 1045">f) Erosion and sediment control; <li data-bbox="282 1054 824 1087">g) Hazardous materials management; <li data-bbox="282 1096 1455 1167">h) Standing heritage resources, including heritage buildings and houses that are in the Certified Project Area; <li data-bbox="282 1176 844 1209">i) Non-hazardous waste management; <li data-bbox="282 1218 646 1251">j) Lighting management; <li data-bbox="282 1260 613 1293">k) Noise and vibration; <li data-bbox="282 1302 587 1335">l) Soil management; <li data-bbox="282 1344 1042 1377">m) Stormwater management and pollution prevention; <li data-bbox="282 1386 730 1419">n) Surface water management; <li data-bbox="282 1428 925 1461">o) Water quality monitoring for in-river works; <li data-bbox="282 1470 1373 1503">p) Vegetation and invasive species management, including but not limited to: <ul style="list-style-type: none"> <li data-bbox="347 1512 701 1545">i) Rare plant surveys; <li data-bbox="347 1554 974 1587">ii) Culturally significant plant surveys; and <li data-bbox="347 1596 1487 1713">iii) Revegetation plans to restore and enhance the potential of permeable surfaces of the site to function effectively as fish, wildlife, and migratory bird habitats; and <li data-bbox="282 1722 1481 1793">q) Wildlife and wildlife habitat management and restoration, including, but not limited to, pre-demolition bird and wildlife surveys. <p data-bbox="233 1856 1373 1890">The plan must include a description of how Indigenous traditional knowledge and</p>

No.	Condition
	<p>Indigenous traditional use information, shared with the Holder by Indigenous Groups, has been incorporated into the plan.</p> <p>The Holder must complete the surveys required by p) and q) of this condition prior to the planned commencement of Demolition. Survey results must be shared with the EAO, FLNRORD, TC, VFPA, and Indigenous Groups prior to Demolition and must inform the development of the plan.</p> <p>The Holder must provide this plan to the EAO, FLNRORD, TC, VFPA, Metro Vancouver, City of New Westminster, City of Surrey, and Indigenous Groups for review a minimum of 60 days prior to the planned commencement of Demolition.</p> <p>The plan, and any amendments thereto, must be implemented to the satisfaction of the QP(s) throughout Demolition and to the satisfaction of the EAO.</p>
11.	<p>Fish and Fish Habitat Monitoring and Mitigation Plan</p> <p>The Holder must retain a QP to develop a Fish and Fish Habitat Monitoring and Mitigation Plan to identify and mitigate potential adverse effects to fish and fish habitat during Construction and Demolition.</p> <p>The plan must be developed in consultation with FLNRORD and Indigenous Groups.</p> <p>The plan must include at least the following:</p> <ul style="list-style-type: none"> a) A description of the measures and standards that will be in place to avoid, reduce, or otherwise mitigate adverse effects on fish and fish habitat that could result from Construction and Demolition; b) A list of fish species at risk (i.e. fish species identified as being at risk through federal or BC legislation) that have the potential to be affected by Project-related activities; c) Identification of reduced-risk work windows, including those windows for eulachon, sturgeon and salmon species, as well as for any species at risk listed in (b), and identification of reduced-risk windows communicated by Indigenous Groups to the Holder, for in-river construction and demolition, and the work that will occur within these windows; d) Identification of, and justification for, any work that will occur outside of the reduced-risk work windows identified in accordance with paragraph (c), and measures to mitigate impacts of such works to fish and fish habitat; e) The means by which, and timing when, monitoring of fish presence, including, but

No.	Condition
	<p>not limited to, the use of side-scan sonar, will be undertaken to support the implementation of mitigation and monitoring to address potential effects to fish, including sturgeon, eulachon, salmon species and any species at risk listed in (b), as determined by a QP;</p> <p>f) The means by which, and timing when, monitoring results will be shared;</p> <p>g) Identification of the geographic areas where, the means by which, and periods of time when, underwater noise monitoring in the Fraser River will be conducted; and</p> <p>h) A description of how Indigenous traditional knowledge and Indigenous traditional use information, shared with the Holder by Indigenous Groups, has been incorporated into the plan.</p> <p>The Holder must complete the <i>Pattullo Bridge Replacement Project – Eulachon Spawning and Staging Study</i> initiated by the Holder in December 2018 prior to commencing Construction. Study results must be shared with the EAO, FLNRORD, and Indigenous Groups prior to Construction and must inform the development of the plan.</p> <p>The Holder must provide this plan to the EAO, FLNRORD and Indigenous Groups for review a minimum of 60 days prior to the planned commencement of Construction.</p> <p>The plan, and any amendments thereto, must be implemented to the satisfaction of the QP throughout Construction and Demolition and to the satisfaction of the EAO.</p>
12.	<p>Fish and Wildlife Habitat Offsetting Plan</p> <p>The Holder must retain a QP to develop a plan for offsetting the loss of habitat from the Project. The plan must be developed in consultation with City of New Westminster, City of Surrey, FLNRORD, VFPA and Indigenous Groups.</p> <p>The plan must include at least the following:</p> <p>a) A description of the measures that will be implemented to offset residual fish habitat loss associated with the Project;</p> <p>b) The means by which the Holder will ensure the offsetting habitat will provide a higher value than the fish habitat it is replacing, as determined by a QP. The plan must describe how the offsetting habitat provides a higher value than the fish habitat it is replacing;</p> <p>c) A description of the measures and standards that will be put in place to avoid or mitigate adverse effects on fish and fish habitat that could result from the implementation of the offsetting measures referred to in paragraph (a);</p> <p>d) A description of the monitoring measures that will be in place to assess the</p>

No.	Condition
	<p>effectiveness of the offsetting measures referred to in paragraph (a);</p> <p>e) The timeline for the implementation of the offsetting plan;</p> <p>f) A description of the contingency measures and associated monitoring measures that will be put into place if the offsetting measures referred to in paragraph (a) are not successful in offsetting the residual loss of fish habitat resulting from the Project;</p> <p>g) Identification of habitat enhancement opportunities including measures to incorporate wildlife and migratory bird habitat offsetting;</p> <p>h) A description of a monitoring program to assess and evaluate the effectiveness of offsetting measures referred to in paragraph (f);</p> <p>i) A description of how Indigenous traditional knowledge and Indigenous traditional use information, shared with the Holder by Indigenous Groups for consideration, has been incorporated into the plan.</p> <p>The Holder must provide the plan to the EAO, FLNRORD, City of New Westminster, City of Surrey, VFPA and Indigenous Groups for review a minimum 60 days prior to the planned commencement of Construction. The plan and any amendments thereto, must be implemented throughout Construction and Demolition under the supervision of the QP and to the satisfaction of the EAO.</p>
13.	<p>Marine and Fisheries Access Management Plan</p> <p>The Holder must develop a plan for marine and fisheries access management applicable to Construction and Demolition. The plan must be developed in consultation with Indigenous Groups, VFPA and TC.</p> <p>The plan must include at least the following:</p> <p>a) A description of how the Holder will avoid, minimize or otherwise mitigate or offset disruptions caused by Construction and Demolition for commercial fisheries or for members of Indigenous Groups to carry out traditional use activities including fishing for food, social and ceremonial purposes that have been identified and communicated by Indigenous Groups to the Holder in relation to this or other relevant plans;</p> <p>b) Identification of travel corridors and placement of Project related marine vessels and equipment into and within the Certified Project Area during Construction and Demolition;</p> <p>c) Identification of existing navigational routes, commercial fishing areas, commercial shipping use, recreational and tourism use, and any associated timing windows;</p> <p>d) Identification of existing and traditional navigational routes, fishing areas and</p>

No.	Condition
	<p>harvesting areas, as identified and communicated by Indigenous Groups, and any associated timing windows;</p> <ul style="list-style-type: none"> e) Construction and Demolition locations, activities, and schedule, including but not limited to staging and laydown areas, barge loading and unloading areas, and habitat offsetting activities, that have the potential to interfere with fishing access and related navigation; f) Results of supplemental hydraulic modeling based on the detailed design of in-river components of the Project, including predicted Project-related changes in scour and sediment deposition, flow velocities and flow distribution in the Fraser River, and mitigation measures including optimization of pier shapes and alignment, proposed to address potential adverse effects predicted by the modelling, and the means to inform Indigenous Groups of these changes; g) The locations at and frequency with which river bed and foreshore monitoring will be conducted for up to a duration of five years after Demolition activities. Parameters must include scour and sediment deposition, flow velocities, and flow distribution; h) A complaint resolution process and compensation regime for loss or damage to traps, nets and other fishing equipment, anchors and other vessel-related gear due to interactions with Project-related marine vessels; i) Actions to inform marine users and Indigenous Groups of the anticipated Project schedule for marine-based activities during Construction and Demolition; j) Methods to coordinate activities with other marine users; k) A description of marine communications, emergency preparedness procedures and other measures to address the safety of marine users, fishers and construction personnel and to minimize the likelihood of vessel collisions during Construction and Demolition; and l) A description of how Indigenous traditional knowledge and Indigenous traditional use information, shared with the Holder by Indigenous Groups, has been incorporated into the plan. <p>The Holder must provide the plan to the EAO, Indigenous Groups, VFPA, and TC no less than 60 days prior to the Holder's planned date to commence in-river Construction activities. The Holder must implement the plan throughout in-river Construction and Demolition activities, to the satisfaction of the EAO.</p> <p>For the purposes of this condition, 'in-river Construction and Demolition activities' includes activities related to Construction and Demolition where Project-related marine vessels, barges and equipment, or machinery, and impediments to navigation, including pier construction and dewatering activities, are present within the Fraser River.</p>

No.	Condition
14.	<p data-bbox="233 239 626 275">Access Management Plan</p> <p data-bbox="233 323 1451 485">The Holder must develop a plan for access management during Construction and Demolition. The plan must be developed in consultation with City of New Westminster, City of Surrey, Fraser Health, Metro Vancouver, TransLink, BC Cycling Coalition, HUB Cycling and Indigenous Groups.</p> <p data-bbox="233 533 850 569">The plan must include at least the following:</p> <ul style="list-style-type: none"> <li data-bbox="282 575 1487 653">a) Measures to avoid or mitigate potential effects to cycling, pedestrian and vehicular traffic, and public transit service; <li data-bbox="282 659 1459 779">b) A description of how traffic interruptions will be planned and mitigated, traffic restrictions and re-routing scenarios will be communicated to stakeholders, emergency responders, transit agencies, municipalities and adjacent land users; <li data-bbox="282 785 1487 1157">c) The means by which the Holder will: <ul style="list-style-type: none"> <li data-bbox="347 827 1187 863">i) Control public access along the Certified Project Area; <li data-bbox="347 869 1338 947">ii) Maintain, restore or enhance existing access to public use areas, community amenities, businesses and residences; <li data-bbox="347 953 1232 989">iii) Maintain, restore or enhance existing cycling access; and <li data-bbox="347 995 1468 1157">iv) Avoid or mitigate any disruption caused by Construction and Demolition to the access for members of Indigenous Groups to carry out land-based traditional use activities that have been identified and communicated by Indigenous Groups to the Holder in relation to this and other relevant plans. <p data-bbox="233 1205 1492 1409">The Holder must provide the plan to the EAO, City of New Westminster, City of Surrey, Fraser Health, Metro Vancouver, TransLink, BC Cycling Coalition, HUB Cycling, and Indigenous Groups for review a minimum 60 days prior to the planned commencement of Construction. The plan, and any amendments thereto, must be implemented throughout Construction and Demolition, to the satisfaction of the EAO.</p>
15.	<p data-bbox="233 1478 1105 1514">Cultural and Archaeological Resources Management Plan</p> <p data-bbox="233 1562 1487 1766">The Holder must retain a QP to develop a plan for the mitigation of impacts of the Project to archaeological resources and cultural sites during Construction and Demolition, including but not limited to sites and resources protected under the <i>Heritage Conservation Act</i>. The plan must be developed in consultation with Indigenous Groups and FLNRORD.</p> <p data-bbox="233 1814 1479 1892">The Holder must develop qualifications and evaluation criteria for the selection of the QP for the plan in consultation with Indigenous Groups.</p>

No.	Condition
	<p>The plan must include at a minimum the following:</p> <ul style="list-style-type: none"> a) Procedures for the identification and treatment of archaeological or cultural resources that may be affected by the Project, and procedures for the preservation and sharing of information regarding these resources with Indigenous Groups and FLNRORD; b) The means by which Indigenous Groups will be involved in the Project Archaeological Impact Assessment (AIA); c) The means by which the Holder will incorporate the results of the AIA into the river hydraulics and morphology model to determine any future requirements for an archaeological shoreline assessment and how the assessment may be conducted; d) The measures to prevent unauthorized access to, and to address access preferences of Indigenous Groups to, archaeological and cultural sites during the completion of the AIA and during Construction and Demolition; e) A description of how archaeological and cultural resources and sites within the Certified Project Area could be impacted by Project activities; f) Measures for mitigating and monitoring Project impacts on archaeological and cultural sites; g) The appropriate locations to store archaeological and cultural resources found within the Certified Project Boundary; h) The means by which the Holder will develop and implement a Chance Find Protocol with Indigenous Groups, including the means by which the Holder will manage chance finds of archaeological and resources; i) The means by which the Holder will develop and implement an ancestral remains protocol in the event ancestral remains are encountered; j) How knowledge from the AIA, Traditional Use Studies (TUS), and Aboriginal Traditional Knowledge (ATK) has been incorporated in the plan; and k) Provisions for training employees and contractors of the Project on cultural sensitivity, confidentiality and recognition of heritage values. <p>Where access permits, as determined by the QP, the AIA must be completed prior to the commencement of Construction.</p> <p>The Holder must provide the plan to the EAO, FLNRORD and Indigenous Groups for review a minimum of 60 days prior to the planned commencement of Construction. The Holder must not commence Construction until the plan is approved by the EAO.</p> <p>The plan and any amendments thereto, must be implemented to the satisfaction of the Qualified Professional throughout Construction, Demolition, and for the first three years</p>

No.	Condition
	after the completion of Demolition, and to the satisfaction of the EAO.
16.	<p data-bbox="230 340 805 373">Indigenous Cultural Recognition Plan</p> <p data-bbox="230 411 1386 529">The Holder must develop a plan for Indigenous cultural recognition, interpretation, education and commemoration of heritage sites. The plan must be developed in consultation with Indigenous Groups.</p> <p data-bbox="230 579 850 613">The plan must include at least the following:</p> <ul style="list-style-type: none"> <li data-bbox="282 621 1461 781">a) Description of a process for continuing engagement with Indigenous Groups throughout Construction, Demolition and for the first three years after the completion of Demolition, to further identify and plan for opportunities for cultural recognition, interpretation, education, and commemoration; <li data-bbox="282 789 1477 865">b) Description of how opportunities for cultural recognition that have been requested by Indigenous Groups have been considered and supported by the Holder; <li data-bbox="282 873 1487 991">c) The process by which Indigenous Groups will be involved in the implementation of the cultural recognition, interpretation, education, or commemoration opportunity and associated activities; and <li data-bbox="282 999 1383 1108">d) Describe opportunities made available to Indigenous Groups to review and provide comment on Project design, and documentation of how feedback received, or comments raised by Indigenous Groups were considered. <p data-bbox="230 1150 1448 1310">The Holder must provide the plan to the EAO and Indigenous Groups for review a minimum of 60 days prior to the planned commencement of Construction and must be implemented to the satisfaction of the EAO throughout Construction, Demolition and Operations.</p>
17.	<p data-bbox="230 1373 1094 1407">Indigenous Training, Employment and Procurement Plan</p> <p data-bbox="230 1457 1490 1575">The Holder must develop an Indigenous Training, Employment and Procurement plan for the Project. The plan must be developed in consultation with Indigenous Groups. The plan must include at a minimum:</p> <ul style="list-style-type: none"> <li data-bbox="282 1583 1341 1659">a) The methods for communicating training, employment and procurement opportunities to Indigenous Groups and their members; <li data-bbox="282 1667 1468 1785">b) Measures that the Holder will use to provide training opportunities for Indigenous monitors and enhance the hiring and retention of Indigenous Groups and their members; <li data-bbox="282 1793 1386 1869">c) Measures that the Holder will use to support the procurement of goods and services from businesses owned by Indigenous Groups; and <li data-bbox="282 1877 1182 1911">d) The means by which the results of b) and c) will be reported.

