



PER No.:	22-047
Tenant:	Peter Kiewit Sons ULC
Project:	Peter Kiewit Sons ULC - Pile Replacements and Removals
Project Location:	1950 Brigantine Drive, Port Coquitla
Vancouver Fraser Port Authority SID No.:	COQ332
Land Use Designation:	Log Storage and Barge Moorage
Applicant/Permit Holder:	Peter Kiewit Sons ULC
Category of Review:	B
Date of Approval:	June 30, 2022
Date of Expiry:	June 30, 2024

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. 22-047: Peter Kiewit Sons ULC - Pile Replacements and Removals (the “Project”) proposed by Peter Kiewit Sons ULC (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 OVERVIEW

2.1 Project Description

In this project permit, the Project means the physical activities authorized by the Port Authority to be carried out pursuant to **PER No. 22-047**, as described below.

The Applicant proposes to extract approximately sixty-eight (68) treated wooden piles of various size and install approximately fifty-eight (58) steel piles to suit their needs for barge storage (Figure 1).

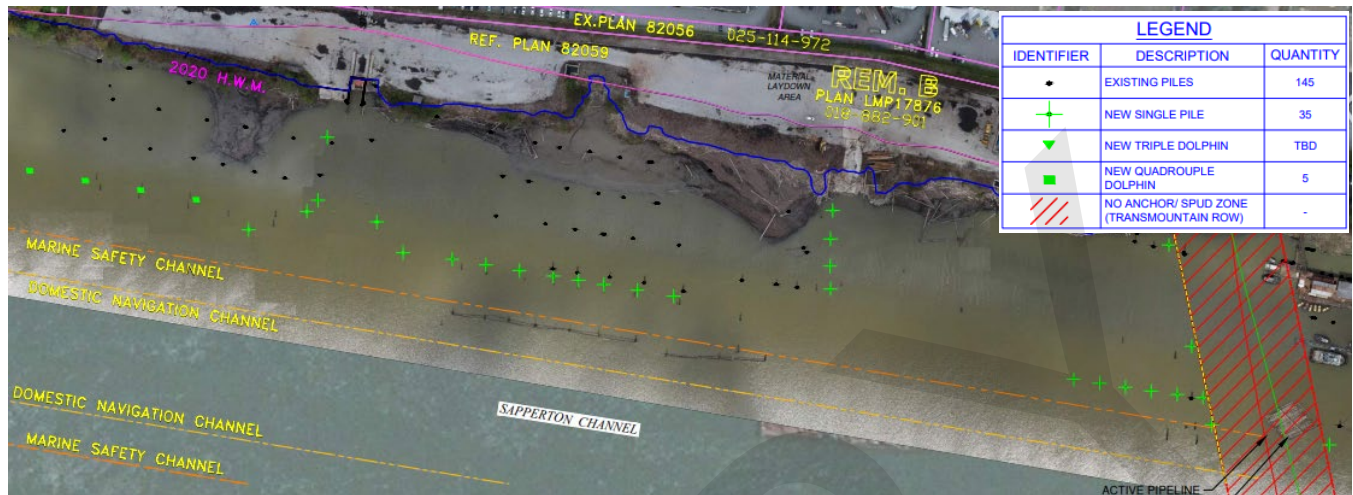


Figure 1. Proposed pile configurations

Steel piles will be installed as single piles and dolphins consisting of up to four (4) piles each. New steel piles will vary from 609- to 762-millimetres in diameter. Piles will be removed and installed using a marine spud derrick equipped with a vibratory hammer and a materials barge. All treated wooden piles removed will be disposed of at an approved licensed waste management facility.

The Project is expected to take approximately three months to complete and will be completed by the end of September 2022.

2.2 Project Considerations

Pile installations will be scheduled within Fisheries and Oceans Canada’s (DFO) least-risk window for the Project area (Fraser River: June 16 to February 28). 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 environmental monitoring 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 INDIGENOUS CONSULTATION

The Port Authority has reviewed the proposed works and determined that adverse impacts to Aboriginal or Treaty rights are not expected. In light of the requirements in the relationship agreement with Tsawwassen First Nation, the Port Authority notified Tsawwassen First Nation of the proposed works and no comments were received.

4 EXISTING POLICIES OR GUIDELINES

The Project area is designated as “Log Storage and Barge Moorage” in the Port Authority Land Use Plan (2020).

The Project is compliant with the Land Use Plan.

5 NOTIFICATIONS

5.1 Municipal Notification

The proposed Project was assessed by the Port Authority to have potential impacts to municipal interests. A notification letter was sent to the City of Coquitlam on May 26, 2022, notifying them of the proposed Project. The City of Coquitlam did not provide any comments on the proposed Project.

5.2 Adjacent Tenant and Marine User Notification

The proposed Project was assessed by the Port Authority to have potential impacts to adjacent tenants and marine user interests. A notification letter was sent to the following stakeholders on May 26, 2022 notifying them of the proposed Project:

- Council of Marine Carriers
- Forrest Marine Limited
- Pacific Custom Log Sorting Ltd.
- Fraser Mills Properties Ltd.
- Transmountain Pipeline ULC

Transmountain Pipeline ULC provided comments on June 6, 2022. A conference call was held on June 16, 2022 between Transmountain Pipeline ULC, the Applicant and the Port Authority to review the proposed scope of work of the Project. Transmountain Pipeline ULC requested for additional information which was provided to them by the Applicant.

