



**PORT of  
vancouver**

Vancouver Fraser  
Port Authority

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

|   |   |
|---|---|
| <b>PER No.:</b>                                 | <b>21-122</b>   |
| <b>Tenant:</b>                                  | <b>Vancouver Fraser Port Authority</b>                    |
| <b>Project:</b>                                 | <b>TCZ-1 current sensor and shed installation</b>         |
| <b>Project Location:</b>                        | <b>Traffic Control Zone 1 and Pembina Terminal</b>        |
| <b>Vancouver Fraser Port Authority SID No.:</b> | <b>DNV063</b>   |
| <b>Land Use Designation:</b>                    | <b>Port Terminal</b>                                      |
| <b>Applicant/Permit Holder:</b>                 | <b>Marine Operations, Vancouver Fraser Port Authority</b> |
| <b>Category of Review:</b>                      | <b>B</b>  |
| <b>Date of Approval:</b>                        | <b>January 24, 2022</b>                                   |
| <b>Date of Expiry:</b>                          | <b>January 31, 2023</b>                                   |

## 1 INTRODUCTION

The Vancouver Fraser Port Authority (the “Port Authority”), a federal Port Authority, manages lands under the purview of the *Canada Marine Act*, which imparts responsibilities for environmental protection. The Port Authority accordingly conducts project and environmental reviews of works and activities undertaken on these lands to ensure that the works and activities will not likely cause significant adverse environmental effects. This project and environmental review report and project permit (the “Permit”) documents the Port Authority’s project and environmental review of PER No. 21-122: TCZ-1 current sensor and shed installation (the “Project”) proposed by the Port Authority’s Marine Operations department (the “Applicant”).

This project and environmental review was carried out to address the Port Authority’s responsibilities under the *Canada Marine Act*, and to meet the requirements of the *Impact Assessment Act*, as applicable. The proposed Project is not considered a “designated project” under the *Impact Assessment Act* and an impact assessment as described in the *Impact Assessment Act* is not required. However, Port Authority authorization is required for the proposed Project to proceed and in such circumstances, where applicable, Section 82 of the *Impact Assessment Act* requires federal authorities to assure themselves that projects will not likely cause significant adverse environmental effects. This review provides that assurance. In addition, the Port Authority considers other interests, impacts and mitigations through the project and environmental review.

The project and environmental review considered the application along with supporting studies, assessments and consultations carried out or commissioned by the Applicant, as well as other information provided by the Applicant. In addition, this project and environmental review considered other information available to the Port Authority and other consultation carried out by the Port Authority. A full list of information sources germane to the review is provided in the following pages of this report.

This Permit is the authorizing document allowing the Applicant to proceed with the Project subject to the listed project and environmental conditions.

## 2 PROJECT DESCRIPTION

In the interest of marine navigation safety, the Vancouver Fraser Port Authority’s Marine Operations department is proposing to install a tidal current sensor system in Burrard Inlet to enable the collection of real-time current data at First Narrows. The Project will require the installation of two piles equipped with two Acoustic Doppler Current Profilers (ADCPs), which are to be located 25 metres southwest of Calamity Light in Burrard Inlet and within

Traffic Control Zone 1 (TCZ1). Equipment used to collect data from the ADCPs is proposed to be housed in a prefabricated equipment shed installed at the southwest corner of Pembina Vancouver Wharves Terminal.

The piles are proposed to be installed using a vibratory hammer from a marine derrick, the use of which is not expected to exceed recommended noise level guidelines for marine mammals. A bubble curtain would be employed to defuse shock waves.

In this project permit, the Project means the physical activities authorized by the Port Authority to be carried out pursuant to **PER No. 21-122**, as described below.

## 2.1 Proposed Works

The proposed Project works include:

- Installation of two 15 metre long, 762 millimetre (30 inch) diameter piles with 2 ADCPs attached
- Installation of a 2 square metre prefabricated data collection and equipment shed that would be lifted by crane truck from Squamish Nation Reserve 5, over the fence and on to the south west corner of the Pembina Vancouver Wharves Terminal
- Installation of a multi-use camera (security and weather) and wind meter at Calamity Light
- Installation of approximately 180 metres of cabling from the in-water piles to the equipment shed on land. Approximately 85 metres of cabling will be located underwater and laid on the sea floor from the piles to Calamity Light, while the remaining 95 metres of cabling will be located above water, along the beach and dock within the terminal lease boundary
- Approximately 30 metres of excavation with a depth of 0.6 metres will be required to accommodate two trenches for a section of cabling within the lease boundary

Should the permit be approved, construction would begin shortly after permit issuance and take approximately two months to complete.