No.	Condition
	<p>The Holder must provide the plan to the EAO and Indigenous Groups for review a minimum of 60 days prior to the planned commencement of Construction.</p> <p>The plan, and any amendments thereto, must be implemented throughout Construction and Demolition to the satisfaction of the EAO.</p>
18.	<p>Engagement and Reporting</p> <p>The Holder must continue to engage with Indigenous Groups from the date of issuance of this Certificate until the implementation of monitoring and follow-up programs required in the conditions described in this Certificate, to the satisfaction of the EAO.</p> <p>The Holder must provide reports to the EAO regarding Indigenous engagement that must include:</p> <ul style="list-style-type: none"> a) A summary of the issues and concerns raised by each Indigenous Group, the measures taken to address the issues and concerns raised, or an explanation of why no action was taken; and b) An outline of on-going or future engagement opportunities with each Indigenous Group for the conditions set out in this Certificate. <p>The reports must be provided:</p> <ul style="list-style-type: none"> c) Within one year of commencing Construction; d) At the commencement of Demolition; and e) Upon the request of the EAO. <p>The EAO may amend these timelines and may request additional reports at any time by providing written notice to the Holder.</p> <p>No less than 30 days prior to providing such a report to the EAO, the Holder must share a draft of such report with Indigenous Groups for their review and comment.</p> <p>The Holder must continue to engage the public from the date of issuance of this Certificate until the implementation of monitoring and follow-up programs required in the conditions described in this Certificate, to the satisfaction of the EAO.</p> <p>Within 60 days of the issuance of this Certificate, the Holder must establish and maintain a dedicated Project website throughout Construction and Demolition and for the first three years after the completion of Demolition. The website must:</p>

No.	Condition
	<ul style="list-style-type: none"> f) Provide general information regarding the Project and Project status; g) Provide information about Project activities during Construction and Demolition and for the first three years after the completion of Demolition; h) Provide information in relation to the notification and communication requirements for the conditions set out in this Certificate; i) Provide information regarding progress in permitting processes that follow the issuance of this Certificate; j) Include information that would promote safety in and surrounding the Project area; k) Include a means for soliciting and receiving feedback; and l) Provide contact information for the Holder. <p>The Holder must provide to the EAO a public engagement report one year after the commencement of Construction and one year after the completion of Demolition, unless otherwise directed by the EAO.</p> <p>The public engagement report must include for each individual or party with which the Holder engaged:</p> <ul style="list-style-type: none"> m) The name of the individual or party; n) The methods(s), date(s), and location(s) of engagement activities; o) A summary of issues or concerns raised; and p) The measures taken, or that will be taken, to address or respond to concerns, or an explanation why no further action is required to respond to issues or concerns.
19.	<p>Transfer of Certificate</p> <p>Except as provided below, neither this Certificate nor any interest in it may be transferred to any person. This Certificate will be effectively transferred if the proposed Holder acknowledges that, upon transfer, it will be responsible for complying with the conditions of the Certificate, and both the proposed Holder and the Holder:</p> <ul style="list-style-type: none"> a) Obtain consent for the transfer from the Executive Director; b) Apply under Section 19 of the Act for such amendments to this Certificate, if any, as the Executive Director deems necessary to ensure compliance with and enforceability of this Certificate and to otherwise reflect the proposed transfer; and c) Confirm by written notice to the Executive Director, within 14 days of the completion of all aspects of the transfer transaction other than this notice, that the transfer has been completed. <p>An interest in this Certificate may be transferred by way of a grant of security to lenders or financiers without consent.</p>

No.	Condition
	<p>A transfer of this Certificate to a trustee in bankruptcy, by a receiver or a trustee in bankruptcy pursuant to a court approved sale, or as part of a court approved arrangement under the <i>Company Creditors Arrangement Act</i> may occur without consent.</p> <p>If this Certificate is transferred without consent, the new and former Holder must notify the Executive Director within 30 days of the transfer and apply within the time specified by the Executive Director for any amendments to this Certificate that the Executive Director deems necessary to ensure compliance with and enforceability of this Certificate and to otherwise reflect the proposed transfer.</p>
20.	<p>Transfer of Interest in Project</p> <p>Except in connection with the granting of security to Project lenders or financiers, prior to the Holder transferring a significant interest in the Project, the Holder and proposed transferee must:</p> <ul style="list-style-type: none"> a) Obtain consent for the transfer from the Executive Director; b) Apply under Section 19 of the Act for such amendments to this Certificate, if any, as the Executive Director deems necessary to ensure compliance with and enforceability of this Certificate and to otherwise reflect the proposed transfer; and c) A transfer to a trustee in bankruptcy, by a receiver or a trustee in bankruptcy pursuant to a court approved sale or as part of a court approved arrangement under the <i>Company Creditors Arrangement Act</i> may occur without consent. <p>If a significant interest in the Project is transferred without consent, the Holder must notify the Executive Director within 30 days of the transfer and apply within the time specified by the Executive Director for any amendments to this Certificate that the Executive Director deems necessary to ensure compliance with and enforceability of this Certificate and to otherwise reflect the proposed transfer.</p>



**VANCOUVER FRASER PORT AUTHORITY
PROJECT AND ENVIRONMENTAL REVIEW
PROJECT PERMIT**

PER No.:	17-107
Tenant:	BC Ministry of Transportation and Infrastructure
Project:	Pattullo Bridge Replacement
Project Location:	New Westminster, BC
VFPA SID No.:	SUR330-06101F-001
Land Use Designation:	Industrial, Port Water, and Recreation
Permit Holder(s):	BC Ministry of Transportation and Infrastructure
Category of Review:	D
Date of Approval:	May 27, 2019
Date of Expiry:	May 31, 2026

PROJECT DESCRIPTION

OVERVIEW

BC Ministry of Transportation and Infrastructure (MOTI) is proposing the Pattullo Bridge Replacement Project to replace the existing Pattullo Bridge with a new four (4) lane bridge across the Fraser River to connect Columbia Street/East Columbia Street in New Westminister to King George Boulevard and Highway 17 in Surrey. The purpose of the Pattullo Bridge Replacement Project is to replace the existing Pattullo Bridge, which has reached the end of its feasible lifespan. The new bridge will be located immediately north and upstream of the existing bridge and the CN Rail Bridge, and will continue to link the communities of New Westminister and Surrey.

The Project is proposed as a Design Build, and the final footprint will be defined in the during the final design stage. The new bridge will have a maximum of four (4) in-river piers, in comparison to the existing bridge which has six (6) in-river piers, the final location of the proposed piers will be determined during the final design stage. The new bridge is proposed to meet current seismic and road design standards, wider lanes for vehicles, and dedicated lanes for walkers and cyclists. There is no proposed increase in traffic capacity for the new bridge. The new bridge will optimize the use of the existing road networks and travel patterns and will also include new connections to reduce traffic on local residential streets to access the river crossing. Constructing the new bridge parallel to the existing bridge also allows the existing bridge to continue operating. Following the commissioning of the new bridge, the existing bridge will be demolished and removed.

The Pattullo corridor provides transportation for important goods and trade linkages between the Roberts Bank Terminal, the Fraser River Trade Area, and adjacent communities. For the purposes of the VFPA Project and Environmental Review, the Project is defined as the construction of the in-river components of the new bridge located within VFPA jurisdiction, the new approach spans directly adjacent to the Fraser River in the City of Surrey which cross over VFPA property and the demolition and removal of the in-river portions of the existing bridge within VFPA jurisdiction and approach spans in the City of Surrey that cross over VFPA property.

The Project footprint is bordered by both industrial and recreational land uses. On the north bank the Project is bound by Brunette Fraser Regional Greenway to the east and the existing bridge to the west. The south bank of the Project is bound by industrial property to the east and by the

existing bridge and Brownsville Park to the west. On the south bank of the Fraser River, the proposed new spans will stretch over VFPA lands.

PROJECT COMPONENTS AND ACTIVITIES

Project Components and Activities comprise:

- Onshore improvements to meet seismic performance requirements for embankments and foundations;
- Construction and use of temporary construction and demolition laydown areas;
- Construction of a stormwater collection and treatment system;
- Installation of cofferdams including ground improvements and rip rap;
- Constructing in-stream and onshore foundations;
- Constructing in-stream and onshore pile caps;
- Constructing bridge towers;
- Constructing piers for approach spans and ramps;
- Constructing the cable-stayed deck;
- Constructing approach span and ramp decks;
- Installing barriers, hand rails, security fencing, suicide prevention barrier, lighting, structural health monitoring, and snow and ice management systems;
- Final paving and lane marking;
- Operational and maintenance activities associated with the new bridge; and
- Demolition of the existing bridge and existing spans connecting King George Boulevard.

New Bridge and Approaches

The Project includes:

- A new four-lane bridge over the Fraser River (the Bridge), with a multi-use path for cyclists and pedestrians on each side;
- Reconfiguration and modification of existing roads and intersections, including, but not limited to the following:
 - King George Boulevard, 112th Avenue and Bridge Road;
 - Intersection of Bridgeview Drive and King George Boulevard; and
 - Grade separation of Highway 17 and Old Yale Road;
- Connections between the multi-use pathways on the Bridge and multi-use path systems;
- A safety and security fence on all exterior sides of the Bridge;
- A fixed barrier separating the multi-use pathways for cyclists and pedestrians on the Bridge will be separated from motorized traffic;

The Bridge will have a maximum of four (4) in-river piers. All in-river piers will be located outside of the Navigation Protection Zones which are defined as a 160 metre wide Main Channel and a 60 metre wide Secondary Channel (see Figure 1 in *Pattullo Bridge Replacement Project - Navigation Requirements*, MOTI, dated April 17, 2019).

The Bridge will have a length of up to 1.2 kilometres, abutment to abutment, and a minimum vertical navigational clearance that accommodates the Navigation Protection Zone subject to the requirements of the *Navigation Protection Act*.

Demolition of the Existing Pattullo Bridge

Project components and activities associated with demolition of the existing bridge include the following:

- Demolition and removal of utilities and electrical systems located on/connected to the existing bridge and approaches and associated rights-of-way; and
- Demolition and removal of the existing bridge and existing spans connecting King George Boulevard.

Temporary Activities

The Project includes the following temporary components and activities during Construction:

- Temporary lighting to facilitate construction during winter months or night work;
- Temporary trestle to provide access to in-river construction areas;
- Temporary barging facilities to assist in the delivery of construction materials and minimize the use of regional and local roads; and
- Installation of temporary in-stream enclosures (cofferdams) that would allow foundation construction activities to be separated from the Fraser River.

Associated Works Not Included in Permit Scope

The following is a summary of Project components that are not located with VFPA jurisdiction and therefore are not included in the scope of the VFPA review, but are assessed through the harmonized environmental assessment process:

- Access roads to and from the new bridge and McBride Boulevard, Royal Avenue, and East Columbia Street;
- Approach spans to connect roads in New Westminster to the in-stream components of the new bridge, including a direct ramp connections from East Columbia for both southbound and northbound bridge traffic;
- Roadway tie-ins to King George Boulevard;
- Connection between the new bridge and Highway 17;
- Reconstruction of Bridge Road to allow two-way traffic access to Old Yale Road;
- Grade separation between Old Yale Road and Highway 17; and
- Landscaping in New Westminster and beyond VFPA jurisdiction in Surrey.

PROJECT AND ENVIRONMENTAL CONDITIONS

The Vancouver Fraser Port Authority (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/>.

COPY

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 indemnify and save harmless VFPA in respect of all claims, losses, costs, fines, penalties or other liabilities, including legal fees, arising out of: (a) any bodily injury or death, property damage or any loss or damage arising out of or in any way connected with the Project; and (b) any breach by the Permit Holder of its obligations under this Permit.
5.	The Permit Holder is responsible for locating all existing site services and third-party utilities including any located underground or suspended from the existing Pattullo Bridge. The Permit Holder is responsible for repair or replacement of any damage to existing site services, utilities, bridge piers (i.e. CN Rail Bridge) to the satisfaction of VFPA, that result from construction or demolition activities, and operation of the Project.
6.	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, including the attached plans and drawings numbered PER No. 17-107-A to F . The Permit Holder shall not carry out any other physical activities unless expressly authorized by VFPA.
7.	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. Accordingly, the Permit Holder shall be familiar with VFPA's compliance and enforcement program: https://www.portvancouver.com/development-and-permits/compliance/ .
8.	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.
9.	The Permit Holder shall make available upon request by any regulatory authority (such as a Fishery Officer) a copy of this Permit.
10.	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.17-107 .

11.	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.	
12.	<p>The Permit Holder shall prepare and submit a self-report form to VFPA demonstrating compliance with conditions at each of the following project phases:</p> <ul style="list-style-type: none"> • Prior to construction Conditions (self-report shall be submitted a minimum of 30 business days prior to the commencement of construction, or any physical activities); • Construction Conditions (self-report shall be submitted every 6 months during construction); • Conditions Upon Completion of the new bridge (self-report shall be submitted within 60 business days of completion of construction of the new bridge); • Demolition Conditions (self-report shall be submitted every 6 months during demolition) • Conditions Upon Completion of the Demolition of the Existing bridge (self-report shall be submitted within 60 business days of completion of demolition of the existing bridge) 	
13.	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.	
14.	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.	
15.	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.	
16.	The Permit Holder shall immediately notify Metro Vancouver of any actual or potential damage to Metro Vancouver infrastructure (including pipelines and outfalls) at: 604-985-1478.	
17.	The Permit Holder must adhere to commitments made to Aboriginal groups and provide updates to the VFPA within 15 days of receiving a request.	
18.	All road and rail design conflicts, including with future rail expansion plans, will be resolved between the Applicant and the impacted railways during the development of final design and railway agreement(s).	
19.	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)
20.	The Permit Holder shall submit signed and sealed drawings for each phase of proposed works approved for construction by a professional engineer licensed to practice in the Province of British Columbia.	10 business days before commencing construction or any physical activities

21.	The Permit Holder shall provide a Project schedule to VFPA 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.	20 business days before commencing construction or any physical activities
22.	The Permit Holder shall provide a draft construction notice (or multiple draft notices for phased construction) to VFPA's satisfaction in accordance with VFPA's Public Consultation Guidelines.	40 business days before commencing construction or any physical activities
23.	The Permit Holder shall submit a draft construction communications plan in accordance with VFPA's Public Consultation Guidelines. The plan shall outline how the Permit Holder will engage and communicate with the public and stakeholders from the date of permit issuance to the completion of construction. The plan shall be updated as necessary and upon request by VFPA to ensure public and stakeholders are provided with relevant information as it becomes available. The Permit Holder shall carry out the Project in accordance with the construction communications plan, and any subsequent amendments approved by VFPA.	40 business days before commencing construction or any physical activities
24.	The Permit Holder shall distribute an approved construction notice (or multiple notices for phased construction) to residents and businesses to an area to VFPA's satisfaction. The Permit Holder shall notify VFPA when such distribution has been completed.	20 business days before commencing construction or any physical activities
25.	The Permit Holder shall submit a Construction Parking and Traffic Management Plan to VFPA's satisfaction. The Permit Holder shall carry out the Project in accordance with the construction parking and traffic management plan, and any subsequent amendments approved by VFPA.	40 business days before commencing construction or any physical activities
26.	The Permit Holder must submit a Construction Staging Plan, including the following for VFPA review and approval: <ul style="list-style-type: none"> • Identification of potential construction-related hazards and risk mitigation measures from construction activities; • Identification of construction activities and staging areas; • Dates and hours of operation; • Description of activities taking place; • Equipment and staging areas (dimensions must be included);and • Special request and/or additional information. 	45 business days before commencing construction or any physical activities
27.	The Permit Holder shall submit an Archaeological Chance Find Procedure for the Project site, to VFPA's satisfaction. The Chance Find Procedure shall be shared with Aboriginal groups for review and	40 business days before commencing

	comment prior to be submitted. The Permit Holder shall carry out the Project in accordance with this Procedure, and any subsequent amendments approved by VFPA.	construction or any physical activities
28.	For any structures proposed that are reviewable under the National Building Code and National Fire Code, the Permit Holder shall apply for a VFPA Building Permit.	40 days before commencing construction of any buildings
29.	The permit holder shall submit drawings to VFPA for review and approval of the new bridge showing Navigation Envelopes (consistent with the Navigation Protection Zones identified in <i>Pattullo Bridge Replacement Project - Navigation Requirements</i> , MOTI, dated April 17, 2019). Drawings should include at minimum: <ul style="list-style-type: none"> • Height – Envelope; • Depth – Envelope; • Width – Envelope; • Pier Placement; • Scour Protection Extents; and • Navigation Lighting. 	45 business days before commencing construction or any physical activities
30.	Prior to the commencement of any vessel-related activities, the Permit Holder must contact CCG Marine Communications and Traffic Services (MCTS), (email: NAVWARN.MCTSPrinceRupert@innav.gc.ca Telephone: 250-627-3070) 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
31.	The Permit Holder must submit a marine construction and staging plan, including the following, for VFPA review and approval: <ul style="list-style-type: none"> • Identification of potential navigation related hazards and risk mitigation measures from construction related activities; • Staging and construction areas; • Dates and hours of operation; • Description of activities taking place; • Equipment and vessels (dimensions must be included); • Method of preferred communication with marine users; • Method of communicating updates to relevant users, as described in the Marine Communication Plan; • Proposed plan to implement and mitigate potential restrictions in navigational channels; and • Special request and/or additional information. 	45 business days before commencing in-river construction or any vessel-related activities
32.	The Permit Holder must submit a Marine Communication Plan for VFPA review and approval, including: <ul style="list-style-type: none"> • Summary of details, timelines, equipment, staging, etc; • Notice to Mariners – Regarding overall Project; • Regular NAVWARN advisories as required; • Public Notices at nearby boat launches; • Identify tug requirements and how these will be met for assisting marine users through construction area; and • Plan to communicate navigation restrictions and channel closures. 	45 business days before commencing in-river construction or any vessel-related activities