Transmountain Pipeline ULC also required that vibration readings for pile driving activities remain within acceptable limits to ensure the safety of the pipeline and that peak velocity does not exceed 50mm per second. Transmountain Pipeline ULC requested that the Applicant monitor the pipeline at the closest point to the proposed pile location with a geophone during all vibratory hammering activities and that the applicant provide a copy of the readings to Transmountain Pipeline ULC once available. These comments are addressed in Condition 25 of the Project Permit.

5.3 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 May 18 to June 16, 2022. 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 was required.

6 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 the Applicant on April 4, 2022
- Project correspondence from April 4, 2022 to June 24, 2022

7 PROJECT AND 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.

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 Permit PER No. 22-047 is approved by:

ORIGINAL COPY SIGNED	June 30, 2022
CHRIS BISHOP MANAGER, PROJECT AND ENVIRONMENTAL REVIEW	DATE OF APPROVAL

8 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 Peter Kiewit Sons ULC (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.
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. 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: per@portvancouver.com and referencing PER No. 22-047 .
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.

	CONDITIONS – PRIOR TO COMMENCING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES	SUBMISSION TIMING (business days)
14.	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, 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
15.	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
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: NAVWARN.MCTSPrinceRupert@innav.gc.ca ; Phone: 250-627-3070) regarding the issuance of a Navigational Warning (NAVWARN) to advise the marine community of potential hazards associated with the Project. The Port Authority's Marine Operations department must be carbon copied into the request (navigation.review@portvancouver.com).	As per Coast Guard requirements
17.	<p>The Permit Holder shall submit a marine construction and staging plan to the Port Authority's satisfaction, which includes:</p> <ul style="list-style-type: none"> a) Identification of navigation related hazards and risk mitigation measures; b) Staging and construction areas; c) Dates and hours of operations; d) Description of activities taking place; e) Participating equipment and vessels (dimensions must be included); f) Method of preferred communication with marine users; g) Method of communicating updates to relevant marine users; h) Emergency contact information; and i) Special requests and/or additional information. <p>The Permit Holder shall carry out the Project in accordance with the marine construction and staging plan, including any subsequent updates made to the Port Authority's satisfaction.</p>	30 business days prior to commencing vessel related activities
CONDITIONS – DURING CONSTRUCTION OR ANY PHYSICAL ACTIVITIES		
18.	All general construction and physical activities related to the Project shall be conducted from Monday to Saturday between the hours of 7:00 a.m. and 8:00 p.m. 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.	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> .
21.	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.
22.	The Permit Holder shall maintain equipment in good mechanical condition and free of fluid leaks, invasive species, and noxious weeds.
23.	<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"> 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 b) when background is greater than 50 NTU, induced turbidity shall not exceed the background values by more than 10% of the background value. <p>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>
24.	Piles shall be driven with a vibratory. 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.
25.	<p>The Permit Holder shall use adequate mitigations to ensure vibration levels, as measured from the adjacent tenant's pipeline with a calibrated geophone, are maintained below a peak particle velocity of 50mm per second at all times during all vibratory hammering activities. Measurements shall be taken at the closest point from the pipeline to the vibratory hammering activities.</p> <p>If vibratory monitoring indicates vibrations levels in excess of the abovementioned thresholds, pile driving shall cease and only resume after additional mitigation measures are implemented to effectively reduce vibration levels below the above-mentioned thresholds.</p> <p>The Permit Holder shall provide monitoring reports weekly to the Port Authority's satisfaction.</p>
26.	The Permit Holder shall remove piles completely by extracting the entire length of pile from the river. If physical conditions result in the breakage of timber piles, the Permit Holder shall remove the remaining pile stubs with the least amount of disturbance of the river as possible. Particular effort shall be made to extract or reduce the height of pile stubs which may pose a hazard to navigation. If pile stubs are left in place, the location shall be surveyed and the location coordinates provided to the Port Authority within five days of Project completion.
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.	The Permit Holder shall cap any exposed hollow pipe piles to prevent wildlife entrapment.	
29.	There shall be no in-water works during the fisheries sensitive period from March 1 to June 15, inclusive, unless otherwise approved in writing by DFO. The Port Authority shall be notified of any DFO exemptions allowing works within the fisheries sensitive period.	
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 not disturb the river outside the Project site.	
32.	The Permit Holder shall not permit barges or other vessels used during the Project to ground on the foreshore or riverbed or otherwise disturb the foreshore or riverbed (including disturbance as a result of vessel propeller wash), excepting only such disturbance as is reasonably required resulting from the use of barge spuds.	
33.	During any vessel-related activities, the Permit Holder shall: <ul style="list-style-type: none"> 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 b) Exhibit the appropriate lights and day shapes at all times c) Monitor the VHF channel used for MCTS communications in the respective area at all times and participate as necessary d) Be familiar with vessel movements in areas affected by the Project e) Plan and execute the Project in a manner that will not impede navigation or interfere with vessel operations 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 	
	CONDITIONS – UPON COMPLETION	SUBMISSION TIMING (Business Days)
34.	The Permit Holder shall notify the Port Authority upon completion of the Project.	Upon substantial completion
35.	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
36.	The Permit Holder must contact the Database Information Office of the CHS at (250) 363-6360 or chsdatacentre@dfo-mpo.gc.ca to arrange for the relevant Canadian Hydrographic Service charts to be updated. The Port Authority's Marine Operations department must be carbon copied into the request (navigation.review@portvancouver.com).	Upon substantial completion
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.		

LENGTH OF PERMIT VALIDITY

The Project must be completed no later than **June 30, 2024** (the “Expiry Date”).

AMENDMENTS

- 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.
- 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.

Failure to apply for an extension as required may, at the sole discretion of the Port Authority, result in termination of this Permit.

CONTACT INFORMATION

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

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