## 2.2 Environmental Effects Summary

Steel piles will be installed using a vibratory hammer from a marine derrick with a mounted crane. Pile installations are expected to take approximately three to five days and will be scheduled within the least-risk window for the Project area (Burrard Inlet: August 16 to February 28). In addition, appropriate mitigation measures will be developed and implemented to ensure harmful alteration, disruption, and destruction to fish and fish habitat are avoided prior to the commencement of the Project. These mitigations will include a bubble curtain to avoid potential adverse impacts from elevated noise levels generated during pile-driving activities and the development and implementation of a spill and emergency response plan. If impact or hydraulic hammers or other technologies besides a vibratory hammer are required, further mitigations will be required to be implemented to reduce potential impacts to fish and fish habitat and subject to review by the Port Authority.

## 3 VANCOUVER FRASER PORT AUTHORITY INTERNAL REVIEWS

The following Port Authority departments have undertaken and completed a review of these works and confirm that the proposal meets their requirements, subject to the listed project and environmental conditions.

Planning

Environmental Programs

Engineering

Marine Operations

Project Consultation

## 4 INDIGENOUS CONSULTATION

The Port Authority has reviewed the proposed works and determined that the Project may have the potential to adversely impact Aboriginal or Treaty rights.

Every reasonable effort was made to consult the following Indigenous groups:

- a) Musqueam Indian Band
- b) Squamish Nation
- c) S’ólhTéméxw Stewardship Alliance (STSA), through the People of the River Referrals Office (PRRO)
- d) Tsleil-Waututh Nation

The following consultation activities were conducted:

- Referral package provided including consultation letter, application package with appendices and participation funding agreement and/or participation funding summary for those Indigenous groups that the Port Authority has annual funding agreements with
  - Notification and project location map uploaded for STSA via PRRO, funding provided by STSA agreement with federal government
- Reminder of comment window deadline sent via email
- Response table provided to Indigenous groups who provided comments on the referral package

Below is a table summarizing comments received by the Port Authority and how they were considered as part of the project and environmental review.

| Issue  | Mitigations and Permit Conditions   | Rationale   |
|--|---|---|
| Impact of construction activities on unidentified archaeological resources | Condition No. 20 of the Permit requires the Applicant to implement the Vancouver Fraser Port Authority’s Archaeological Chance Find Procedure during Project works. | Historical aerial photos and historic fill information indicate that the Project area was built entirely on historic fill, which was laid beginning in 1942 (additional fill in 1963, 1979 and 1981). Given that no native soils will be impacted during Project works, no further archaeological assessment work was required for the Project. |

Based on the record of consultation, the Port Authority is of the view that the duty to consult has been met.

## 5 EXISTING POLICIES OR GUIDELINES

The Project area is designated as “Port Terminal” and “Port Water” in the Port Authority Land Use Plan (2020). The Project is compliant with the Land Use Plan.

## 6 NOTIFICATIONS

### 6.1 Municipal Notification

The proposed Project was assessed by the Port Authority to have no potential impacts to municipal interests. Consequently municipal notification was not conducted.

### 6.2 Adjacent Tenant Notification

On August 31, 2021, an agreement and understanding was established between the Applicant and PKM Canada Marine Terminal Limited Partnership (Pembina Vancouver Wharves Terminal) for installation and access of the equipment shed that is being proposed within the Pembina lease boundary. As a result of the existence of the agreement, additional tenant notification was not deemed required.

### 6.3 Public Engagement

To meet requirements of section 86 of the *Impact Assessment Act*, the Port Authority posted a description of the Project and notice of public participation to the Canadian Impact Assessment Registry to provide the public 30 calendar days to comment on the project and provide community knowledge.

The comment period ran from November 17 to December 16, 2021. At the close of the 30-calendar day public comment period, no comments were received.

The proposed Project was assessed by the Port Authority to have minimal or no potential impacts to community interests in the surrounding area either during construction or once the project is completed. Therefore, no construction notification is required.

## 7 INFORMATION SOURCES

The Port Authority has relied upon the following sources of information in its review of the Project.

- Application form and materials submitted by Marine Operations on July 26, 2021
- Project correspondence from August 20, 2021 to January 19, 2022
- Plans and drawings labelled PER No. 21-122 A-C

## 8 ENVIRONMENTAL REVIEW DECISION

In completing the project and environmental review, the Port Authority has reviewed and taken into account relevant information available on the proposed project and has considered any adverse impact that the Project may have on the rights of Indigenous peoples, Indigenous knowledge, community knowledge, comments received from the public, and measures that would mitigate any significant adverse environmental effects of the Project. We conclude that with the implementation of proposed mitigation measures and conditions described in the project and environmental conditions section below, the Project is not likely to cause significant adverse environmental effects.