33.	<p>The Permit Holder shall establish a Marine Users Working Group for the purposes of communicating relevant in-water work activities to local marine operators.</p> <p>The Permit Holder must provide the Marine Users Working Group a copy of the Marine Construction & Staging Plan for their consideration and feedback. Any updates to the documents must be provided to the working group before and during in-water construction phases.</p>	30 business days before commencing in-river construction or any vessel-related activities
34.	<p>The Permit Holder must post and maintain notices at the beginning of each phase of in-water work, intended for recreational marine users, at the public boat launches and recreational marinas near the work site.</p>	5 days before commencing any vessel-related activities
35.	<p>The Permit Holder must retain a Qualified Professional to develop a monitoring plan referring to sites identified by VFPA in the document "PBRP – Hydraulic Model – Identification of VFPA Key Nodes – 2016 -10-20". This is required to monitor potential adverse effects to current, river bed and foreshore caused by the Project and assist in identifying potential mitigation measures if required. The plan and any amendments thereto, must be implemented throughout construction, and for up to three years following completion of demolition. The plan must be developed in consultation and approved by VFPA.</p>	45 business days before commencing construction or any physical activities
36.	<p>The Permit Holder shall provide a hydraulic model report, based on the final design which will be used to assess potential impacts that are acceptable for navigation, environment, and infrastructure, that includes:</p> <ul style="list-style-type: none"> • A spatial extent that encompasses, at a minimum, the area from the Alex Fraser Bridge in South Arm to the Port Mann Bridge in the Main Arm; downriver in the North Arm to Queensborough Highway Bridge; and downriver in Annacis Channel to Annacis Swing Bridge. • A temporal extent that includes current conditions (for validation purposes), during construction period when all piers are present, after demolition of the existing bridge, at least 1 full year post demolition. • Predictions of potential changes in river hydraulics and morphology. This includes potential changes to currents and sedimentation at sites identified by VFPA in the document "PBRP – Hydraulic Model – Identification of VFPA Key Nodes – 2016 -10-20". • An assessment of potential effects on flow split between the Fraser River South Arm, Fraser River North Arm, and Annacis Channel as per function of a series of river training structures within the vicinity of the proposed works. 	60 business days before commencing construction or any physical activities
37.	<p>The Permit Holder shall submit a Construction Environmental Management Plan to VFPA's satisfaction, available at: https://www.portvancouver.com/wp-content/uploads/2018/04/PER-Construction-Environmental-Management-Plan-CEMP-Guideline-UPDATE.pdf. The Permit Holder shall carry out the Project in accordance with the construction environmental management plan, and any subsequent amendments approved by VFPA.</p>	60 business days prior to the start of construction or any physical activities

<p>38.</p>	<p>The Permit Holder shall retain a qualified environmental professional to act as an Independent Monitor responsible for reviewing the construction environmental records and on-site construction activities for compliance with the Construction Environmental Management Plan and this Permit. The Independent Monitor shall possess the following qualifications:</p> <ul style="list-style-type: none"> • Suitable education and knowledge demonstrating that they may be reasonably relied on to provide advice within their area of expertise; • A minimum of five years of experience monitoring related types of construction activities in similar environments. <p>The Independent Monitor shall not be an employee of the Permit Holder’s organization or of a contractor/consultant retained by the Permit Holder to work on the Project in other capacities.</p>	<p>Prior to the start of construction or any physical activities</p>
<p>39.</p>	<p>The Permit Holder shall submit a proposed pier design and impact strategy to VFPA’s satisfaction.</p>	<p>60 business days before commencing construction or any physical activities</p>
<p>40.</p>	<p>The Permit Holder shall submit an Independent Monitoring Work Plan. At a minimum, the Independent Monitoring Work Plan shall describe the following:</p> <ul style="list-style-type: none"> • The role and responsibilities of the Independent Monitor, including the following provisions: <ul style="list-style-type: none"> ○ The Independent Monitor shall have unfettered access to environmental compliance documentation and the Project site at all times during construction without notice. ○ The Independent Monitor shall have the authority to direct the Permit Holder to stop a construction activity that is causing an adverse effect. ○ The Independent Monitor shall report directly to VFPA and obtain direction from VFPA on matters that arise during construction that are not described in the project permit and cannot be resolved by discussion with the Permit Holder. ○ The Independent Monitor shall concurrently submit compliance reports directly to the Permit Holder and VFPA within one week of site visits. • The frequency of site visits by the Independent Monitor, with a higher frequency of site visits to occur during in-water works as compared to those scheduled for land-based construction activities. • The manner in which notice will be given to the Permit Holder and VFPA for an activity not in compliance with permit conditions or having unforeseen adverse effects. • The name and qualifications of the Independent Monitor. 	<p>60 business days prior to the start of construction or any physical activities</p>

	<ul style="list-style-type: none"> The name(s), role(s) and qualifications of other individuals providing specialized expertise or designated to act as the Independent Monitor during specific construction activities or times. <p>The Permit Holder shall carry out the Project in accordance with the approved Monitoring Work Plan, and any subsequent amendments, to the satisfaction of VFPA.</p>	
<p>41.</p>	<p>The Permit Holder shall submit a Fish and Fish Habitat Monitoring and Mitigation Plan for the Project site, to VFPA's satisfaction. The Fish and Fish Habitat Monitoring and Mitigation Plan will include:</p> <ul style="list-style-type: none"> A description of the measures and standards that will be in place to avoid, reduce, or otherwise mitigate or offset any adverse effects on fish and fish habitat; A list of fish species at risk that have the potential to be affected by Project-related activities; Identification of, a clear definition for, and a rationale of reduced-risk work windows, including those windows for eulachon, sturgeon and salmon species, as well as for any species at risk, and identification of reduced-risk windows communicated by Indigenous Groups to the Holder, for in-river construction and demolition, and the work that will occur within these windows; Identification of, and justification for, any work that will occur outside of the reduced-risk work windows identified above, and measures to mitigate impacts of such works to fish and fish habitat; The methods and timing of when monitoring of fish presence will be undertaken to support the implementation of mitigation and monitoring to address potential effects to fish; Identification of the areas where, and periods of time when, underwater noise monitoring in the Fraser River will be conducted; A description of adaptive management measures which identifies contingencies in the event that unanticipated effects on fish are revealed during and after construction and demolition phases; A description of how Aboriginal traditional knowledge and Aboriginal traditional use information, shared with the Holder by Aboriginal Groups, has been incorporated into the plan; and A description of reporting frequency. 	<p>40 business days before commencing construction or any physical activities</p>
<p>42.</p>	<p>The Permit Holder shall submit a stormwater pollution prevention plan, written in accordance with the VFPA Guidelines - Developing Your Stormwater Pollution Prevention Plan available at: www.portvancouver.com/wp-content/uploads/2015/05/PER-Stormwater-Pollution-Prevention-Plan-Guidelines-Final-2015-07-09.pdf), to VFPA's satisfaction. The Permit Holder shall carry out the Project in accordance with the stormwater pollution prevention plan, including any subsequent amendments approved by VFPA.</p>	<p>40 business days before commencing construction of the stormwater utility</p>

43.	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
CONDITIONS - DURING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES		
44.	The Permit Holder shall notify VFPA upon commencement of construction, or any physical activities (e.g., mobilization to the Project site).	
45.	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, in keeping with VFPA Guidelines on this topic.	
46.	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.	
47.	The Permit Holder shall remove from the Project area on port lands all existing utilities that may be decommissioned by the Project, both underground and aboveground. At locations of connection to municipal work (i.e., at property lines), the abandoned utilities shall be capped.	
48.	The Permit Holder shall ensure that an appropriately qualified archaeological monitor be on the Project site at all times during ground disturbing activities with the potential to impact an identified archaeological site and intrude into native soils.	
49.	The Permit Holder shall provide opportunities for interested Aboriginal groups to participate in archaeological monitoring for all Project activities impacting an identified archaeological site and cultural resource. Notification is required at least 15 days prior to any Project activities commencing.	
50.	The Permit Holder shall submit a report summarizing opportunities for Aboriginal involvement in the construction of the Project, one year following commencement of construction, and on an annual basis thereafter until construction completion.	
51.	The Permit Holder shall submit a Cultural and Archaeological Resources Mitigation and Management Plan to mitigate potential impacts of the Project on archeological and cultural resources. The Plan must be developed by a Qualified Professional, and in consultation with Aboriginal groups.	
52.	The Permit Holder may place temporary construction trailers on the Project site while this Permit remains in effect, provided that the Permit Holder does not connect such trailers to any underground utilities without the prior written consent of VFPA which may require, at VFPA's discretion, a VFPA Building Permit.	
53.	The Permit Holder will maintain open and ongoing communications with the Marine User's Working Group as per Condition No. 33.	

54.	<p>During any vessel-related activities, the Permit Holder shall:</p> <ul style="list-style-type: none"> • Position vessels and equipment associated with the Project in such a manner so as not to obstruct line of sight to navigational aids or markers; • Exhibit the appropriate lights and day shapes at all times; • Monitor the VHF channel used for MCTS communications in the respective area at all times and participate as necessary; • Be familiar with vessel movements in areas affected by the Project. • Plan and execute the Project in a manner that will not impede navigation or interfere with vessel operations; and, • 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, any variations must be referred to the marine working users group and approved by VFPA. 											
55.	<p>The Permit Holder shall ensure an assist tug, of adequate size and power is available to render assistance, if requested, to any passing vessels and/or barges that are passing the Project site during all phases of in-water works. Details of how to request the use of the assist tug, must be referred to the Marine Users Working Group and included in the Marine Communication Plan.</p>											
56.	<p>The Permit Holder shall continue to monitor and report changes to VFPA regarding potential adverse effects to current, river bed and foreshore as a result of the Project, referencing the identification of "VFPA Key Nodes – 2016 -10-20". VFPA in cooperation with the Permit Holder shall determine what changes constitute an adverse effect.</p>											
57.	<p>The Permit Holder, or their contractor, shall engage a qualified environmental professional to monitor construction activities 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 full time when works are underway that have the potential to adversely affect fish or fish habitat.</p>											
58.	<p>The Permit Holder shall provide monthly environmental monitoring reports to VFPA as specified in the Construction Environmental Management Plan 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.</p>											
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%; text-align: left;">CONDITIONS - UPON COMPLETION OF NEW BRIDGE</th> <th style="width: 30%; text-align: center;">SUBMISSION TIMING (Business Days)</th> </tr> </thead> <tbody> <tr> <td data-bbox="142 1486 245 1572">59.</td> <td data-bbox="245 1486 1481 1572"> <p>The Permit Holder shall notify VFPA upon completion of the Project.</p> </td> <td data-bbox="1216 1486 1481 1572"> <p>Within 30 business days of completion</p> </td> </tr> <tr> <td data-bbox="142 1572 245 1759">60.</td> <td data-bbox="245 1572 1481 1759"> <p>The Permit Holder shall provide 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. The record drawings will show navigational envelope clearances and navigation light placement.</p> </td> <td data-bbox="1216 1572 1481 1759"> <p>Within 40 business days of completion</p> </td> </tr> <tr> <td data-bbox="142 1759 245 1900">61.</td> <td data-bbox="245 1759 1481 1900"> <p>Upon completion of work the Permit Holder shall provide a Hydrographic survey to VFPA. The survey must meet Canadian Hydrographic Service (CHS) "Standards for Hydrographic Surveys". In particular, Surveys must meet "Special Order Survey with Type C1</p> </td> <td data-bbox="1216 1759 1481 1900"> <p>Within 40 business days of completion</p> </td> </tr> </tbody> </table>	CONDITIONS - UPON COMPLETION OF NEW BRIDGE	SUBMISSION TIMING (Business Days)	59.	<p>The Permit Holder shall notify VFPA upon completion of the Project.</p>	<p>Within 30 business days of completion</p>	60.	<p>The Permit Holder shall provide 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. The record drawings will show navigational envelope clearances and navigation light placement.</p>	<p>Within 40 business days of completion</p>	61.	<p>Upon completion of work the Permit Holder shall provide a Hydrographic survey to VFPA. The survey must meet Canadian Hydrographic Service (CHS) "Standards for Hydrographic Surveys". In particular, Surveys must meet "Special Order Survey with Type C1</p>	<p>Within 40 business days of completion</p>
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	Coverage". This typically requires either multibeam or multi-transducer survey equipment.	
62.	The Permit Holder shall continue hydrographic surveys and monitoring of VFPA Key Nodes "PBRP – Hydraulic Model – Identification of VFPA Key Nodes – 2016 -10-20" annually (Post Freshet), and submit a report annually for up to 3 years following the completion of demolition, as per Condition No. 35.	Annually for up to 3 years post completion of demolition
	CONDITIONS – PRIOR TO DEMOLITION OF EXISTING BRIDGE	SUBMISSION TIMING (Business Days)
63.	The Permit Holder shall submit signed and sealed drawings for proposed works approved for demolition by a professional engineer licensed to practice in the Province of British Columbia.	10 business days before commencing demolition or any physical activities
64.	The Permit Holder shall completely remove all of the piers from the existing bridge. However, if the Permit Holder submits an analysis supporting a rationale to retain portions of the existing bridge piers for riverbed stability, VFPA will consider allowing portions of the piers to be retained. The retained portions of the existing bridge piers must be removed to 14.32 metres below Geodetic Datum as per <i>Pattullo Bridge Replacement Project - Navigation Requirements</i> , MOTI, dated April 17, 2019.	45 business days before commencing demolition or any physical activities
65.	The Permit Holder shall provide a Project demolition schedule to VFPA 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.	20 business days before commencing demolition or any physical activities
66.	The Permit Holder shall submit a demolition environmental management plan to VFPA's satisfaction. The Permit Holder shall carry out the Project in accordance with the Demolition Environmental Management Plan, and any subsequent amendments approved by VFPA.	60 business days prior to the start of demolition or any physical activities
67.	The Permit Holder shall provide a draft demolition notice to VFPA's satisfaction in accordance with VFPA's Public Consultation Guidelines.	40 business days before commencing construction or any physical activities
68.	The Permit Holder shall submit a draft Demolition Communications Plan in accordance with VFPA's Public Consultation Guidelines. The plan shall outline how the Permit Holder will engage and communicate with the public and stakeholders from the date of permit issuance to the completion of demolition. The plan shall be updated as necessary and upon request by VFPA to ensure public and stakeholders are provided with relevant information as it becomes available. The Permit Holder	40 business days before commencing construction or any physical activities

	shall carry out the Project in accordance with the demolition communications plan, and any subsequent amendments approved by VFPA.	
69.	The Permit Holder shall distribute an approved demolition notice to residents and businesses to an area to VFPA's satisfaction. The Permit Holder shall notify VFPA when such distribution has been completed.	20 business days before commencing construction or any physical activities
70.	The Permit Holder must submit a Demolition Staging Plan, including the following for VFPA review and approval: <ul style="list-style-type: none"> • Identification of potential demolition-related hazards and risk mitigation measures from demolition activities; • Identification of land-based staging during demolition; • Dates and hours of operation; • Description of activities taking place; • Equipment staging areas (dimensions must be included); and • Special request and/or additional information. 	45 business days before commencing demolition or any physical activities
71.	The Permit Holder shall submit a demolition parking and traffic management plan to VFPA's satisfaction. The Permit Holder shall carry out the Project in accordance with the construction parking and traffic management plan, and any subsequent amendments approved by VFPA.	40 business days before commencing construction or any physical activities
72.	The Permit Holder shall submit an Archaeological Chance Find Procedure for the Project site, to VFPA's satisfaction. The Chance Find Procedure shall be shared with Aboriginal groups for review and comment prior to being submitted. The Permit Holder shall carry out the Project in accordance with this Procedure, and any subsequent amendments approved by VFPA.	40 business days before commencing construction or any physical activities
73.	The Permit Holder must post and maintain notices at the beginning of each phase of in-water work, intended for recreational marine users, at the public boat launches and recreational marinas near the work site.	5 days before commencing any vessel-related activities
74.	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
75.	The Permit Holder must submit a Demolition Marine Communication Plan for VFPA review and approval, including: <ul style="list-style-type: none"> • Summary of details, timelines, equipment, staging, etc; • Notice to Mariners – Regarding overall Project; • Regular NAVWARN advisories as required; 	45 business days before commencing

