

December 5, 2025

Emma Bolin, Director
Planning and Community Development Department
City of Port Townsend
250 Madison Street
Port Townsend, WA 98368

Subject: Boat Haven Breakwater Repair Project

Dear Emma:

This letter is being written to supplement the Port's Shoreline Substantial Development Permit Exemption, SEPA checklist and grading permit application to aid the City in determining the permit requirements for the above referenced project, specifically in meeting the requirements of the Shoreline Master Program (SMP).

The project involves the rehabilitation of a 590 linear foot long Port-owned section of the Boat Haven Breakwater, a 2,400 long structure built in the 1930's. The project's purpose is to restore the deteriorated section of breakwater to its original profile through the removal of failed timber members, placement of geotextile, new bedding stone, and new armor stone (riprap). Work will be performed "in the dry" with no work to be performed in-water. The repaired structure will be no higher, longer or wider than the original breakwater.

As shown in the project drawings, some areas will be repaired by placing additional armor stone (riprap) in depressed areas. These areas are identified as "fill" sections. Other areas are designated for a "rebuild" profile. Rebuilt sections are scheduled for excavation of unsuitable materials, installation of geotextile fabric, placement of foundational bedding stone (quarry spalls) with the final placement of new armor stone (riprap) to complete the section.

Approximately 259 cubic yards of armor stone (riprap) will be placed in addition to 417 cubic yards of new bedding stone for a total of 676 cubic yards of new material. It is important to note that a good amount of material will be excavated and removed from the site to an approved disposal site, resulting in a rebuilt breakwater profile that approximates the original breakwater cross section.

The current cross section of the breakwater is displayed in the attached exhibit and is approximately 1,270 square feet in area. For each linear foot of the Port-owned breakwater, there are approximately 47 cubic yards of material. The approximate volume of the Port-owned breakwater for a length of 590 linear feet is 27,000 cubic yards.

The calculation of proposed new materials divided by the overall volume of Port-owned breakwater (676 cubic yards / 27,000 cubic yards) results in a percentage proposal of approximately 2.5%.

The breakwater structure is clearly subject to the Shoreline Master Program for the City of Port Townsend, as an in-water structure. The Boat Haven breakwater, comprised of US Army Corps of Engineers owned and Port-owned segments serves a vital function in protecting Boat Haven boats (recreational and commercial), docks, piers, ramps and fueling facilities from waves and weather.

Please refer to a previous SSDP exemption (LUP 22-021, April 4, 2022) granted to a similar breakwater rehabilitation project for the Point Hudson Breakwaters, constructed in 2023-2024. The Port would like to respectfully request that our application be reviewed for an exemption from SSDP requirements per SMP 2.4.D(2) in the same light as the Point Hudson project, even though the scope of the proposed Boat Haven breakwater repair project is significantly smaller in scope. The following section of the SMP was quoted in the "Findings & Conclusions" of the LUP22-021 Exemption document:

2. Normal maintenance or repair of existing structures or developments, including damage by accident, fire, or elements

Also included for reference are exemption documents related to the Boat Haven Breakwater structure for repairs conducted in 2017. The repairs in 2017 are similar in nature to what is being proposed today, except smaller in scope.

The Port feels that previous exemption documents, findings and conditions should be considered in the evaluation of its current proposal.

If you have any questions about the project, or the responses provided above, please do not hesitate to contact me at telephone 360-316-6469 or email at dnakagawara@portofpt.com

Dave Nakagawara, PE
Capital Projects Engineer
Port of Port Townsend

Cc: LUP22-021 SSDP Exemption, Point Hudson Breakwater Rehab
LUP16-066 SSDP Exemption, Boat Haven Breakwater Repair
LUP16-064 SEPA DNS, Boat Haven Breakwater Repair

**CITY OF PORT TOWNSEND
SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT EXEMPTION
Incorporating
CRITICAL AREAS and FLOOD DEVELOPMENT REVIEW
WASHINGTON STATE SHORELINE MANAGEMENT ACT (RCW 90.58)
(Type I-A Land Use Permit)**

Applicants: Port of Port Townsend
c/o Eric Toews, Director of Planning
PO Box 1180
Pt. Townsend, WA 98368

Case Number: LUP22-021

Project Location and Legal Description: The Point Hudson Marina Breakwater Project is an unaddressed site located at the marine opening to Pt. Hudson Marina. The project site lies entirely within the waters of Port Townsend Bay and is located in the SW 1/4, Section 1, Township 30N, Range 1West, Jefferson County.