ORIGINAL COPY SIGNED

**LISA McCUAIG**  
MANAGER, ECOSYSTEM MANAGEMENT AND  
ENVIRONMENTAL PROGRAMS

January 21, 2022

**DATE OF DECISION**

## 9 CONCLUSION

In completing the project and environmental review, the Port Authority concludes that with the implementation of proposed mitigation measures and conditions described in the project and environmental conditions section below, the Project has appropriately addressed all identified concerns.

## PROJECT AND ENVIRONMENTAL REVIEW DECISION

Project Permit PER No. 21-122 is approved by:

ORIGINAL COPY SIGNED

**CHRIS BISHOP**  
**MANAGER, PROJECT AND ENVIRONMENTAL**  
**REVIEW**

January 24, 2022

**DATE OF APPROVAL**

### 10 PROJECT AND ENVIRONMENTAL CONDITIONS

The Port Authority 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 82 of the *Impact Assessment Act*.

If at any time the Marine Operations Department (Port Authority) (the "Permit Holder") fails to comply with any of the project and environmental conditions set out in the project permit (the "Permit") below, or if the Port Authority determines that the Permit Holder has provided any incomplete, incorrect or misleading information in relation to the Project, the Port Authority 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*, the Port Authority 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 the Port Authority at any time in relation to the potential adverse environmental and other effects of the Project.

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

Port Authority Guidelines and Record Drawing Standards referenced in this document can be located at: <https://www.portvancouver.com/permitting-and-reviews/per/project-and-environment-review-applicant/guidelines/>.

| No. | GENERAL CONDITIONS  |
|-----|---|
| 1.  | The Permit Holder must have a valid lease, licence, or access agreement for the Project site prior to accessing the Project site or commencing construction or any other physical activities on the Project site. This Permit shall in no way limit any of the Permit Holder's obligations, or the Port Authority'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 the Port Authority 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 the Port Authority 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. |

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|-----|--|---|
| 5.  | The Permit Holder is responsible for locating all existing site services and utilities, including any located underground. The Permit Holder shall provide an Infrastructure Surveyed Data Drawing that includes topographic and utility locate data based on surveys in accordance with the Port Authority's Record Drawing Standards. The Permit Holder is responsible for repair or replacement of any damage to existing site services and utilities, to the satisfaction of the Port Authority, that result from construction 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 <b>PER No. 19-122-A to C</b> . The Permit Holder shall not carry out any other physical activities unless expressly authorized by the Port Authority.  |   |
| 7.  | The Permit Holder shall cooperate fully with the Port Authority in respect of any review by the Port Authority of the Permit Holder's compliance with this Permit, including providing information and documentation in a timely manner, as required by the Port Authority. The Permit Holder is solely responsible for demonstrating the Permit Holder's compliance with this Permit.   |   |
| 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 plans, documents, and notices required under this Permit to the following email address: <b>per@portvancouver.com</b> and referencing <b>PER No. 21-122</b> .  |   |
| 11. | Unless otherwise specified, all plans, schedules, and other Project-related documentation that the Permit Holder is required to provide under this Permit, and any subsequent updates, must be to the Port Authority's satisfaction.   |   |
| 12. | The Port Authority shall have unfettered access to environmental compliance documentation and the Project site at all times during construction without notice.  |   |
| 13. | 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 the Port Authority.  |   |
|     | <b>CONDITIONS – PRIOR TO COMMENCING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES</b>  | <b>SUBMISSION TIMING (business days)</b>                                  |
| 14. | The Permit Holder shall submit Issued For Construction Drawings for proposed works in accordance with the Port Authority's Record Drawing Standards. These drawings shall be signed and sealed and approved for construction by a professional engineer licensed to practice in the Province of British Columbia. In addition, these drawings shall be submitted in both AutoCAD and PDF format and shall be named according to the record drawing index numbering system set out at Section 2.10 of the Port Authority's Record Drawing Standards.              | 5 business days before commencing construction or any physical activities |