	<ul style="list-style-type: none"> Public Notices at nearby boat launches; How tug requirements will be met for assisting marine users through construction area; and Proposed plan to communicate navigation restrictions and channel closures. 	demolition or any physical activities
76.	<p>The Permit Holder shall continue the Marine Users Working Group, for the purposes of communicating relevant in-water work activities to local marine operators.</p> <p>The Permit Holder must consider feedback from and provide relevant updates to the group, specifically concerning the Marine Demolition and Staging Plan or equivalent, both before and during in-water demolition phases.</p>	As per Condition No. 33
77.	<p>Prior to the commencement of any vessel-related activities, the Permit Holder must contact CCG Marine Communications and Traffic Services (MCTS), (email: NAVWARN.MCTSPRinceRupert@innav.gc.ca Telephone: 250-627-3070) regarding the issuance of a Navigational Warning (NAVWARN) to advise the marine community of potential hazards associated with the Project.</p>	As per Coast Guard requirements
78.	<p>The Permit Holder must submit a Marine Demolition and Staging Plan, including the following, for VFPA review and approval:</p> <ul style="list-style-type: none"> Identification of potential navigation related hazards and risk mitigation measures from demolition related activities; Staging and demolition areas; Dates and hours of operation; Description of activities taking place; Equipment and vessels (dimensions must be included); Method of preferred communication with marine users; Method of communicating updates to relevant users; Proposed plan on potential restrictions and navigational channels; and Special requests and/or additional information. 	45 business days before commencing demolition or any physical activities
79.	<p>The Permit Holder shall retain a qualified environmental professional to act as an Independent Monitor responsible for reviewing the construction environmental records and on-site construction activities for compliance with the Demolition Environmental Management Plan and this Permit. The Independent Monitor shall possess the following qualifications:</p> <ul style="list-style-type: none"> Suitable education and knowledge demonstrating that they may be reasonably relied on to provide advice within their area of expertise; A minimum of five years of experience monitoring related types of demolition activities in similar environments. <p>The Independent Monitor shall not be an employee of the Permit Holder's organization or of a contractor/consultant retained by the Permit Holder to work on the Project in other capacities.</p>	45 business days before commencing demolition or any physical activities
80.	<p>The Permit Holder shall submit an Independent Monitoring Work Plan for the demolition phase. At a minimum, the Demolition Monitoring Work Plan shall describe the following:</p> <ul style="list-style-type: none"> The role and responsibilities of the Independent Monitor, 	45 business days before commencing demolition or any physical activities

	<p>including the following provisions:</p> <ul style="list-style-type: none"> ○ The Independent Monitor shall have unfettered access to environmental compliance documentation and the Project site at all times during demolition without notice. ○ The Independent Monitor shall have the authority to direct the Permit Holder to stop a demolition activity that is causing an adverse effect. ○ The Independent Monitor shall report directly to VFPA and obtain direction from VFPA on matters that arise during demolition that are not described in the project permit and cannot be resolved by discussion with the Permit Holder. ○ The Independent Monitor shall concurrently submit compliance reports directly to the Permit Holder and VFPA within one week of site visits. <ul style="list-style-type: none"> ● The frequency of site visits by the Independent Monitor, with a higher frequency of site visits to occur during in-water works as compared to those scheduled for land-based demolition activities. ● The manner in which notice will be given to the Permit Holder and VFPA for an activity not in compliance with permit conditions or having unforeseen adverse effects. ● The name and qualifications of the Independent Monitor. ● The name(s), role(s) and qualifications of other individuals providing specialized expertise or designated to act as the Independent Monitor during specific construction activities or times. <p>The Permit Holder shall carry out the Project in accordance with the approved Monitoring Work Plan, and any subsequent amendments, to the satisfaction of VFPA.</p>	
CONDITIONS - DURING DEMOLITION OR ANY PHYSICAL ACTIVITIES		
81.	The Permit Holder shall notify VFPA upon commencement of demolition, or any physical activities (e.g., mobilization to the Project site).	
82.	All general demolition 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 demolition 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, in keeping with VFPA Guidelines on this topic.	
83.	<p>During any vessel-related demolition activities, the Permit Holder shall:</p> <ul style="list-style-type: none"> ● Position vessels and equipment associated with the Project in such a manner so as not to obstruct line of sight to navigational aids or markers; ● Exhibit the appropriate lights and day shapes at all times; ● Monitor the VHF channel used for MCTS communications in the respective area at all times and participate as necessary; ● Be familiar with vessel movements in areas affected by the Project. 	

	<ul style="list-style-type: none"> Plan and execute the Project in a manner that will not impede navigation or interfere with vessel operations; and, 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, any variations must be referred to the marine working users group and approved by VFPA.
84.	The Permit Holder will maintain open and ongoing communications with the marine working users group as per Condition No. 33, No. 53, and No. 76.
85.	The Permit Holder shall ensure an assist tug, of adequate size and power is available to render assistance, if requested, to any passing vessels and/or barges that are passing the Project site during all phases of in-water works. Details of how to request the use of the assist tug, must be referred to the marine users working group and included in the marine communication plan.
86.	The Permit Holder shall remove from the Project area on port lands all existing utilities that may be decommissioned by the Project, both underground and aboveground. At locations of connection to municipal work (i.e., at property lines), the abandoned utilities shall be capped.
87.	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.
88.	The Permit Holder shall ensure that an appropriately qualified archaeological monitor be on the Project site at all times during ground disturbing activities with the potential to impact an identified archaeological site and intrude into native soils.
89.	The Permit Holder shall provide opportunities for interested Aboriginal groups to participate in archaeological monitoring for all Project activities impacting an identified archaeological site and cultural resource. Notification is required at least 15 days prior to any demolition activities commencing.
90.	The Permit Holder shall submit a report summarizing opportunities for Aboriginal involvement in the demolition of the existing bridge, one year following commencement of demolition activities, and on an annual basis thereafter until project completion.
91.	The Permit Holder shall submit a Cultural and Archaeological Resources Mitigation and Management Plan to mitigate potential impacts of the Project on archeological and cultural resources. The Plan must be developed by a Qualified Professional, and in consultation with Aboriginal groups.
92.	The Permit Holder shall continue to monitor and report changes to VFPA regarding potential adverse effects to current, river bed and foreshore as a result of the Project, referencing the identification of "VFPA Key Nodes – 2016 -10-20". VFPA in cooperation with the Permit Holder shall determine what changes constitute an adverse effect.
93.	The Permit Holder, or their contractor, 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 Demolition Environmental Management Plan, or VFPA, provided that monitoring will be full time when works are underway that have the potential to adversely affect fish or fish habitat.

94.	The Permit Holder shall provide environmental monitoring reports to VFPA as specified in the Demolition Environmental Management Plan 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 OF DEMOLITION OF EXISTING BRIDGE	SUBMISSION TIMING (Business Days)
95.	Upon completion of demolition work the Permit Holder shall provide a Hydrographic survey to VFPA. The survey must meet Canadian Hydrographic Service (CHS) "Standards for Hydrographic Surveys" In particular, Surveys must meet "Special Order Survey with Type C1 Coverage". This typically requires either multibeam or multi-transducer survey equipment.	Within 30 business days of completion
96.	The Permit Holder shall commit to continue hydrographic surveys and monitoring of VFPA Key Nodes "PBRP – Hydraulic Model – Identification of VFPA Key Nodes – 2016 -10-20" and submit reports annually (Post Freshet) for up to 3 years post Project completion of demolition, as per Condition No. 35.	Annually for up to 3 years post demolition
97.	The Permit Holder shall notify VFPA upon completion of the Project.	Within 30 business days of completion of demolition
98.	The Permit Holder shall provide 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. The record drawings will show navigational envelope clearances and the footprint of any portions of the existing bridge that are to be retained for riverbed stability.	Within 40 business days of completion of demolition
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 commence within 2 years from the end of the month from the permit date (the Commencement Date) and be completed no later than 7 years from the end of the month of the permit date (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. 17-107 is approved by:

ORIGINAL COPY SIGNED

PETER XOTTA
VICE PRESIDENT, PLANNING & OPERATIONS
CHAIR OF PROJECT AND ENVIRONMENTAL
REVIEW COMMITTEE

May 27, 2019

DATE OF APPROVAL

CONTACT INFORMATION

Vancouver Fraser Port Authority (VFPA)
100 The Pointe, 999 Canada Place,
Vancouver BC V6C 3T4 Canada

Project & Environmental Review
Tel.: 604-665-9047
Fax: 1-866-284-4271
Email: PER@portvancouver.com
Website: www.portvancouver.com

**APPENDIX B
TABLE OF CONDITIONS - EAC**

1. Note that this Appendix B varies from the Environmental Assessment Certificate “Proponents Table of Conditions” in that two columns “Delivered by” and “Performance Mechanism Index” have been added to this Appendix B. All other columns in this Appendix B are intended to contain the precise language as found in the Environmental Assessment Certificate “Proponents Table of Conditions”.
2. Notwithstanding any references in a condition to “Proponent”, “Holder” and/or “Project Co”, a commitment in this Appendix B that:
 - (a) contains a corresponding designation of “Project Co” in the column entitled “Delivered by”; or
 - (b) contains a corresponding designation of “Project Co/Province” in the column entitled “Delivered by”,shall be interpreted to mean that Project Co shall be obliged to perform and carry out the works and activities and comply with the matters described in the relevant condition in their entirety or, as the case may be, as provided otherwise in the Notes included in the “Delivered by” column.
3. The designation of “Minor”, “Moderate”, “Major”, or “Severe” in the column entitled “Performance Mechanism Index” in this Appendix B indicates, in respect of the condition corresponding to such designation in this Appendix B, the basis on which NCE Points and Default Points will be assigned in accordance with Part 8 [NCE Points and Default Points] of Schedule 10 to this Agreement.
4. All terms used in the “Condition” column of this Appendix B and included in the table “Definitions” forming part thereof shall have the meanings given in such table. All defined terms used in the “Delivered by” column of the Table of Conditions shall have the meanings given in Schedule 1 [Definitions and Interpretation] to the Project Agreement.

PATTULLO BRIDGE REPLACEMENT PROJECT

SCHEDULE B

TABLE OF CONDITIONS

FOR

AN ENVIRONMENTAL ASSESSMENT CERTIFICATE

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DEFINITIONS

Indigenous Groups:	Refers to the Indigenous Groups identified in Schedule B in the Section 11 Order: <ul style="list-style-type: none"> • Cowichan Tribes; • Halalt First Nation; • Katzie First Nation; • Kwantlen First Nation; • Kwikwetlem First Nation; • Lake Cowichan First Nation; • Lyackson First Nation; • Musqueam Indian Band; • Penelakut Tribe; • Semiahmoo First Nation; • Squamish Nation; • Stz'uminus First Nation; • Tsawwassen First Nation; and • Tsleil-Waututh Nation.
Application	Application submitted by the British Columbia Ministry of Transportation and Infrastructure to the Environmental Assessment Office on August 14, 2018 applying for an Environmental Assessment Certificate, pursuant to Section 16 of the <i>Environmental Assessment Act</i> , and accepted for review on August 14, 2018.
Certificate	Environmental Assessment Certificate
Construction	The phase of the Project during which the new bridge and associated infrastructure, are constructed, including in-river work, physical alteration of land, vegetation or any other aspect of the natural environment, occurs. For the purposes of this Schedule B, Construction does not include any activities conducted solely for investigative purposes under a valid permit or authorization.
Demolition	The phase of the Project during which the existing Pattullo Bridge is demolished resulting in in-river work, the physical alteration of land, vegetation, or any other aspect of the natural environment.
Holder	The British Columbia Ministry of Transportation and Infrastructure or, if this Certificate has been transferred in accordance with the conditions below, the entity to which this Certificate has been transferred in accordance with such conditions.
Operations	The phase of the Project commencing when the new bridge and approaches are open to public traffic.
Project	The Pattullo Bridge Replacement Project as described in the Certified Project Description (CPD) attached as Schedule A to the Certificate.
Qualified Professional	A person who has training, experience and expertise in a discipline relevant to the field of practice set out in the condition, and who is registered with the appropriate professional organization in British Columbia, is acting under that organization's code of ethics and is subject to disciplinary action by that organization. The EAO may update this definition in order to maintain consistency with Provincial policy or practice regarding Qualified Professionals.
TransLink	The South Coast British Columbia Transportation Authority

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ACRONYMS AND ABBREVIATIONS

AIA	Archaeological Impact Assessment
ATK	Aboriginal Traditional Knowledge
CPD	Certified Project Description
DFO	Fisheries and Oceans Canada
EAO	Environmental Assessment Office
FLNRORD	Ministry of Forests, Lands, Natural Resource Operations and Rural Development
IEM	Independent Environmental Monitor
MOTI	Ministry of Transportation and Infrastructure
QP	Qualified Professional
TC	Transport Canada
TUS	Traditional Use Study
VFPA	Vancouver Fraser Port Authority

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TABLE OF CONDITIONS

No.	Condition	Delivered By	Performance Mechanism Index
1.	<p>Document Review and Implementation</p> <p>Where a condition of this Certificate requires the Holder to provide a plan, program or other document, the Holder must provide the plan, program or other document to the Environmental Assessment Office (EAO) in the timeframe referenced in such condition, unless otherwise approved by the EAO. The EAO may, within 45 days of receiving a copy of such plan, program or other document, advise that:</p> <ul style="list-style-type: none"> a) The Holder may proceed to implement the plan, program or other document with or without revisions; or b) A revised plan, program or other document must be provided for approval of the EAO prior to a specified activity or milestone. <p>If the EAO advises pursuant to paragraphs (a) or (b) that changes are required to the plan, program or other document, then the Holder must follow the instructions of the EAO in that regard.</p> <p>If the EAO does not advise on a) or b) within 45 days of the EAO receiving a plan, program or other document, the Holder may proceed to implement the plan, program or other document.</p> <p>The Holder may, or the EAO may require the Holder to, revise any plan, program or other document if the Holder or the EAO determines that the implementation of the plan, program or other document is not:</p> <ul style="list-style-type: none"> c) Meeting one or more objectives of the plan, program or other document set out in the relevant condition of this Certificate; d) Having the effects contemplated or intended, as set out in the plan, program or other document itself; e) Consistent with the Certificate; or f) Consistent with changes in industry best practices or technology. 	Project Co	Severe