Proposal: The Port of Port Townsend proposes to replace the 75-year-old Point Hudson breakwater structures with a design to address project concerns, namely of structural integrity and wave reflection in the navigation channel and appearance. The project is proposing the removal, disposal and re-construction of the north and south breakwaters projecting on either side of the Point Hudson Marina. The new breakwaters will be a combined rock & steel pipe pile breakwater system. In addition, a bulkhead extending shoreward of the south breakwater leg will be replaced and select maintenance dredging of the navigation channel will occur after construction of the breakwaters. In-water construction will include removal of existing outer and core materials, dredging, debris disposal, installation of a rock habitat feature using recovered large rock, installation of replacement breakwater materials, and installation of the breakwater armoring. Out-of-water construction (above HTL) will include excavation and backfilling behind the replacement bulkhead, placing rock, installing the top whaler above the water line, replacing pavement near the top of the southern breakwater and bulkhead, installing signage, and replacing handrails and navigation lights. An 8-foot-wide walkway with steel or timber guardrails will be installed on the top of the south breakwater along its full length. The walkway will comply with ADA accessibility regulations. Construction will be conducted below and above the High Tide Line (HTL) and is anticipated to be completed in two seasons. Work below the HTL and in-water will be conducted during the in-water work window of September 15- January 15 during both seasons.

Critical Areas: Seismic Hazard/ Tsunami Inundation Zone; Aquifer Recharge; Frequently Flooded; and Fish and Wildlife Habitat.

Adjacent Water body: Port Townsend Bay

SMP Shoreline Designation: Point Hudson Marina

FIRM Map Panel 530310155

FIRM Map Effective: 6/7/19

Zone: AE

Base Flood Elevation (BFE): 12-13 feet

Findings & Conclusions

1. **Background:** In 2016, the City issued a Shoreline Substantial Development Permit (SSDP) Exemption (LUP16-064) for replacement of the Point Hudson Marina Breakwater Project. At that time, the proposed design was a steel pipe plumb pile and sheet pile combi-wall. The project was not constructed and the 2016 SSDP Exemption expired.
2. On March 15, 2022, the City received application for a SSDP Exemption application for a replacement of the Point Hudson Marina Breakwater Project (LUP22-021). Like the original proposal, the project involves phased removal and replacement of the Port's 75-year-old breakwater entrance to the Point Hudson Marina. The project proposes demolition and replacement of both arms of the existing breakwater/bulkhead structure.

The new project design has changed from a steel pipe plumb pile and sheet pile combi-wall to a double wall consisting of closely spaced, steel pipe batter piles, filled with large competent rock that are similar in appearance and function to the existing structure. The battered pile/rock breakwaters will have different wave energy dissipation properties than the vertical, non-permeable steel sheet pile structures. They will dissipate wave energy as a result of surface roughness, therefore reducing bottom scour and wave velocities along the outside of the breakwater structures. A detailed description of the changes is provided in Exhibit B5. Differences include:

- Design change from a steel pipe plumb pile and sheet pile combi-wall to a double wall consisting of closely spaced, steel pipe batter piles, filled with large rock similar in appearance and function to the existing structure. The bulkhead extending shoreward of the south breakwater leg will be replaced and select maintenance dredging of the navigation channel will occur after construction of the breakwaters.
- New habitat conservation measures including a habitat feature to offset potential impacts to rockfish and lingcod. The plan involves salvaging larger rock and placing the salvaged rock, in 30 feet of water or greater, between the mooring buoy and the end of the south breakwater. The permanent footprint

will be approximately 55 feet wide, 49 feet long, and 15 feet tall for an area of about 2,700 sf.

- Revised structure footprint - Like the 2016 design, the revised project is smaller than the footprint of the existing breakwater. However, unlike the prior design, the revision avoids impacts to eelgrass beds.
3. The revised design and methods of construction are intended to minimize environmental effects both during and following the breakwater replacement. No new or substantially different environmental impacts are anticipated.
 4. On February 25, 2022, United States Fish and Wildlife (USFW) issued a NEPA Categorical Exclusion concluding that:

“Reconstruction of the breakwater has been designed to be self-mitigating requiring no off-site mitigation location . Removal of 827 creosote timber pile (76,000 sq ft of surface area) will be removed and disposed of an offsite location. The reduction in the overall footprint of breakwaters will create 17,315 sq ft of additional surface area will promote healthy system in an area which is currently poor. Material of the proposed breakwater will be environmentally compatible and consist of steel sheet piles and competent rock. Similar rock to the existing armor rock will be used to promote an artificial reef which is currently inhabited by invertebrates and fish. In addition, a portion of the recovered rock material from the north breakwater will be used to install a submerged (30ft depth) rock habitat feature to provide alternative habitat for sessile organisms and fish species for the duration and after the reconstruction. The design of the breakwater has considered the action of wave reflection and will be structured to increase wave reflection and bottom scour. The structure proposed will have closely spaced batter piles with a rock core, which will dissipate wave energy as a result of its surface roughness. Reduce wave reflection characteristics will reduce bottom scour and wave velocity along the outside of the breakwater structure”.
 5. As documented in the NEPA Categorical Exclusion (Exhibit B6), the NEPA process involved interagency coordination and opportunities for public input.
 6. Both the original 2016 design and the revised breakwater replacement project underwent review pursuant to the State Environmental Policy Act (SEPA). On March 4, 2022, the City of Port Townsend, acting as lead agency, issued a SEPA Addendum to the original October 19, 2016, Threshold Determination of Non-Significance (DNS) (Exhibit B – *SEPA Addendum*). The SEPA Addendum was issued under WAC 197-11-600(4)(c) and 197-11-625. The Addendum was circulated to the applicant and agencies with jurisdiction. No additional

comment or appeal period for a SEPA Addendum is required per WAC 197-11-625 and none was provided.

7. **Permits Required:** To the extent known by city staff, the replacement breakwater requires the following permits/approvals:

- U.S. Army Corps of Engineers Individual Permit (includes NEPA review)
- National Marine Fisheries Service and U.S. Fish and Wildlife Service Biological Concurrence
- Washington State Department of Ecology Water Quality Certification
- State Department of Fish and Wildlife Hydraulic Project Approval (HPA)
- City of Port Townsend Building Permit, SSDP Exemption, Historic Design Review, Minor Improvement Permit

8. The proposal made by the applicant to undertake the development described above within the waters of the City of Port Townsend and/or its associated wetlands is exempt from the requirement of a substantial development permit. Specifically, the proposal constitutes:

“Normal maintenance or repair of existing structures or developments, including damage by accident, fire, or elements.” (City SMP, Section 2.4(D.2))

9. As proposed and conditioned, the proposal will not materially interfere with the public use of public lands and waters or the private use of adjacent private lands nor will it result in any material expansion or change in use beyond that previously existing. As a repair/replacement project, there is no change in use.

Public access to Port Townsend Bay and all adjacent shoreline areas will continue as part of the Point Hudson Marina breakwater replacement project. The breakwater helps to create and protect a publicly owned marina where boaters and the adjacent supporting businesses rely on the Port-operated facility for access. In this sense, the breakwater itself is an aid to creating and maintaining shoreline public access.

In addition to this functional contribution, the southern breakwater arm has an existing pedestrian facility located on top of it which is being rebuilt as part of the replacement project. The existing breakwater walkway is approximately 8' wide by 265' long and constructed of wood decking, railings, and balusters. Due to the failing condition of the breakwater, the outer 125' (approx.) of walkway has been closed to public use. An 8-foot-

wide walkway with steel or timber guardrails will be installed on the top of the south breakwater along its full length. The walkway will comply with ADA accessibility regulations.

Given the above- described project features, and subject to certain conditions, the breakwater replacement project will be consistent with the City's SMP concerning public access.

Critical Areas Review

10. The City's Shoreline Master Program (SMP) has been updated consistent with the state guidelines, and the Department of Ecology (DOE) has adopted the SMP. The SMP incorporates the Critical Areas Ordinance (CAO) by reference (Chapter 6 of the SMP). Critical areas review is incorporated into the shoreline permit process; a separate Critical areas permit is not required.
11. According to the City's Critical Areas maps, the site contains four different critical areas: Seismic Hazard/ Tsunami Inundation Zone; Aquifer Recharge; Frequently Flooded; and Fish and Wildlife Habitat.
12. Pursuant to PTMC 19.05.040(D), compliance with the Critical Areas chapter for development in seismic hazard/ Tsunami Inundation Zone, aquifer recharge and frequently flooded areas may be waived when the DSD Director is satisfied that the performance standards will be met, and no purpose established by the CAO ordinance would be furthered by requiring compliance with those specific performance standards. For this project, the Director grants such a waiver for the seismic hazard, aquifer recharge and flood hazard critical areas.
13. In regards flood hazard, the proposal reduces the overall volume of the breakwater and thus will not reduce the effective base flood storage volume (Exhibit A. JARPA and Exhibit B3, Project Plans). Pursuant to PTMC Chapter 16.08 Flood Damage Prevention, the proposal constitutes "development" within the Special Flood Hazard Area, specifically FEMA zone AE. Consistent with the provisions of PTMC 16.08.120 and as conditioned herein, a development permit shall be obtained before construction or development begins. During review of the building permit, the building official shall review the application for compliance with the requirements of Chapter [16.08](#) PTMC, "Flood Damage Prevention."
14. In regards mapped Fish and Wildlife Habitat Critical area, the existing breakwater is an over-water structure; however, the replacement project results in a *reduced* breakwater footprint and the proposal includes a rock habitat feature. All in-water development shall meet the requirements of the hydraulic project approval (HPA) process administered by