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| 15.  | The Permit Holder shall have in place a spill prevention, containment and clean-up plan for hydrocarbon products (including fuel, oil and hydraulic fluid) and any other deleterious substances. Appropriate spill containment and clean-up supplies shall be available on the Project site at all times and all personnel working on the Project shall be trained on the spill prevention, reporting, containment and clean-up plan. The Permit Holder shall carry out the Project in accordance with the spill prevention, containment and clean-up plan. | Before commencing construction or any physical activities |
| 16.  | Prior to the commencement of any vessel-related activities, the Permit Holder shall contact Canadian Coast Guard (CCG) Marine Communications and Traffic Services (MCTS), (email: <a href="mailto:NAVWARN.MCTSPrinceRupert@innav.gc.ca">NAVWARN.MCTSPrinceRupert@innav.gc.ca</a> ; Phone: 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                           |
| <b>CONDITIONS – DURING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES</b> |   |   |
| 17.  | The Permit Holder shall notify the Port Authority upon commencement of construction, or any physical activities (e.g., mobilization to the Project site).   |   |
| 18.  | All general construction and physical activities related to the Project shall be conducted from <b>Monday to Saturday</b> between the hours of <b>7:00 a.m. and 8:00 p.m.</b> No construction and physical activities shall take place on Sundays or holidays. These hours shall not be modified without prior approval of the Port Authority. To request permission to conduct activities outside these hours, the Permit Holder must submit a written request no less than 30 business days prior to the desired start date.                              |   |
| 19.  | The Permit Holder shall notify the Port Authority within two business days of any complaints received from the community and stakeholders during construction and indicate how the Permit Holder has responded to such complaints.  |   |
| 20.  | The Permit Holder shall carry out the Project in accordance with the Vancouver Fraser Port Authority's Archaeological Chance Find Procedure, and any subsequent updates made to the Port Authority's satisfaction.  |   |
| 21.  | The Permit Holder shall remove all abandoned utilities from the Project site, both underground and aboveground. At locations of connection to municipal works (i.e., at property lines), the abandoned utilities shall be capped. The Permit Holder shall provide detailed drawings of abandoned utilities and capped connections in both AutoCAD and PDF format in accordance with the Port Authority's Record Drawing Standards.  |   |
| 22.  | The Permit Holder may place temporary construction trailers on the Project site while this Permit remains in effect, provided such trailers meet all of the criteria set out in the Port Authority's Temporary Construction Trailer Criteria, available at: <a href="https://www.portvancouver.com/permitting-and-reviews/building-permits/">https://www.portvancouver.com/permitting-and-reviews/building-permits/</a> . Should one or more of the criteria not be met, a Port Authority Building Permit is required.                                      |   |
| 23.  | Without limiting the generality of permit condition #2, the Permit Holder shall not, directly or indirectly: (a) deposit or permit the deposit of a deleterious substance of any type in water frequented by fish in a manner contrary to Section 36 of the <i>Fisheries Act</i> ; or (b) adversely affect fish or fish habitat in a manner contrary to Section 35 of the <i>Fisheries Act</i> .  |   |
| 24.  | The Permit Holder shall not permit barges or other vessels used during the Project to ground on the foreshore or seabed or otherwise disturb the foreshore or seabed (including disturbance as a result of vessel propeller wash), excepting only such disturbance as is reasonably required resulting from the use of barge spuds.   |   |

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| 25. | Piles shall be driven with a vibratory hammer. Piles shall not be installed using a diesel or hydraulic hammer or other technology such as drilling without review and authorization by the Port Authority.  |
| 26. | The Permit Holder shall cap any exposed hollow pipe piles to prevent wildlife entrapment.  |
| 27. | Sediments contained within piles after driving shall be left in place. If it is determined that they must be removed for engineering reasons, the Permit Holder shall consult the Port Authority for review and authorization prior to initiating the proposed physical activities.  |
| 28. | <p>The Permit Holder shall not permit sediment, sediment-laden waters, or other deleterious substances to enter the water during the Project. The Permit Holder shall carry out all physical activities in a manner that prevents induced sedimentation of foreshore and near shore areas and induced turbidity of local waters, and the release of sediment, sediment-laden waters, and turbid waters to the aquatic environment. The Permit Holder shall manage turbidity in compliance with the following water quality criteria:</p> <ul style="list-style-type: none"> <li>a) when background is less than or equal to 50 nephelometric turbidity units (NTU), induced turbidity shall not exceed 5 NTU above the background values; and</li> <li>b) when background is greater than 50 NTU, induced turbidity shall not exceed the background values by more than 10% of the background value.</li> </ul> <p>For the purposes of this condition, "background" means the level at an appropriate adjacent reference site (as determined to the satisfaction of the Port Authority) that is affected neither by physical activities at the project site, nor sediment-laden or turbid waters resulting from physical activities at the project site.</p> |
| 29. | The Permit Holder shall not disturb the seabed outside the Project site.   |
| 30. | The Permit Holder shall immediately cease work and notify the Port Authority if the Permit Holder has reasonable grounds to believe that the Project has harmed fish or fish habitat, including observation of distressed, injured, or dead fish. The Permit Holder shall not resume work until authorized by the Port Authority.  |
| 31. | The Permit Holder shall contain and collect debris and waste material in the immediate working area within the Project site. The Permit Holder shall dispose of waste material at suitable upland locations and maintain records of off-site disposal.   |
| 32. | The Permit Holder shall maintain equipment in good mechanical condition and free of fluid leaks, invasive species, and noxious weeds.  |
| 33. | The Permit Holder shall conduct all activities involving the use of concrete, cement, mortars and other Portland cement or lime-containing construction materials in a manner that shall not deposit sediments, debris, concrete (cured or uncured), and concrete fines to the aquatic environment, either directly or indirectly. Water that has contacted uncured or partly cured concrete or Portland cement or lime-containing construction materials (such as the water that may be used for exposed aggregate wash-off, wet curing, equipment and truck washing) shall not be permitted to enter the aquatic environment. The Permit Holder shall provide containment facilities at the site for the wash-down water from concrete delivery trucks, concrete pumping equipment, and other tools and equipment, as required.  |