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No.	Condition	Delivered By	Performance Mechanism Index
2.	<p>Plan Development</p> <p>a) Where a condition of this Certificate requires the Holder to develop a plan, program or similar document, any such plan, program or document must, at a minimum, include the following information:</p> <ul style="list-style-type: none"> i) Purpose and objectives of the plan, program or other document; ii) Roles and responsibilities of the Holder, project personnel and contractors; iii) Names and if applicable, professional certifications and professional stamps/seals, for those responsible for the preparation of the plan, program or other document; iv) Schedule for implementing the plan, program or other document throughout the relevant Project phases; v) Means by which the effectiveness of the mitigation measures will be evaluated including the schedule for evaluating effectiveness; vi) Adaptive management plan to address effects of the Project if the monitoring conducted under section 2 of this condition shows that those effects: <ul style="list-style-type: none"> (a) Are not mitigated to the extent contemplated in the Application; or (b) Are not predicted in the Application; vii) Schedules and methods for the submission of reporting to specific agencies, Indigenous Group(s) and the public, and the required form and content of those reports; and viii) Process and timing for updating and revising the plan, program or other document, including any consultation with agencies and Indigenous Groups that would occur in connection with such updates and revisions. <p>b) Where a plan, program or other document includes monitoring requirements, the plan, program or other document must include:</p> <ul style="list-style-type: none"> i) Description of baseline information that will be used to support monitoring of the effectiveness of mitigation; ii) Methodology, location, frequency, timing and duration of monitoring; and iii) Scope, content and frequency of reporting of the monitoring results. 	Project Co	Moderate

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No.	Condition	Delivered By	Performance Mechanism Index
3.	<p>Consultation</p> <p>Where a condition of this Certificate requires the Holder to consult a particular party or parties regarding the content of a plan, program or other document the Holder must, to the satisfaction of the EAO:</p> <ul style="list-style-type: none"> a) Provide written notice to each such party that: <ul style="list-style-type: none"> i) Includes a copy of the plan, program or other document; ii) Invites the party to provide its views on the content of such plan, program or other document; and iii) Indicates: <ul style="list-style-type: none"> i. If a timeframe providing such views to the Holder is specified in the relevant condition of this Certificate, that the party may provide such views to the Holder within such time frame; or ii. If a timeframe providing such views to the Holder is not specified in the relevant condition of this Certificate, specifies a reasonable period during which the party may submit such views to the Holder; b) Undertake a full and impartial consideration of any views and other information provided by a party in accordance with the timelines specified in a notice given pursuant to paragraph (a); c) Provide a written explanation to each party that provided comments in accordance with a notice given pursuant to paragraph (a) as to: <ul style="list-style-type: none"> i) How the views and information provided by such party to the Holder have been considered and addressed in a revised version of the plan, program or other document; or ii) Why such views and information have not been addressed in a revised version of the plan, program or other document; d) Maintain a record of consultation with each such party regarding the plan, program or other document; and e) Provide a copy of such consultation record to the EAO, the relevant party, or both, promptly upon the written request of the EAO or such party. 	Project Co	Major

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No.	Condition	Delivered By	Performance Mechanism Index
4.	<p>Compliance Verification and Reporting</p> <p>The Holder must provide any document, data or information requested by the EAO for the purposes of compliance inspection and verification.</p> <p>The Holder must submit a report to the attention of the EAO and Indigenous Groups on the status of compliance with this Certificate at the following times:</p> <ul style="list-style-type: none"> a) At least 30 days prior to the start of Construction; and b) On or before January 31 in each year after the start of Construction, until three years after the start of Operations. <p>The reports must be in a form satisfactory to the EAO. The EAO may adjust or extend this reporting requirement by providing written notice to the Holder.</p>	<p>Project Co/Province</p> <p>Note: Province only after Total Completion Date</p>	<p>Moderate</p>
5.	<p>Project Status Notification</p> <p>The Holder must notify the EAO, Vancouver Fraser Port Authority (VFPA) and Indigenous Groups in writing that the Project is under construction, under demolition, and when it is operational. The notification must be received by the EAO, VFPA, and Indigenous Groups within three months of the commencement of Construction, Demolition and Operations.</p> <p>Should the primary contact for the Project change, the Holder must notify the EAO, VFPA and Indigenous Groups, in writing, within 30 days of such change and provide the physical address, email address and phone number(s) of the new primary contact.</p>	<p>Province</p>	
6.	<p>Compliance Notification</p> <p>The Holder must notify the EAO, VFPA and Indigenous Groups:</p> <ul style="list-style-type: none"> a) As soon as practical; and b) In any event, no more than 72 hours, <p>after the Holder determines that the Holder has not, or may not have, fully complied with this Certificate.</p>	<p>Project Co</p>	<p>Major</p>

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7.	<p>Independent Environmental Monitor</p> <p>The Holder must retain the services of an Independent Environmental Monitor (IEM). The Holder must develop the qualification requirements and evaluation criteria for the selection of the IEM in consultation with Indigenous Groups.</p> <p>The IEM must be a Qualified Professional (QP), unless otherwise approved by the EAO, with a minimum of five years experience in monitoring construction in British Columbia. The IEM will:</p> <ul style="list-style-type: none"> a) Observe and record for, and report to, the EAO on compliance with the Certificate; and b) Provide information to the EAO, Indigenous Groups, Ministry of Forests, Lands and Natural Resource Operations and Rural Development (FLNRORD) and VFPA, <p>as directed by the EAO. Subject to any exceptions set out in the terms of engagement for the IEM, when providing information or reports to the EAO, the IEM must not provide such information or reports to the Holder in advance of providing such information or reports to the EAO, Indigenous Groups, FLNRORD and VFPA.</p> <p>The Holder must retain the IEM throughout Construction and Demolition and for three years after the completion of Demolition.</p> <p>The Holder must develop the terms of engagement for the IEM in consultation with Indigenous Groups, FLNRORD and VFPA:</p> <ul style="list-style-type: none"> c) 45 days prior to the planned commencement of Construction, the Holder must: <ul style="list-style-type: none"> i) Submit to the EAO for review the name, organization and qualifications of the proposed IEM and the IEM terms of engagement; and ii) Provide notice to Indigenous Groups of the name, organization and qualifications of the proposed IEM. <p>The Holder must not start Construction until the selection of the IEM and the terms of engagement have been approved by the EAO.</p> <p>The terms of engagement must include, at a minimum, the following:</p> <ul style="list-style-type: none"> d) The role, responsibilities and qualifications of the IEM; e) The roles, responsibilities and qualifications of any staff or other persons including Indigenous monitors who will assist the IEM with performing the IEM's roles and responsibilities (each an "IEM Support"); f) The nature and frequency of monitoring; g) The process whereby the IEM or an IEM Support will make recommendations to the Holder to take mitigative or 	<p>Project Co/Province</p> <p>Note: Province only for retaining the IEM for the period following Total Completion.</p>	<p>Severe</p>

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	<p>corrective actions to address any non-compliance or potential non-compliance with this Certificate;</p> <p>h) The process by which the recommendations in section g) above will be communicated to the EAO and the Holder;</p> <p>i) The situations in which the IEM will have the authority to stop work on part of or all of the project if the IEM determines that:</p> <ul style="list-style-type: none"> i) The Holder has not, or may have not, complied fully with the requirements of this Certificate; and ii) Stopping work is necessary to prevent or reduce Project-related adverse effects as determined by the IEM or any IEM support; <p>j) The details of a report to be submitted to the EAO and Indigenous Groups upon completion of Construction and Demolition, and three years following the completion of Demolition. The report must be written by the IEM and include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> i) A record of all non-compliances with this Certificate; ii) A record of the recommendations made by the IEM to the Holder to prevent or address any non-compliance with this Certificate; iii) A record of whether any such recommendations from the IEM were implemented and the corresponding outcome of implementation; iv) A record of all stop-work orders issued to prevent or address a non-compliance with this Certificate and any other Provincial or Federal legislation or authorization applicable to the Project; and, v) Assessment of the effectiveness of Project mitigation measures for Construction and Demolition and for three years after completion of Demolition. <p>k) A requirement that a detailed work plan for Construction, Demolition and for the first three years after the completion of Demolition be submitted to the EAO for approval 60 days prior to the start of Construction. The work plans must describe the frequency of inspections and rationale for that frequency, the manner in which IEM-identified non-compliances will be communicated to the EAO, the Holder and Indigenous Groups, and the format and frequency of IEM reports, on an annual basis.</p>		

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8.	<p>Indigenous Group Monitoring Plan</p> <p>The Holder must, to the satisfaction of the EAO, offer opportunities for members or representatives of Indigenous Groups to participate in monitoring activities during Construction and Demolition, including, but not limited to, monitoring of Construction and Demolition activities that may affect traditional use and related environmental values.</p> <p>The Holder must prepare an Indigenous Group Monitoring Plan in consultation with Indigenous Groups and the EAO. The plan must include at least the following:</p> <ul style="list-style-type: none"> a) The methods for communicating monitoring opportunities to Indigenous Groups and their members b) The roles and responsibilities of Indigenous monitors, including: <ul style="list-style-type: none"> i) The nature and frequency of the monitoring activities that will be conducted; and ii) The means and methods by which monitoring activities will be undertaken; c) Protocols for access to the Project and access to monitoring locations by Indigenous Group Monitors; and d) The training, equipment and support that will be provided to the monitors to support the monitoring activities. <p>The Holder must provide the plan to Indigenous Groups and the EAO for review a minimum of 60 days prior to the planned commencement of Construction.</p> <p>The plan, and any amendments thereto, must be implemented prior to Construction and during Construction and Demolition, and to the satisfaction of the EAO.</p>	Project Co	Severe

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9.	<p>Construction Environmental Management Plan</p> <p>The Holder must retain one or more Qualified Professionals to develop a Construction Environmental Management Plan. The plan must be developed in consultation with FLNRORD, TC, VFPA, Metro Vancouver, City of New Westminister, City of Surrey and Indigenous Groups.</p> <p>The plan must apply to all components of the Project, including any work sites external to the Certified Project Area. The plan must include, at a minimum, component plans to address:</p> <ul style="list-style-type: none"> a) Air quality management; b) Construction health and safety management; c) Construction staging, laydown, and any work sites external to the Certified Project Area; d) Contaminated sites management; e) Emergency response and spill prevention; f) Erosion and sediment control; g) Hazardous materials management; h) Standing heritage resources such as Woodlands wall and heritage buildings and houses within the Certified Project Area; i) Non-hazardous waste management; j) Lighting Management, including but not limited to the means by which the potential attraction of birds will be mitigated; k) Noise and vibration; l) Soil management; m) Stormwater management and pollution prevention; n) Surface water management; o) Water quality monitoring for in-river works; p) Vegetation and invasive species management, including but not limited to: <ul style="list-style-type: none"> i) Rare plant surveys; 	Project Co	Severe

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	<ul style="list-style-type: none"> ii) Culturally significant plant surveys; and iii) Revegetation plans to restore and enhance the potential of permeable surfaces of the site to function effectively as fish, wildlife, and migratory bird habitats; q) Wildlife and wildlife habitat management including but not limited to: <ul style="list-style-type: none"> i) Pre-construction bird and wildlife surveys; and ii) Pre-construction shoreline mammal habitat surveys. <p>The plan must include a description of how Indigenous traditional knowledge and Indigenous traditional use information, shared with the Holder by Indigenous Groups, has been incorporated into the plan.</p> <p>The Holder must complete the surveys required by p) and q) of this condition prior to the planned commencement of Construction. Survey results must be shared with the EAO, FLNRORD, TC, VFPA, Metro Vancouver, City of New Westminister, City of Surrey and Indigenous Groups prior to Construction and must inform the development of the plan.</p> <p>The Holder must provide this plan to the EAO, FLNRORD, TC, VFPA, Metro Vancouver, City of New Westminister, City of Surrey and Indigenous Groups for review a minimum of 60 days prior to the planned commencement of Construction.</p> <p>The plan, and any amendments thereto, must be implemented to the satisfaction of the QP(s) throughout Construction and to the satisfaction of the EAO.</p>		

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10.	<p>Demolition Environmental Management Plan</p> <p>The Holder must retain one or more QPs to develop a Demolition Environmental Management Plan. The plan must be developed in consultation with FLNRORD, TC, VFPA, Metro Vancouver, City of New Westminster, City of Surrey, and Indigenous Groups.</p> <p>The plan must apply to all components of the Project, including any work sites external to the Certified Project Area. The plan must include, at a minimum, component plans to address:</p> <ul style="list-style-type: none"> a) Air quality management; b) Health and safety management; c) Demolition staging, laydown, and any work sites external to the Certified Project Area; d) Contaminated sites management; e) Emergency response and spill prevention; f) Erosion and sediment control; g) Hazardous materials management; h) Standing heritage resources, including heritage buildings and houses that are in the Certified Project Area; i) Non-hazardous waste management; j) Lighting management; k) Noise and vibration; l) Soil management; m) Stormwater management and pollution prevention; n) Surface water management; o) Water quality monitoring for in-river works; p) Vegetation and invasive species management, including but not limited to: <ul style="list-style-type: none"> i) Rare plant surveys; ii) Culturally significant plant surveys; and 	Project Co	Severe

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	<p>iii) Revegetation plans to restore and enhance the potential of permeable surfaces of the site to function effectively as fish, wildlife, and migratory bird habitats; and</p> <p>q) Wildlife and wildlife habitat management and restoration, including, but not limited to, pre-demolition bird and wildlife surveys.</p> <p>The plan must include a description of how Indigenous traditional knowledge and Indigenous traditional use information, shared with the Holder by Indigenous Groups, has been incorporated into the plan.</p> <p>The Holder must complete the surveys required by p) and q) of this condition prior to the planned commencement of Demolition. Survey results must be shared with the EAO, FLNRORD, TC, VFPA, and Indigenous Groups prior to Demolition and must inform the development of the plan.</p> <p>The Holder must provide this plan to the EAO, FLNRORD, TC, VFPA, Metro Vancouver, City of New Westminster, City of Surrey, and Indigenous Groups for review a minimum of 60 days prior to the planned commencement of Demolition.</p> <p>The plan, and any amendments thereto, must be implemented to the satisfaction of the QP(s) throughout Demolition and to the satisfaction of the EAO.</p>		

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No.	Condition	Delivered By	Performance Mechanism Index
11.	<p>Fish and Fish Habitat Monitoring and Mitigation Plan</p> <p>The Holder must retain a QP to develop a Fish and Fish Habitat Monitoring and Mitigation Plan to identify and mitigate potential adverse effects to fish and fish habitat during Construction and Demolition.</p> <p>The plan must be developed in consultation with FLNRORD and Indigenous Groups.</p> <p>The plan must include at least the following:</p> <ul style="list-style-type: none"> a) A description of the measures and standards that will be in place to avoid, reduce, or otherwise mitigate adverse effects on fish and fish habitat that could result from Construction and Demolition; b) A list of fish species at risk (i.e. fish species identified as being at risk through federal or BC legislation) that have the potential to be affected by Project-related activities; c) Identification of reduced-risk work windows, including those windows for eulachon, sturgeon and salmon species, as well as for any species at risk listed in (b), and identification of reduced-risk windows communicated by Indigenous Groups to the Holder, for in-river construction and demolition, and the work that will occur within these windows; d) Identification of, and justification for, any work that will occur outside of the reduced-risk work windows identified in accordance with paragraph (c), and measures to mitigate impacts of such works to fish and fish habitat; e) The means by which, and timing when, monitoring of fish presence, including, but not limited to, the use of side-scan sonar, will be undertaken to support the implementation of mitigation and monitoring to address potential effects to fish, including sturgeon, eulachon, salmon species and any species at risk listed in (b), as determined by a QP; f) The means by which, and timing when, monitoring results will be shared; g) Identification of the geographic areas where, the means by which, and periods of time when, underwater noise monitoring in the Fraser River will be conducted; and h) A description of how Indigenous traditional knowledge and Indigenous traditional use information, shared with the Holder by Indigenous Groups, has been incorporated into the plan. <p>The Holder must complete the <i>Pattullo Bridge Replacement Project – Eulachon Spawning and Staging Study</i> initiated by the Holder in December 2018 prior to commencing Construction. Study results must be shared with the EAO, FLNRORD, and Indigenous Groups prior to Construction and must inform the development of the plan.</p> <p>The Holder must provide this plan to the EAO, FLNRORD and Indigenous Groups for review a minimum of 60 days prior to the planned commencement of Construction.</p> <p>The plan, and any amendments thereto, must be implemented to the satisfaction of the QP throughout Construction and Demolition and to the satisfaction of the EAO.</p>	Project Co	Severe