Washington Department of Fish and Wildlife. During pile extraction, Best Management Practices (BMPS) as outlined by EPA and DNR will be followed. All upland soil disturbance will be protected in accordance with standard BMPs as outlined in the WA Department of Ecology Stormwater Management Manual. As conditioned, lighting shall be minimized to the extent feasible, and all lighting fixtures shall be small downward facing to prevent unnecessary light and glare in the marine environment.

15. The USFWS completed consultation with NMFS on effects to NMFS species, Critical Habitat, and Essential Fish Habitat, which concluded on February 23, 2022, with the issuance of a NMFS Biological Opinion for the project (Exhibit B7). In this Opinion, NMFS determined that the project was not likely to jeopardize NMFS species or destroy or adversely modify critical habitat. Conservation measures to protect, avoid, and minimize effects to Essential Fish Habitat were recommended and accepted by the USFWS in accordance with section 305 (b)(4)(B) of the Magnuson-Stevens Act. NMFS also determined that this project would create a net conservation benefit, per the NOAA NMFS nearshore conservation calculator, through removal of creosote-contaminated material. Additional avoidance measures, such as timing of in water work and augmented aquatic habitat (rock habitat feature) will provide further benefits to listed species and critical habitat. The NMFS Biological Opinion (Ref. WCRO-2021-00301) contains additional required Terms and Conditions and impact reduction measures:
 - The project will adhere to the Essential Fish Habitat Conservation Recommendations (Pg. 69)
 - The project must adhere to the Terms and Conditions and Incidental Take Statement (Pg. 57-62)
 - The project must follow the Minimization Measures to minimize impacts (Pg. 9-11)
 - The project is encouraged to adhere to the following additional Conservation Recommendations, and to notify the USFWS and NMFS if they are carried out (Pg. 67-68)
16. With the conservation measures set forth in the NMFS Biological Opinion (WCRO-2021-00301), all applicable performance standards of City's Critical Areas code (PTMC 19.05) are met. Special consideration has been given to the preservation and enhancement of anadromous fish habitat as documented in the Biological Opinion. A separate habitat assessment is not required.
17. Consistent with SMP DR 6.6.1, the applicant has demonstrated that all of the following criteria can be met:
 - a. An alternative alignment or location is not feasible.
 - a. An alternative alignment or location is not feasible.

The proposal involves removal, disposal and re-construction of the north and south breakwaters projecting on either side of the Point Hudson Marina. Replacement of the breakwater is necessary as the facility is over 75-years old and has reached the end of its useful life. Portions of the breakwater are failing, and the walkway has been closed for safety. As documented in the NEPA Categorical Exclusion (Exhibit B6), *“An Alternatives Analysis was prepared as part of the USACE permit review process and provided to USFWS, which looked at options including a no action alternative (Alternative 1), existing structure remains and is encapsulated (Alternative 2), partial reconstruction and encapsulation (Alternative 3), the entire reconstruction of the breakwaters (Alternative 4), and the demolition and construction of combi-walls (Alternative 5). Alternative 4, the complete reconstruction alternative, was determined to be the least environmentally damaging practicable alternative that will satisfy the purpose and need of the proposed project. The project, as proposed, will minimize temporary disturbances within in the in-water work area with the least number of long-term implications.”*

- b. The project is designed to minimize its impacts on critical saltwater habitats and the shoreline environment.

Extraneous rockfall and rubble outside the breakwater will be removed and the new breakwaters will decrease in footprint area. A total of 2,871 square feet of habitat will be recovered.¹ As outlined in the JARPA (Exhibit A) and Biological Opinion (Exhibit B7), the applicant proposes minimization measures and best management practices to avoid and minimize impacts. These measures, in concert with the proposed installation of a rock habitat feature, achieve no net loss of habitat functions and values.