|  |   |  |
|--|---|--|
| 34.  | During any vessel-related activities, the Permit Holder shall: <ol style="list-style-type: none"> <li>a) 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</li> <li>b) Exhibit the appropriate lights and day shapes at all times</li> <li>c) Monitor the VHF channel used for MCTS communications in the respective area at all times and participate as necessary</li> <li>d) Be familiar with vessel movements in areas affected by the Project</li> <li>e) Plan and execute the Project in a manner that will not impede navigation or interfere with vessel operations</li> <li>f) During night hours, unless working 24 hours per day, ensure that the rig and associated equipment is moored outside the navigation channel and lit in accordance with all applicable regulations</li> </ol> |  |
| <b>CONDITIONS – UPON COMPLETION</b>  |   | <b>SUBMISSION TIMING<br/>(Business Days)</b> |
| 35.  | The Permit Holder shall notify the Port Authority upon completion of the Project.   | Upon substantial completion                  |
| 36.  | The Permit Holder shall provide record drawings, including a Project site plan that clearly identifies the location of works, in both AutoCAD and PDF format (with an Engineers stamp where applicable) in accordance with the Port Authority's Record Drawing Standards. All drawings shall be named according to the record drawing index numbering system set out at Section 2.10 of the Port Authority's Record Drawing Standards.  | Within 40 business days of completion        |
| <b>The Port Authority reserves the right to rescind or revise these conditions at any time that new information warranting this action is made available to the Port Authority.</b>  |   |  |
| <b>LENGTH OF PERMIT VALIDITY</b>   |   |  |
| The Project must be completed no later than <b>January 31, 2023</b> (the Expiry Date).   |   |  |
| <b>AMENDMENTS</b>  |   |  |
| <ul style="list-style-type: none"> <li>• 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 the Port Authority for consideration of an amendment to this Permit.</li> <li>• For an extension to the Expiry Date, the Permit Holder must apply in writing to the Port Authority no later than 40 business days prior to that date.</li> </ul> <p><b>Failure to apply for an extension as required may, at the sole discretion of the Port Authority, result in termination of this Permit.</b></p> |   |  |

## CONTACT INFORMATION

Vancouver Fraser Port Authority  
 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](mailto:PER@portvancouver.com)  
 Website: [www.portvancouver.com](http://www.portvancouver.com)

**After normal business hours:**

In the event of any land or marine construction incidents or concerns related to works carried out on-site under this permit, please contact the 24/7 Port Operations Centre 604-665-9086. In the event of an emergency requiring 'First Responders', please call 911 first.

COPY



**PER #21-122**

**TCZ 1 current sensor  
and shed installation**

-  Project Location
-  Override 1
-  VFPA Boundary

Vancouver Fraser Port Authority:  
This drawing has been reviewed by  
Vancouver Fraser Port Authority  
solely for the purpose of VFPA's  
issuance of a Project Permit. This  
Permit in no way denotes design,  
engineering, or structural approval  
or endorsement.