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No.	Condition	Delivered By	Performance Mechanism Index
12.	<p>Fish and Wildlife Habitat Offsetting Plan</p> <p>The Holder must retain a QP to develop a plan for offsetting the loss of habitat from the Project. The plan must be developed in consultation with City of New Westminster, City of Surrey, FLNRORD, VFPA and Indigenous Groups.</p> <p>The plan must include at least the following:</p> <ul style="list-style-type: none"> i) A description of the measures that will be implemented to offset residual fish habitat loss associated with the Project; ii) The means by which the Holder will ensure the offsetting habitat will provide a higher value than the fish habitat it is replacing, as determined by a QP. The plan must describe how the offsetting habitat provides a higher value than the fish habitat it is replacing; iii) A description of the measures and standards that will be put in place to avoid or mitigate adverse effects on fish and fish habitat that could result from the implementation of the offsetting measures referred to in paragraph (a) [<i>sic</i> - should be paragraph i)]; iv) A description of the monitoring measures that will be in place to assess the effectiveness of the offsetting measures referred to in paragraph (a) [<i>sic</i> - should be paragraph i)]; v) The timeline for the implementation of the offsetting plan; vi) A description of the contingency measures and associated monitoring measures that will be put into place if the offsetting measures referred to in paragraph (a) [<i>sic</i> - should be paragraph i)] are not successful in offsetting the residual loss of fish habitat resulting from the Project; vii) Identification of habitat enhancement opportunities including measures to incorporate wildlife and migratory bird habitat offsetting; viii) A description of a monitoring program to assess and evaluate the effectiveness of offsetting measures referred to in paragraph (f) [<i>sic</i> - should be paragraph vi)]; ix) A description of how Indigenous traditional knowledge and Indigenous traditional use information, shared with the Holder by Indigenous Groups for consideration, has been incorporated into the plan. <p>The Holder must provide the plan to the EAO, FLNRORD, City of New Westminster, City of Surrey, VFPA and Indigenous Groups for review a minimum 60 days prior to the planned commencement of Construction. The plan and any amendments thereto, must be implemented throughout Construction and Demolition under the supervision of the QP and to the satisfaction of the EAO.</p>	Project Co	Severe

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13.	<p>Marine and Fisheries Access Management Plan</p> <p>The Holder must develop a plan for marine and fisheries access management applicable to Construction and Demolition. The plan must be developed in consultation with Indigenous Groups, VFPA and TC.</p> <p>The plan must include at least the following:</p> <ul style="list-style-type: none"> a) A description of how the Holder will avoid, minimize or otherwise mitigate or offset disruptions caused by Construction and Demolition for commercial fisheries or for members of Indigenous Groups to carry out traditional use activities including fishing for food, social and ceremonial purposes that have been identified and communicated by Indigenous Groups to the Holder in relation to this or other relevant plans; b) Identification of travel corridors and placement of Project related marine vessels and equipment into and within the Certified Project Area during Construction and Demolition; c) Identification of existing navigational routes, commercial fishing areas, commercial shipping use, recreational and tourism use, and any associated timing windows; d) Identification of existing and traditional navigational routes, fishing areas and harvesting areas, as identified and communicated by Indigenous Groups, and any associated timing windows; e) Construction and Demolition locations, activities, and schedule, including but not limited to staging and laydown areas, barge loading and unloading areas, and habitat offsetting activities, that have the potential to interfere with fishing access and related navigation; f) Results of supplemental hydraulic modeling based on the detailed design of in-river components of the Project, including predicted Project-related changes in scour and sediment deposition, flow velocities and flow distribution in the Fraser River, and mitigation measures including optimization of pier shapes and alignment, proposed to address potential adverse effects predicted by the modelling, and the means to inform Indigenous Groups of these changes; g) The locations at and frequency with which river bed and foreshore monitoring will be conducted for up to a duration of five years after Demolition activities. Parameters must include scour and sediment deposition, flow velocities, and flow distribution; h) A complaint resolution process and compensation regime for loss or damage to traps, nets and other fishing equipment, anchors and other vessel-related gear due to interactions with Project-related marine vessels; i) Actions to inform marine users and Indigenous Groups of the anticipated Project schedule for marine-based activities during Construction and Demolition; 	Project Co	Severe

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	<p>j) Methods to coordinate activities with other marine users;</p> <p>k) A description of marine communications, emergency preparedness procedures and other measures to address the safety of marine users, fishers and construction personnel and to minimize the likelihood of vessel collisions during Construction and Demolition; and</p> <p>l) A description of how Indigenous traditional knowledge and Indigenous traditional use information, shared with the Holder by Indigenous Groups, has been incorporated into the plan.</p> <p>The Holder must provide the plan to the EAO, Indigenous Groups, VFPA, and TC no less than 60 days prior to the Holder's planned date to commence in-river Construction activities. The Holder must implement the plan throughout in-river Construction and Demolition activities, to the satisfaction of the EAO.</p> <p>For the purposes of this condition, 'in-river Construction and Demolition activities' includes activities related to Construction and Demolition where Project-related marine vessels, barges and equipment, or machinery, and impediments to navigation, including pier construction and dewatering activities, are present within the Fraser River.</p>		

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14.	<p>Access Management Plan</p> <p>The Holder must develop a plan for access management during Construction and Demolition. The plan must be developed in consultation with City of New Westminster, City of Surrey, Fraser Health, Metro Vancouver, TransLink, BC Cycling Coalition, HUB Cycling and Indigenous Groups.</p> <p>The plan must include at least the following:</p> <ul style="list-style-type: none"> a) Measures to avoid or mitigate potential effects to cycling, pedestrian and vehicular traffic, and public transit service; b) A description of how traffic interruptions will be planned and mitigated, traffic restrictions and re-routing scenarios will be communicated to stakeholders, emergency responders, transit agencies, municipalities and adjacent land users; c) The means by which the Holder will: <ul style="list-style-type: none"> i) Control public access along the Certified Project Area; ii) Maintain, restore or enhance existing access to public use areas, community amenities, businesses and residences; iii) Maintain, restore or enhance existing cycling access; and iv) Avoid or mitigate any disruption caused by Construction and Demolition to the access for members of Indigenous Groups to carry out land-based traditional use activities that have been identified and communicated by Indigenous Groups to the Holder in relation to this and other relevant plans. <p>The Holder must provide the plan to the EAO, City of New Westminster, City of Surrey, Fraser Health, Metro Vancouver, TransLink, BC Cycling Coalition, HUB Cycling, and Indigenous Groups for review a minimum 60 days prior to the planned commencement of Construction. The plan, and any amendments thereto, must be implemented throughout Construction and Demolition, to the satisfaction of the EAO.</p>	Project Co	Severe

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15.	<p>Cultural and Archaeological Resources Management Plan</p> <p>The Holder must retain a QP to develop a plan for the mitigation of impacts of the Project to archaeological resources and cultural sites during Construction and Demolition, including but not limited to sites and resources protected under the <i>Heritage Conservation Act</i>. The plan must be developed in consultation with Indigenous Groups and FLNRORD.</p> <p>The Holder must develop qualifications and evaluation criteria for the selection of the QP for the plan in consultation with Indigenous Groups.</p> <p>The plan must include at a minimum the following:</p> <ul style="list-style-type: none"> a) Procedures for the identification and treatment of archaeological or cultural resources that may be affected by the Project, and procedures for the preservation and sharing of information regarding these resources with Indigenous Groups and FLNRORD; b) The means by which Indigenous Groups will be involved in the Project Archaeological Impact Assessment (AIA); c) The means by which the Holder will incorporate the results of the AIA into the river hydraulics and morphology model to determine any future requirements for an archaeological shoreline assessment and how the assessment may be conducted; d) The measures to prevent unauthorized access to, and to address access preferences of Indigenous Groups to, archaeological and cultural sites during the completion of the AIA and during Construction and Demolition; e) A description of how archaeological and cultural resources and sites within the Certified Project Area could be impacted by Project activities; f) Measures for mitigating and monitoring Project impacts on archaeological and cultural sites; g) The appropriate locations to store archaeological and cultural resources found within the Certified Project Boundary; h) The means by which the Holder will develop and implement a Chance Find Protocol with Indigenous Groups, including the means by which the Holder will manage chance finds of archaeological and resources; i) The means by which the Holder will develop and implement an ancestral remains protocol in the event ancestral remains are encountered; j) How knowledge from the AIA, Traditional Use Studies (TUS), and Aboriginal Traditional Knowledge (ATK) has been incorporated in the plan; and k) Provisions for training employees and contractors of the Project on cultural sensitivity, confidentiality and 	Project Co	Severe

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No.	Condition	Delivered By	Performance Mechanism Index
	<p>recognition of heritage values.</p> <p>Where access permits, as determined by the QP, the AIA must be completed prior to the commencement of Construction.</p> <p>The Holder must provide the plan to the EAO, FLNRORD and Indigenous Groups for review a minimum of 60 days prior to the planned commencement of Construction. The Holder must not commence Construction until the plan is approved by the EAO.</p> <p>The plan and any amendments thereto, must be implemented to the satisfaction of the Qualified Professional throughout Construction, Demolition, and for the first three years after the completion of Demolition, and to the satisfaction of the EAO.</p>		
16.	<p>Indigenous Cultural Recognition Plan</p> <p>The Holder must develop a plan for Indigenous cultural recognition, interpretation, education and commemoration of heritage sites. The plan must be developed in consultation with Indigenous Groups.</p> <p>The plan must include at least the following:</p> <ul style="list-style-type: none"> a) Description of a process for continuing engagement with Indigenous Groups throughout Construction, Demolition and for the first three years after the completion of Demolition, to further identify and plan for opportunities for cultural recognition, interpretation, education, and commemoration; b) Description of how opportunities for cultural recognition that have been requested by Indigenous Groups have been considered and supported by the Holder; c) The process by which Indigenous Groups will be involved in the implementation of the cultural recognition, interpretation, education, or commemoration opportunity and associated activities; and d) Describe opportunities made available to Indigenous Groups to review and provide comment on Project design, and documentation of how feedback received, or comments raised by Indigenous Groups were considered. <p>The Holder must provide the plan to the EAO and Indigenous Groups for review a minimum of 60 days prior to the planned commencement of Construction and must be implemented to the satisfaction of the EAO throughout Construction, Demolition and Operations.</p>	<p>Province/ Project Co</p> <p>Note: Project Co only until Total Completion and for supporting the Province in engagement related to Design and Construction, in accordance with Section 3.2.6 of Part 2 of Schedule 4 and with Schedule 9.</p>	Severe

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17.	<p>Indigenous Training, Employment and Procurement Plan</p> <p>The Holder must develop an Indigenous Training, Employment and Procurement plan for the Project. The plan must be developed in consultation with Indigenous Groups. The plan must include at a minimum:</p> <ul style="list-style-type: none"> a) The methods for communicating training, employment and procurement opportunities to Indigenous Groups and their members; b) Measures that the Holder will use to provide training opportunities for Indigenous monitors and enhance the hiring and retention of Indigenous Groups and their members; c) Measures that the Holder will use to support the procurement of goods and services from businesses owned by Indigenous Groups; and d) The means by which the results of b) and c) will be reported. <p>The Holder must provide the plan to the EAO and Indigenous Groups for review a minimum of 60 days prior to the planned commencement of Construction.</p> <p>The plan, and any amendments thereto, must be implemented throughout Construction and Demolition to the satisfaction of the EAO.</p>	Project Co	Severe
18.	<p>Engagement and Reporting</p> <p>The Holder must continue to engage with Indigenous Groups from the date of issuance of this Certificate until the implementation of monitoring and follow-up programs required in the conditions described in this Certificate, to the satisfaction of the EAO.</p> <p>The Holder must provide reports to the EAO regarding Indigenous engagement that must include:</p> <ul style="list-style-type: none"> a) A summary of the issues and concerns raised by each Indigenous Group, the measures taken to address the issues and concerns raised, or an explanation of why no action was taken; and b) An outline of on-going or future engagement opportunities with each Indigenous Group for the conditions set out in this Certificate. <p>The reports must be provided:</p> <ul style="list-style-type: none"> c) Within one year of commencing Construction; d) At the commencement of Demolition; and e) Upon the request of the EAO. 	<p>Project Co/ Province</p> <p>Note: Province only for the Project Website and the Pubic Engagement Report required to be submitted one year after completion of Demolition.</p>	Severe

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	<p>The EAO may amend these timelines and may request additional reports at any time by providing written notice to the Holder.</p> <p>No less than 30 days prior to providing such a report to the EAO, the Holder must share a draft of such report with Indigenous Groups for their review and comment.</p> <p>The Holder must continue to engage the public from the date of issuance of this Certificate until the implementation of monitoring and follow-up programs required in the conditions described in this Certificate, to the satisfaction of the EAO.</p> <p>Within 60 days of the issuance of this Certificate, the Holder must establish and maintain a dedicated Project website throughout Construction and Demolition and for the first three years after the completion of Demolition. The website must:</p> <ul style="list-style-type: none"> f) Provide general information regarding the Project and Project status; g) Provide information about Project activities during Construction and Demolition and for the first three years after the completion of Demolition; h) Provide information in relation to the notification and communication requirements for the conditions set out in this Certificate; i) Provide information regarding progress in permitting processes that follow the issuance of this Certificate; j) Include information that would promote safety in and surrounding the Project area; k) Include a means for soliciting and receiving feedback; and l) Provide contact information for the Holder. <p>The Holder must provide to the EAO a public engagement report one year after the commencement of Construction and one year after the completion of Demolition, unless otherwise directed by the EAO.</p> <p>The public engagement report must include for each individual or party with which the Holder engaged:</p> <ul style="list-style-type: none"> m) The name of the individual or party; n) The methods(s), date(s), and location(s) of engagement activities; o) A summary of issues or concerns raised; and p) The measures taken, or that will be taken, to address or respond to concerns, or an explanation why no further action is required to respond to issues or concerns. 		

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No.	Condition	Delivered By	Performance Mechanism Index
19.	<p>Transfer of Certificate</p> <p>Except as provided below, neither this Certificate nor any interest in it may be transferred to any person. This Certificate will be effectively transferred if the proposed Holder acknowledges that, upon transfer, it will be responsible for complying with the conditions of the Certificate, and both the proposed Holder and the Holder:</p> <ul style="list-style-type: none"> a) Obtain consent for the transfer from the Executive Director; b) Apply under Section 19 of the Act for such amendments to this Certificate, if any, as the Executive Director deems necessary to ensure compliance with and enforceability of this Certificate and to otherwise reflect the proposed transfer; and c) Confirm by written notice to the Executive Director, within 14 days of the completion of all aspects of the transfer transaction other than this notice, that the transfer has been completed. <p>An interest in this Certificate may be transferred by way of a grant of security to lenders or financiers without consent.</p> <p>A transfer of this Certificate to a trustee in bankruptcy, by a receiver or a trustee in bankruptcy pursuant to a court approved sale, or as part of a court approved arrangement under the <i>Company Creditors Arrangement Act</i> may occur without consent.</p> <p>If this Certificate is transferred without consent, the new and former Holder must notify the Executive Director within 30 days of the transfer and apply within the time specified by the Executive Director for any amendments to this Certificate that the Executive Director deems necessary to ensure compliance with and enforceability of this Certificate and to otherwise reflect the proposed transfer.</p>	Not applicable	Not applicable

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No.	Condition	Delivered By	Performance Mechanism Index
20.	<p>Transfer of Interest in Project</p> <p>Except in connection with the granting of security to Project lenders or financiers, prior to the Holder transferring a significant interest in the Project, the Holder and proposed transferee must:</p> <ul style="list-style-type: none"> a) Obtain consent for the transfer from the Executive Director; b) Apply under Section 19 of the Act for such amendments to this Certificate, if any, as the Executive Director deems necessary to ensure compliance with and enforceability of this Certificate and to otherwise reflect the proposed transfer; and c) A transfer to a trustee in bankruptcy, by a receiver or a trustee in bankruptcy pursuant to a court approved sale or as part of a court approved arrangement under the <i>Company Creditors Arrangement Act</i> may occur without consent. <p>If a significant interest in the Project is transferred without consent, the Holder must notify the Executive Director within 30 days of the transfer and apply within the time specified by the Executive Director for any amendments to this Certificate that the Executive Director deems necessary to ensure compliance with and enforceability of this Certificate and to otherwise reflect the proposed transfer.</p>	Not applicable	Not applicable

**APPENDIX C
PROJECT AND ENVIRONMENTAL CONDITIONS - PPEP**

1. Note that this Appendix C varies from the Port Project and Environmental Permit “Project and Environmental Conditions” in that one column “Delivered by” has been added to this Appendix C. All other columns in this Appendix C are intended to contain the precise language as found in the Port Project and Environmental Permit “Project and Environmental Conditions”.
2. Notwithstanding any references in a condition to “Proponent”, “Permit Holder” and/or “Project Co”, a commitment in this Appendix C that:
 - (a) contains a corresponding designation of “Project Co” in the column entitled “Delivered by”; or
 - (b) contains a corresponding designation of “Project Co/Province” in the column entitled “Delivered by”,shall be interpreted to mean that Project Co shall be obliged to perform and carry out the works and activities and comply with the matters described in the relevant condition in their entirety or, as the case may be, as provided otherwise in the Notes included in the “Delivered by” column.
3. All defined terms used in the “Delivered by” column of this Appendix C shall have the meanings given in Schedule 1 [Definitions and Interpretation] to the Project Agreement.