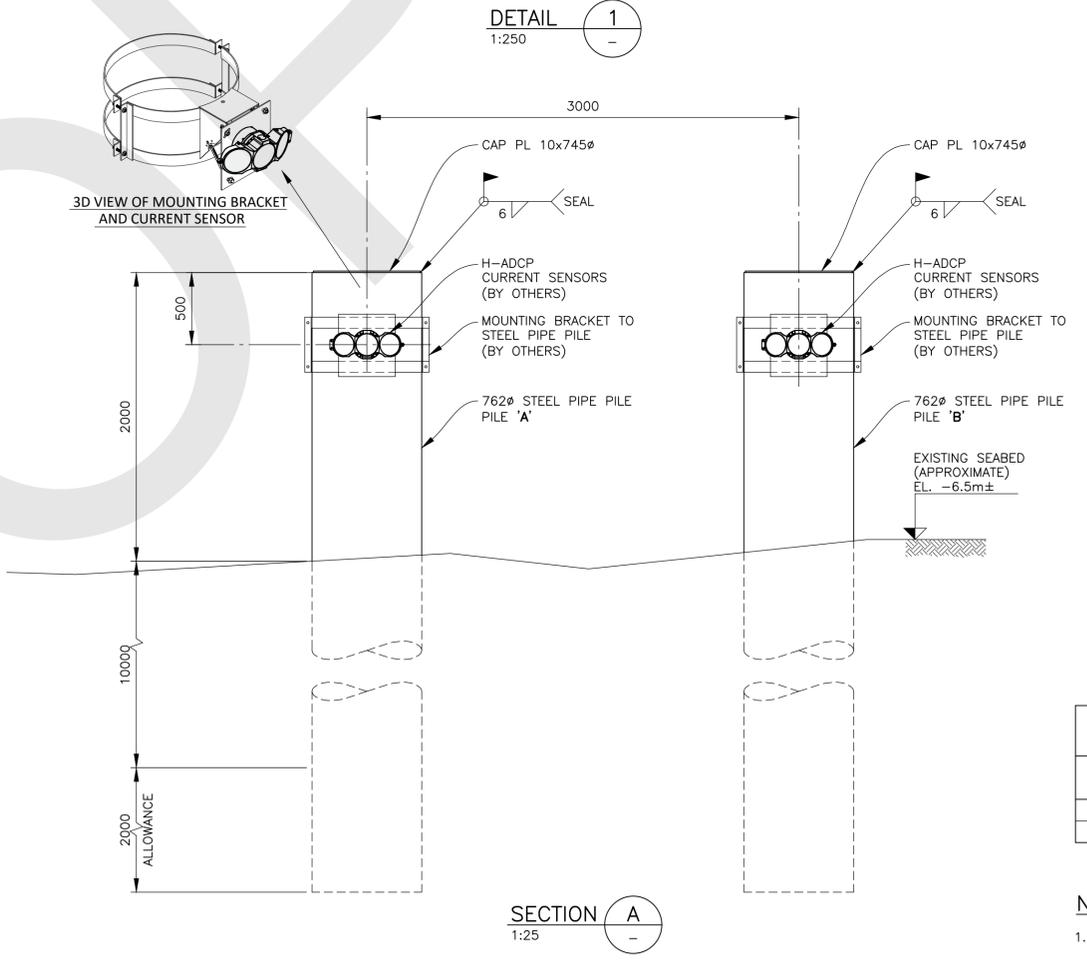
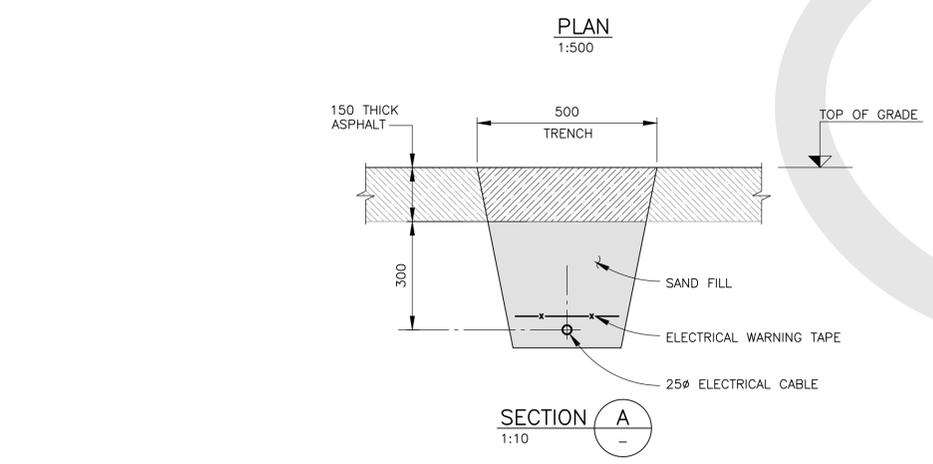
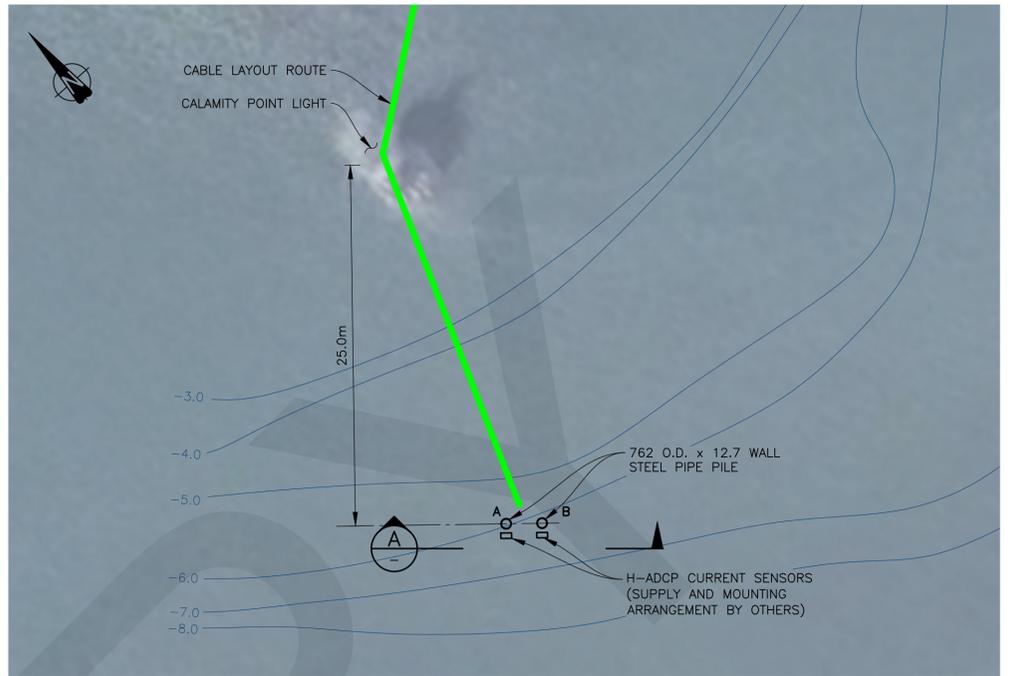
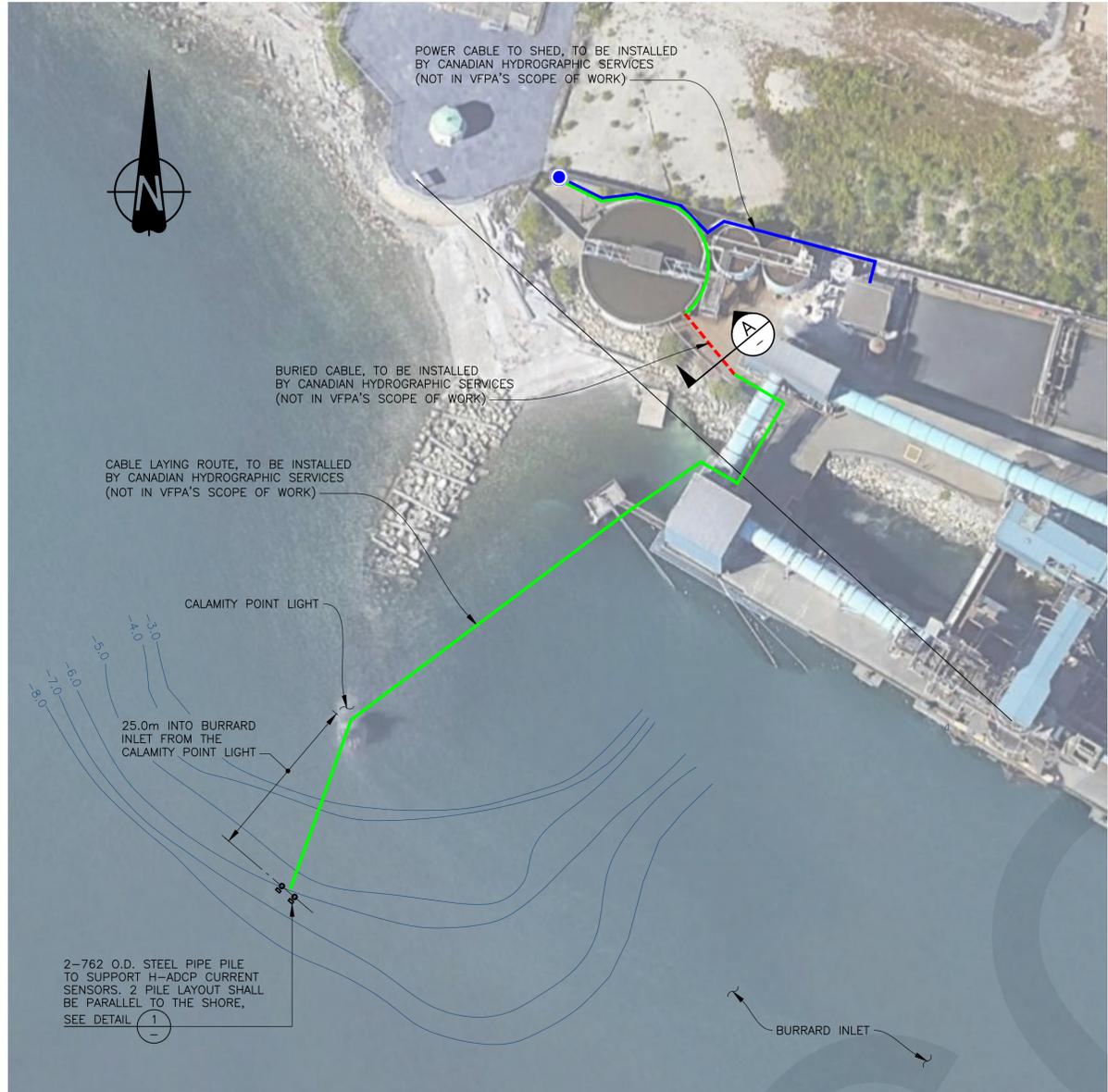