No.	General Conditions	Delivered By
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.	Project Co
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.	Project Co
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.	N/A
4	The Permit Holder shall indemnify and save harmless VFPA in respect of all claims, losses, costs, fines, penalties or other liabilities, including legal fees, arising out of: (a) any bodily injury or death, property damage or any loss or damage arising out of or in any way connected with the Project; and (b) any breach by the Permit Holder of its obligations under this Permit.	Project Co in accordance with the Project Agreement
5	The Permit Holder is responsible for locating all existing site services and third-party utilities including any located underground or suspended from the existing Pattullo Bridge. The Permit Holder is responsible for repair or replacement of any damage to existing site services, utilities, bridge piers (i.e. CN Rail Bridge) to the satisfaction of VFPA, that result from construction or demolition activities, and operation of the Project.	Project Co
6	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, including the attached plans and drawings numbered PER No. 17-107-A to F. The Permit Holder shall not carry out any other physical activities unless expressly authorized by VFPA.	Project Co
7	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. Accordingly, the Permit Holder shall be familiar with VFPA's compliance and enforcement program: https://www.portvancouver.com/development-and-permits/compliance/ .	Project Co
8	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.	Project Co
9	The Permit Holder shall make available upon request by any regulatory authority (such as a Fishery Officer) a copy of this Permit.	Project Co
10	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.17-107.	Project Co
11	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.	Project Co

SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS

Appendix C: Project and Environmental Conditions - PPEP

No.	General Conditions	Delivered By
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"> • Prior to construction Conditions (self-report shall be submitted a minimum of 30 business days prior to the commencement of construction, or any physical activities); • Construction Conditions (self-report shall be submitted every 6 months during construction); • Conditions Upon Completion of the new bridge (self-report shall be submitted within 60 business days of completion of construction of the new bridge); • Demolition Conditions (self-report shall be submitted every 6 months during demolition) • Conditions Upon Completion of the Demolition of the Existing bridge (self-report shall be submitted within 60 business days of completion of demolition of the existing bridge) 	Project Co
13	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.	Project Co
14	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.	Project Co
15	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.	Project Co
16	The Permit Holder shall immediately notify Metro Vancouver of any actual or potential damage to Metro Vancouver infrastructure (including pipelines and outfalls) at: 604-985-1478.	Project Co
17	The Permit Holder must adhere to commitments made to Aboriginal groups and provide updates to the VFPA within 15 days of receiving a request.	Project Co
18	All road and rail design conflicts, including with future rail expansion plans, will be resolved between the Applicant and the impacted railways during the development of final design and railway agreement(s).	Project Co
19	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.	N/A

No.	Conditions – Prior to Commencing Construction or any Physical Activities	Submission Timing (business days)	Delivered By
20	The Permit Holder shall submit signed and sealed drawings for each phase of proposed works approved for construction by a professional engineer licensed to practice in the Province of British Columbia.	10 business days before commencing construction or any physical activities	Project Co

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Appendix C: Project and Environmental Conditions - PPEP

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No.	Conditions – Prior to Commencing Construction or any Physical Activities	Submission Timing (business days)	Delivered By
21	The Permit Holder shall provide a Project schedule to VFPA 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.	20 business days before commencing construction or any physical activities	Project Co
22	The Permit Holder shall provide a draft construction notice (or multiple draft notices for phased construction) to VFPA's satisfaction in accordance with VFPA's Public Consultation Guidelines.	40 business days before commencing construction or any physical activities	Project Co
23	The Permit Holder shall submit a draft construction communications plan in accordance with VFPA's Public Consultation Guidelines. The plan shall outline how the Permit Holder will engage and communicate with the public and stakeholders from the date of permit issuance to the completion of construction. The plan shall be updated as necessary and upon request by VFPA to ensure public and stakeholders are provided with relevant information as it becomes available. The Permit Holder shall carry out the Project in accordance with the construction communications plan, and any subsequent amendments approved by VFPA.	40 business days before commencing construction or any physical activities	Project Co
24	The Permit Holder shall distribute an approved construction notice (or multiple notices for phased construction) to residents and businesses to an area to VFPA's satisfaction. The Permit Holder shall notify VFPA when such distribution has been completed.	20 business days before commencing construction or any physical activities	Project Co
25	The Permit Holder shall submit a Construction Parking and Traffic Management Plan to VFPA's satisfaction. The Permit Holder shall carry out the Project in accordance with the construction parking and traffic management plan, and any subsequent amendments approved by VFPA.	40 business days before commencing construction or any physical activities	Project Co
26	The Permit Holder must submit a Construction Staging Plan, including the following for VFPA review and approval: <ul style="list-style-type: none">• Identification of potential construction-related hazards and risk mitigation measures from construction activities;• Identification of construction activities and staging areas;• Dates and hours of operation;• Description of activities taking place;• Equipment and staging areas (dimensions must be included);and• Special request and/or additional information.	45 business days before commencing construction or any physical activities	Project Co
27	The Permit Holder shall submit an Archaeological Chance Find Procedure for the Project site, to VFPA's satisfaction. The Chance Find Procedure shall be shared with Aboriginal groups for review and comment prior to be submitted. The Permit Holder shall carry out the Project in accordance with this Procedure, and any subsequent amendments approved by VFPA.	40 business days before commencing construction or any physical activities	Project Co

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SCHEDULE 6: ENVIRONMENTAL OBLIGATIONS

Appendix C: Project and Environmental Conditions - PPEP

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No.	Conditions – Prior to Commencing Construction or any Physical Activities	Submission Timing (business days)	Delivered By
28	For any structures proposed that are reviewable under the National Building Code and National Fire Code, the Permit Holder shall apply for a VFPA Building Permit.	40 days before commencing construction of any buildings	Project Co
29	The permit holder shall submit drawings to VFPA for review and approval of the new bridge showing Navigation Envelopes (consistent with the Navigation Protection Zones identified in Pattullo Bridge Replacement Project - Navigation Requirements, MOTI, dated April 17, 2019). Drawings should include at minimum: <ul style="list-style-type: none">• Height – Envelope;• Depth – Envelope;• Width – Envelope;• Pier Placement;• Scour Protection Extents; and• Navigation Lighting.	45 business days before commencing construction of any physical activities	Project Co
30	Prior to the commencement of any vessel-related activities, the Permit Holder must contact CCG Marine Communications and Traffic Services (MCTS), (email: NAVWARN.MCTSPRinceRupert@innav.gc.ca Telephone: 250-627-3070) 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	Project Co
31	The Permit Holder must submit a marine construction and staging plan, including the following, for VFPA review and approval: <ul style="list-style-type: none">• Identification of potential navigation related hazards and risk mitigation measures from construction related activities;• Staging and construction areas;• Dates and hours of operation;• Description of activities taking place;• Equipment and vessels (dimensions must be included);• Method of preferred communication with marine users;• Method of communicating updates to relevant users, as described in the Marine Communication Plan;• Proposed plan to implement and mitigate potential restrictions in navigational channels; and• Special request and/or additional information.	45 business days before commencing in-river construction or any vessel-related activities	Project Co

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No.	Conditions – Prior to Commencing Construction or any Physical Activities	Submission Timing (business days)	Delivered By
32	<p>The Permit Holder must submit a Marine Communication Plan for VFPA review and approval, including:</p> <ul style="list-style-type: none">• Summary of details, timelines, equipment, staging, etc;• Notice to Mariners – Regarding overall Project;• Regular NAVWARN advisories as required;• Public Notices at nearby boat launches;• Identify tug requirements and how these will be met for assisting marine users through construction area; and• Plan to communicate navigation restrictions and channel closures.	45 business days before commencing in-river construction or any vessel-related activities	Project Co
33	<p>The Permit Holder shall establish a Marine Users Working Group for the purposes of communicating relevant in-water work activities to local marine operators.</p> <p>The Permit Holder must provide the Marine Users Working Group a copy of the Marine Construction & Staging Plan for their consideration and feedback. Any updates to the documents must be provided to the working group before and during in-water construction phases.</p>	30 business days before commencing in-river construction or any vessel-related activities	Project Co
34	<p>The Permit Holder must post and maintain notices at the beginning of each phase of in-water work, intended for recreational marine users, at the public boat launches and recreational marinas near the work site.</p>	5 days before commencing any vessel-related activities	Project Co
35	<p>The Permit Holder must retain a Qualified Professional to develop a monitoring plan referring to sites identified by VFPA in the document “PBRP – Hydraulic Model – Identification of VFPA Key Nodes – 2016 -10-20”. This is required to monitor potential adverse effects to current, river bed and foreshore caused by the Project and assist in identifying potential mitigation measures if required. The plan and any amendments thereto, must be implemented throughout construction, and for up to three years following completion of demolition. The plan must be developed in consultation and approved by VFPA.</p>	45 business days before commencing any vessel related activities	Province

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No.	Conditions – Prior to Commencing Construction or any Physical Activities	Submission Timing (business days)	Delivered By
36	<p>The Permit Holder shall provide a hydraulic model report, based on the final design which will be used to assess potential impacts that are acceptable for navigation, environment, and infrastructure, that includes:</p> <ul style="list-style-type: none">• A spatial extent that encompasses, at a minimum, the area from the Alex Fraser Bridge in South Arm to the Port Mann Bridge in the Main Arm; downriver in the North Arm to Queensborough Highway Bridge; and downriver in Annacis Channel to Annacis Swing Bridge.• A temporal extent that includes current conditions (for validation purposes), during construction period when all piers are present, after demolition of the existing bridge, at least 1 full year post demolition.• Predictions of potential changes in river hydraulics and morphology. This includes potential changes to currents and sedimentation at sites identified by VFPA in the document “PBRP – Hydraulic Model – Identification of VFPA Key Nodes – 2016 -10-20”.• An assessment of potential effects on flow split between the Fraser River South Arm, Fraser River North Arm, and Annacis Channel as per function of a series of river training structures within the vicinity of the proposed works.	60 business days before commencing construction or any physical activities	Project Co
37	<p>The Permit Holder shall submit a Construction Environmental Management Plan to VFPA's satisfaction, available at: https://www.portvancouver.com/wp-content/uploads/2018/04/PER-Construction-Environmental-Management-Plan-CEMP-Guideline-UPDATE.pdf. The Permit Holder shall carry out the Project in accordance with the construction environmental management plan, and any subsequent amendments approved by VFPA.</p>	60 business days prior to the start of construction or any physical activities	Project Co
38	<p>The Permit Holder shall retain a qualified environmental professional to act as an Independent Monitor responsible for reviewing the construction environmental records and on-site construction activities for compliance with the Construction Environmental Management Plan and this Permit. The Independent Monitor shall possess the following qualifications:</p> <ul style="list-style-type: none">• Suitable education and knowledge demonstrating that they may be reasonably relied on to provide advice within their area of expertise;• A minimum of five years of experience monitoring related types of construction activities in similar environments. <p>The Independent Monitor shall not be an employee of the Permit Holder’s organization or of a contractor/consultant retained by the Permit Holder to work on the Project in other capacities.</p>	Prior to the start of any construction or any physical activities	Project Co
39	<p>The Permit Holder shall submit a proposed pier design and impact strategy to VFPA’s satisfaction.</p>	60 business days before commencing construction or any physical activities	Project Co

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No.	Conditions – Prior to Commencing Construction or any Physical Activities	Submission Timing (business days)	Delivered By
40	<p>The Permit Holder shall submit an Independent Monitoring Work Plan. At a minimum, the Independent Monitoring Work Plan shall describe the following:</p> <ul style="list-style-type: none"> • The role and responsibilities of the Independent Monitor, including the following provisions: <ul style="list-style-type: none"> o The Independent Monitor shall have unfettered access to environmental compliance documentation and the Project site at all times during construction without notice. o The Independent Monitor shall have the authority to direct the Permit Holder to stop a construction activity that is causing an adverse effect. o The Independent Monitor shall report directly to VFPA and obtain direction from VFPA on matters that arise during construction that are not described in the project permit and cannot be resolved by discussion with the Permit Holder. o The Independent Monitor shall concurrently submit compliance reports directly to the Permit Holder and VFPA within one week of site visits. • The frequency of site visits by the Independent Monitor, with a higher frequency of site visits to occur during in-water works as compared to those scheduled for land-based construction activities. • The manner in which notice will be given to the Permit Holder and VFPA for an activity not in compliance with permit conditions or having unforeseen adverse effects. • The name and qualifications of the Independent Monitor. • The name(s), role(s) and qualifications of other individuals providing specialized expertise or designated to act as the Independent Monitor during specific construction activities or times. <p>The Permit Holder shall carry out the Project in accordance with the approved Monitoring Work Plan, and any subsequent amendments, to the satisfaction of VFPA.</p>	60 business days prior to the start of construction or any physical activities	Project Co

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No.	Conditions – Prior to Commencing Construction or any Physical Activities	Submission Timing (business days)	Delivered By
41	<p>The Permit Holder shall submit a Fish and Fish Habitat Monitoring and Mitigation Plan for the Project site, to VFPA’s satisfaction. The Fish and Fish Habitat Monitoring and Mitigation Plan will include:</p> <ul style="list-style-type: none"> • A description of the measures and standards that will be in place to avoid, reduce, or otherwise mitigate or offset any adverse effects on fish and fish habitat; • A list of fish species at risk that have the potential to be affected by Project-related activities; • Identification of, a clear definition for, and a rationale of reduced-risk work windows, including those windows for eulachon, sturgeon and salmon species, as well as for any species at risk, and identification of reduced-risk windows communicated by Indigenous Groups to the Holder, for in-river construction and demolition, and the work that will occur within these windows; • Identification of, and justification for, any work that will occur outside of the reduced-risk work windows identified above, and measures to mitigate impacts of such works to fish and fish habitat; • The methods and timing of when monitoring of fish presence will be undertaken to support the implementation of mitigation and monitoring to address potential effects to fish; • Identification of the areas where, and periods of time when, underwater noise monitoring in the Fraser River will be conducted; • A description of adaptive management measures which identifies contingencies in the event that unanticipated effects on fish are revealed during and after construction and demolition phases; • A description of how Aboriginal traditional knowledge and Aboriginal traditional use information, shared with the Holder by Aboriginal Groups, has been incorporated into the plan; and • A description of reporting frequency. 	40 business days before commencing construction or any physical activities	Project Co
42	<p>The Permit Holder shall submit a stormwater pollution prevention plan, written in accordance with the VFPA Guidelines - Developing Your Stormwater Pollution Prevention Plan available at: www.portvancouver.com/wp-content/uploads/2015/05/PER-Stormwater-Pollution-Prevention-Plan-Guidelines-Final-2015-07-09.pdf), to VFPA's satisfaction. The Permit Holder shall carry out the Project in accordance with the stormwater pollution prevention plan, including any subsequent amendments approved by VFPA.</p>	40 business days before commencing construction of the stormwater utility	Project Co
43	<p>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.</p>	Immediately prior to activities with the potential to affect birds and/or their active nests and eggs	Project Co