**PORT of  
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Vancouver Fraser  
Port Authority

Date: January 18, 2022

TITLE BLOCK: DL-1B.dwg  
 DATE: 2021/10/20 - 4:38pm  
 PATH: C:\Users\muller\OneDrive\Engineering\Westmar\20211210151-First Narrows Current Gauge\1210151-63-009-201-202.dwg



| PILE LIST   |             |            |
|-------------|-------------|------------|
| PILE NUMBER | NORTHING    | EASTING    |
| A           | 5462182.600 | 490710.114 |
| B           | 5462180.982 | 490712.020 |

NOTES:  
 1. FOR DESIGN CRITERIA AND GENERAL NOTES, SEE DWG. 1210151-00-201.

**PRELIMINARY**  
 DO NOT USE FOR CONSTRUCTION  
 Last Saved: Oct. 20/21 4:37pm

**WESTMAR**  
 ADVISORS

CONSULTANT  
 PROJECT NO. 1210151

ENGINEERING DEPARTMENT

|           |             |
|-----------|-------------|
| DESIGN BY | H. LIANG    |
| DRAWN BY  | R. MULLER   |
| APPROVED  | V. RAMADHAS |
| DATE      | 2021-OCT-13 |
| SCALE     | NONE        |
| VFPA SITE | 63-009      |

|  |  |      |      |                   |        |     |
|--|--|------|------|-------------------|--------|-----|
| <b>TCZ-1 CURRENT SENSOR AND SHED INSTALLATION PLAN AND SECTION</b> |  | SIZE | DWG. | <b>63-009-202</b> | SHEET  | REV |
| D  |  |      |      |                   | 2 of 2 | B   |

| Ref. No. | REFERENCE |
|----------|-----------|
|          |           |
|          |           |
|          |           |
|          |           |

| No. | Date     | REVISION                      | Dr'n | Ch'd |
|-----|----------|-------------------------------|------|------|
| B   | OCT20/21 | ISSUED FOR PERMIT APPLICATION | RM   | HL   |
| A   | OCT13/21 | ISSUED FOR CLIENT REVIEW      | RM   | HL   |

Proposed Location of Shed & Shed



## **SCHEDULE "B"**

### **Scope of Work for Canadian Hydrographic Service**

All installation procedures and materials used comply with current local and provincial building, fire and electrical codes, as well as Industry Canada Health and Safety codes and standards.

#### **NEW SHED INSTALLATION:**

##### **SHED SPECIFICATIONS**

HEIGHT: 7-feet

BASE OF SHED:

HEIGHT OF SHED:

**WIRING SPECIFICATIONS: TBD**

**ELECTRICAL REQUIREMENTS: TBD**

**COMMUNICATION EQUIPMENT: TBD**

COPY