No.	Conditions – During Construction or any Physical Activities	Delivered By
44	The Permit Holder shall notify VFPA upon commencement of construction, or any physical activities (e.g., mobilization to the Project site).	Project Co
45	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, in keeping with VFPA Guidelines on this topic.	Project Co
46	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.	Project Co
47	The Permit Holder shall remove from the Project area on port lands all existing utilities that may be decommissioned by the Project, both underground and aboveground. At locations of connection to municipal work (i.e., at property lines), the abandoned utilities shall be capped.	Project Co
48	The Permit Holder shall ensure that an appropriately qualified archaeological monitor be on the Project site at all times during ground disturbing activities with the potential to impact an identified archaeological site and intrude into native soils.	Project Co
49	The Permit Holder shall provide opportunities for interested Aboriginal groups to participate in archaeological monitoring for all Project activities impacting an identified archaeological site and cultural resource. Notification is required at least 15 days prior to any Project activities commencing.	Project Co
50	The Permit Holder shall submit a report summarizing opportunities for Aboriginal involvement in the construction of the Project, one year following commencement of construction, and on an annual basis thereafter until construction completion.	Project Co
51	The Permit Holder shall submit a Cultural and Archaeological Resources Mitigation and Management Plan to mitigate potential impacts of the Project on archeological and cultural resources. The Plan must be developed by a Qualified Professional, and in consultation with Aboriginal groups.	Project Co
52	The Permit Holder may place temporary construction trailers on the Project site while this Permit remains in effect, provided that the Permit Holder does not connect such trailers to any underground utilities without the prior written consent of VFPA which may require, at VFPA’s discretion, a VFPA Building Permit.	Project Co
53	The Permit Holder will maintain open and ongoing communications with the Marine User’s Working Group as per Condition No. 33.	Project Co

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No.	Conditions – During Construction or any Physical Activities	Delivered By
54	During any vessel-related activities, the Permit Holder shall: <ul style="list-style-type: none"> • Position vessels and equipment associated with the Project in such a manner so as not to obstruct line of sight to navigational aids or markers; • Exhibit the appropriate lights and day shapes at all times; • Monitor the VHF channel used for MCTS communications in the respective area at all times and participate as necessary; • Be familiar with vessel movements in areas affected by the Project; • Plan and execute the Project in a manner that will not impede navigation or interfere with vessel operations; and, • 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, any variations must be referred to the marine working users group and approved by VFPA. 	Project Co
55	The Permit Holder shall ensure an assist tug, of adequate size and power is available to render assistance, if requested, to any passing vessels and/or barges that are passing the Project site during all phases of in-water works. Details of how to request the use of the assist tug, must be referred to the Marine Users Working Group and included in the Marine Communication Plan.	Project Co
56	The Permit Holder shall continue to monitor and report changes to VFPA regarding potential adverse effects to current, river bed and foreshore as a result of the Project, referencing the identification of “VFPA Key Nodes – 2016 -10-20”. VFPA in cooperation with the Permit Holder shall determine what changes constitute an adverse effect.	Province
57	The Permit Holder, or their contractor, shall engage a qualified environmental professional to monitor construction activities 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 full time when works are underway that have the potential to adversely affect fish or fish habitat.	Project Co
58	The Permit Holder shall provide monthly environmental monitoring reports to VFPA as specified in the Construction Environmental Management Plan 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.	Project Co

No.	Conditions – Upon Completion of New Bridge	Submission Timing (business days)	Delivered By
59	The Permit Holder shall notify VFPA upon completion of the Project.	Within 30 business days of completion	Project Co
60	The Permit Holder shall provide 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. The record drawings will show navigational envelope clearances and navigation light placement.	Within 40 business days of completion	Project Co

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No.	Conditions – Upon Completion of New Bridge	Submission Timing (business days)	Delivered By
61	Upon completion of work the Permit Holder shall provide a Hydrographic survey to VFPA. The survey must meet Canadian Hydrographic Service (CHS) “Standards for Hydrographic Surveys”. In particular, Surveys must meet “Special Order Survey with Type C1 Coverage”. This typically requires either multibeam or multi-transducer survey equipment.	Within 40 business days of completion	Project Co
62	The Permit Holder shall continue hydrographic surveys and monitoring of VFPA Key Nodes “PBRP – Hydraulic Model – Identification of VFPA Key Nodes – 2016 -10-20” annually (Post Freshet), and submit a report annually for up to 3 years following the completion of demolition, as per Condition No. 35.	Annually for up to 3 years post completion of demolition	Province

No.	Conditions – Prior to Demolition of Existing Bridge	Submission Timing (business days)	Delivered By
63	The Permit Holder shall submit signed and sealed drawings for proposed works approved for demolition by a professional engineer licensed to practice in the Province of British Columbia.	10 business days before commencing demolition or any physical activities	Project Co
64	The Permit Holder shall completely remove all of the piers from the existing bridge. However, if the Permit Holder submits an analysis supporting a rationale to retain portions of the existing bridge piers for riverbed stability, VFPA will consider allowing portions of the piers to be retained. The retained portions of the existing bridge piers must be removed to 14.32 metres below Geodetic Datum as per Pattullo Bridge Replacement Project - Navigation Requirements, MOTI, dated April 17, 2019.	45 business days before commencing demolition or any physical activities	Project Co Note: Project Co in accordance with Section 14.2 of Part 2 of Schedule 4.
65	The Permit Holder shall provide a Project demolition schedule to VFPA 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.	20 business days before commencing demolition or any physical activities	Project Co
66	The Permit Holder shall submit a demolition environmental management plan to VFPA's satisfaction. The Permit Holder shall carry out the Project in accordance with the Demolition Environmental Management Plan, and any subsequent amendments approved by VFPA.	60 business days prior to the start of demolition or any physical activities	Project Co
67	The Permit Holder shall provide a draft demolition notice to VFPA's satisfaction in accordance with VFPA's Public Consultation Guidelines.	40 business days before commencing construction or any physical activities	Project Co

No.	Conditions – Prior to Demolition of Existing Bridge	Submission Timing (business days)	Delivered By
68	The Permit Holder shall submit a draft Demolition Communications Plan in accordance with VFPA’s Public Consultation Guidelines. The plan shall outline how the Permit Holder will engage and communicate with the public and stakeholders from the date of permit issuance to the completion of demolition. The plan shall be updated as necessary and upon request by VFPA to ensure public and stakeholders are provided with relevant information as it becomes available. The Permit Holder shall carry out the Project in accordance with the demolition communications plan, and any subsequent amendments approved by VFPA.	40 business days before commencing construction or any physical activities	Project Co
69	The Permit Holder shall distribute an approved demolition notice to residents and businesses to an area to VFPA's satisfaction. The Permit Holder shall notify VFPA when such distribution has been completed.	20 business days before commencing construction or any physical activities	Project Co
70	The Permit Holder must submit a Demolition Staging Plan, including the following for VFPA review and approval: <ul style="list-style-type: none">• Identification of potential demolition-related hazards and risk mitigation measures from demolition activities;• Identification of land-based staging during demolition;• Dates and hours of operation;• Description of activities taking place;• Equipment staging areas (dimensions must be included); and• Special request and/or additional information.	45 business days before commencing demolition or any physical activities	Project Co
71	The Permit Holder shall submit a demolition parking and traffic management plan to VFPA's satisfaction. The Permit Holder shall carry out the Project in accordance with the construction parking and traffic management plan, and any subsequent amendments approved by VFPA.	40 business days before commencing construction or any physical activities	Project Co
72	The Permit Holder shall submit an Archaeological Chance Find Procedure for the Project site, to VFPA's satisfaction. The Chance Find Procedure shall be shared with Aboriginal groups for review and comment prior to being submitted. The Permit Holder shall carry out the Project in accordance with this Procedure, and any subsequent amendments approved by VFPA.	40 business days before commencing construction or any physical activities	Project Co
73	The Permit Holder must post and maintain notices at the beginning of each phase of in-water work, intended for recreational marine users, at the public boat launches and recreational marinas near the work site.	5 days before commencing any vessel-related activities	Project Co

No.	Conditions – Prior to Demolition of Existing Bridge	Submission Timing (business days)	Delivered By
74	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	Project Co
75	The Permit Holder must submit a Demolition Marine Communication Plan for VFPA review and approval, including: <ul style="list-style-type: none"> • Summary of details, timelines, equipment, staging, etc; • Notice to Mariners – Regarding overall Project; • Regular NAVWARN advisories as required; • Public Notices at nearby boat launches; • How tug requirements will be met for assisting marine users through construction area; and • Proposed plan to communicate navigation restrictions and channel closures. 	45 business days before commencing demolition or any physical activities	Project Co
76	The Permit Holder shall continue the Marine Users Working Group, for the purposes of communicating relevant in-water work activities to local marine operators. The Permit Holder must consider feedback from and provide relevant updates to the group, specifically concerning the Marine Demolition and Staging Plan or equivalent, both before and during in-water demolition phases.	As per Condition No. 3	Project Co
77	Prior to the commencement of any vessel-related activities, the Permit Holder must contact CCG Marine Communications and Traffic Services (MCTS), (email: NAVWARN.MCTSPRinceRupert@innav.gc.ca Telephone: 250-627-3070) 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	Project Co
78	The Permit Holder must submit a Marine Demolition and Staging Plan, including the following, for VFPA review and approval: <ul style="list-style-type: none"> • Identification of potential navigation related hazards and risk mitigation measures from demolition related activities; • Staging and demolition areas; • Dates and hours of operation; • Description of activities taking place; • Equipment and vessels (dimensions must be included); • Method of preferred communication with marine users; • Method of communicating updates to relevant users; • Proposed plan on potential restrictions and navigational channels; and • Special requests and/or additional information. 	45 business days before commencing demolition or any physical activities	Project Co

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No.	Conditions – Prior to Demolition of Existing Bridge	Submission Timing (business days)	Delivered By
79	<p>The Permit Holder shall retain a qualified environmental professional to act as an Independent Monitor responsible for reviewing the construction environmental records and on-site construction activities for compliance with the Demolition Environmental Management Plan and this Permit. The Independent Monitor shall possess the following qualifications:</p> <ul style="list-style-type: none"> • Suitable education and knowledge demonstrating that they may be reasonably relied on to provide advice within their area of expertise; • A minimum of five years of experience monitoring related types of demolition activities in similar environments. <p>The Independent Monitor shall not be an employee of the Permit Holder’s organization or of a contractor/consultant retained by the Permit Holder to work on the Project in other capacities.</p>	45 business days before commencing demolition or any physical activities	Project Co
80	<p>The Permit Holder shall submit an Independent Monitoring Work Plan for the demolition phase. At a minimum, the Demolition Monitoring Work Plan shall describe the following:</p> <ul style="list-style-type: none"> • The role and responsibilities of the Independent Monitor, including the following provisions: <ul style="list-style-type: none"> o The Independent Monitor shall have unfettered access to environmental compliance documentation and the Project site at all times during demolition without notice. o The Independent Monitor shall have the authority to direct the Permit Holder to stop a demolition activity that is causing an adverse effect. o The Independent Monitor shall report directly to VFPA and obtain direction from VFPA on matters that arise during demolition that are not described in the project permit and cannot be resolved by discussion with the Permit Holder. o The Independent Monitor shall concurrently submit compliance reports directly to the Permit Holder and VFPA within one week of site visits. • The frequency of site visits by the Independent Monitor, with a higher frequency of site visits to occur during in-water works as compared to those scheduled for land-based demolition activities. • The manner in which notice will be given to the Permit Holder and VFPA for an activity not in compliance with permit conditions or having unforeseen adverse effects. • The name and qualifications of the Independent Monitor. • The name(s), role(s) and qualifications of other individuals providing specialized expertise or designated to act as the Independent Monitor during specific construction activities or times. <p>The Permit Holder shall carry out the Project in accordance with the approved Monitoring Work Plan, and any subsequent amendments, to the satisfaction of VFPA.</p>	45 business days before commencing demolition or any physical activities	Project Co

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No.	Conditions – During Demolition or any Physical Activities	Delivered By
81	The Permit Holder shall notify VFPA upon commencement of demolition, or any physical activities (e.g., mobilization to the Project site).	Project Co
82	All general demolition 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 demolition 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, in keeping with VFPA Guidelines on this topic.	Project Co
83	<p>During any vessel-related demolition activities, the Permit Holder shall:</p> <ul style="list-style-type: none"> • Position vessels and equipment associated with the Project in such a manner so as not to obstruct line of sight to navigational aids or markers; • Exhibit the appropriate lights and day shapes at all times; • Monitor the VHF channel used for MCTS communications in the respective area at all times and participate as necessary; • Be familiar with vessel movements in areas affected by the Project; • Plan and execute the Project in a manner that will not impede navigation or interfere with vessel operations; and, 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, any variations must be referred to the marine working users group and approved by VFPA. 	Project Co
84	The Permit Holder will maintain open and ongoing communications with the marine working users group as per Condition No. 33, No. 53, and No. 76.	Project Co
85	The Permit Holder shall ensure an assist tug, of adequate size and power is available to render assistance, if requested, to any passing vessels and/or barges that are passing the Project site during all phases of in-water works. Details of how to request the use of the assist tug, must be referred to the marine users working group and included in the marine communication plan.	Project Co
86	The Permit Holder shall remove from the Project area on port lands all existing utilities that may be decommissioned by the Project, both underground and aboveground. At locations of connection to municipal work (i.e., at property lines), the abandoned utilities shall be capped.	Project Co
87	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.	Project Co
88	The Permit Holder shall ensure that an appropriately qualified archaeological monitor be on the Project site at all times during ground disturbing activities with the potential to impact an identified archaeological site and intrude into native soils.	Project Co
89	The Permit Holder shall provide opportunities for interested Aboriginal groups to participate in archaeological monitoring for all Project activities impacting an identified archaeological site and cultural resource. Notification is required at least 15 days prior to any demolition activities commencing.	Project Co
90	The Permit Holder shall submit a report summarizing opportunities for Aboriginal involvement in the demolition of the existing bridge, one year following commencement of demolition activities, and on an annual basis thereafter until project completion.	Project Co

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No.	Conditions – During Demolition or any Physical Activities	Delivered By
91	The Permit Holder shall submit a Cultural and Archaeological Resources Mitigation and Management Plan to mitigate potential impacts of the Project on archeological and cultural resources. The Plan must be developed by a Qualified Professional, and in consultation with Aboriginal groups.	Project Co
92	The Permit Holder shall continue to monitor and report changes to VFPA regarding potential adverse effects to current, river bed and foreshore as a result of the Project, referencing the identification of “VFPA Key Nodes – 2016 -10-20”. VFPA in cooperation with the Permit Holder shall determine what changes constitute an adverse effect.	Province
93	The Permit Holder, or their contractor, 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 Demolition Environmental Management Plan, or VFPA, provided that monitoring will be full time when works are underway that have the potential to adversely affect fish or fish habitat.	Project Co
94	The Permit Holder shall provide environmental monitoring reports to VFPA as specified in the Demolition Environmental Management Plan 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.	Project Co

No.	Conditions – Upon Completion of Demolition of Existing Bridge	Submission Timing (Business Days)	Delivered By
95	Upon completion of demolition work the Permit Holder shall provide a Hydrographic survey to VFPA. The survey must meet Canadian Hydrographic Service (CHS) “Standards for Hydrographic Surveys” In particular, Surveys must meet “Special Order Survey with Type C1 Coverage”. This typically requires either multibeam or multi-transducer survey equipment.	Within 30 business days of completion	Project Co
96	The Permit Holder shall commit to continue hydrographic surveys and monitoring of VFPA Key Nodes “PBRP – Hydraulic Model – Identification of VFPA Key Nodes – 2016 -10-20” and submit reports annually (Post Freshet) for up to 3 years post Project completion of demolition, as per Condition No. 35.	Annually for up to 3 years post demolition	Province
97	The Permit Holder shall notify VFPA upon completion of the Project.	Within 30 business days of completion of demolition	Project Co
98	The Permit Holder shall provide 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. The record drawings will show navigational envelope clearances and the footprint of any portions of the existing bridge that are to be retained for riverbed stability.	Within 40 business days of completion of demolition	Project Co