- c. Impacts to critical saltwater habitat functions are mitigated to result in equal or better ecological function.

See b. above.

- d. The facility is a public or semipublic facility (e.g., water-dependent recreational or transportation facility or utility) and is in the public interest.

The project is proposing the removal, disposal and re-construction of the north and south breakwaters projecting on either side of the Point Hudson Marina. Marinas and their associated breakwaters are a water-dependent use. The marina harbors recreational and commercial vessels. An 8-foot-wide public walkway will be installed on the top of the south breakwater along its full length. The walkway will comply with ADA accessibility regulations.

¹ Exhibit A, JARPA

Conditions

The following conditions apply to both phases of the project:

1. All development shall be in substantial conformance with the development plans submitted in the application for Shoreline Exemption including replacement of the walkway on the south jetty. There shall be no further expansions to or addition of any structure's seaward of the existing development without prior review for conformance with the Shoreline Master Program and any other applicable laws and ordinances.
2. Lighting shall be minimized to the extent feasible, and all lighting fixtures shall be small downward facing (e.g., similar to Union Wharf, Pope Marine Dock) to prevent unnecessary light and glare impacts in the marine environment.
3. This exemption does not excuse the proponent from complying with other local, state, and federal ordinances, regulations, or statutes applicable to the proposed development including but not limited to the City's Critical Areas ordinance. Best Management Practices (BMP's) must be always followed during construction. No construction debris or materials is allowed to enter the waters of Port Townsend Bay. The applicant shall obtain a Hydraulic Project Approval (HPA) from WDFW prior to beginning work. Any conditions of the resulting HPA (or HPAs, should the permitting be phased) are considered conditions of this Shoreline Exemption.
4. With the exception of materials deemed suitable for the rock habitat structure, all demolition materials will be placed on a material barge, transported for suitable upland disposal. None of the materials being removed from the existing Point Hudson breakwater may be transported for reuse outside the project area (e.g., rip rap taken to the Boat Haven breakwater) without the prior written permit approval(s) of the City and any other agency with jurisdiction.
5. A City of Port Townsend building permit must be applied for and issued prior to commencing with each arm of the breakwater replacement work. Building permit applications for both arms of the breakwater shall include a Flood Development Review application. The building official shall review the applications for compliance with the requirements of Chapter [16.08](#) PTMC, "Flood Damage Prevention." The building permit submitted for the southern arm shall include details for City review and approval on the new breakwater walkway railing system to be used.
6. It is the applicant's responsibility, and/or their contractors to ensure public safety for the duration of the construction period. The contractor shall take necessary precautions (e.g.,

temporary signage/fencing).

Prior to Sign Off on the Building Permit Final Inspection

7. It is the applicant's responsibility, and/or their contractors, to repair any damage to the public or private roadways or any other improvements that may be caused by construction traffic. If construction equipment inadvertently damages the shoreline environment, the applicant shall notify the City and any other responsible agencies (e.g., Ecology, WDFW) immediately. The applicant shall be responsible for repairing the shoreline to its preexisting condition to the satisfaction of the responsible agencies.

Expiration: Pursuant to Section 2.4(A) of the SMP, in consideration of the logistics of the phase construction, fish windows, and potential issues with supply chain and contractor availability this exemption shall automatically expire **three years** from the date of issuance.

In consideration of the above, the proposal is found exempt from the requirement of a shoreline substantial development permit.



Judy Surber, Planning Manager and Shorelines Administrator
Interim Director – Planning
Development Services Department
City of Port Townsend

4/4/22

Date of Issuance

Exhibits:

Exhibit A: *Shoreline Exemption and JARPA applications, received March 15, 2022*

Exhibit B: SEPA Addendum issued March 4, 2022, with the following attachments:

- B1. Vicinity Map
- B2. Original SEPA Mitigated Determination of No Significance (LUP16-064), October 19, 2016
- B3. Point Hudson Marina Breakwater Replacement Plan Set, October 22, 2021
- B4. SEPA Checklist for Revised Project dated March 1, 2022
- B5. SEPA Checklist Differences Memorandum, Widener & Associates, February 25, 2022
- B6. US Fish and Wildlife NEPA Categorical Exclusion
- B7. Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Point Hudson Breakwater Replacement, issued by NOAA NMFS, February 23, 2022 (WCRO-2021-00301)
- B8. Preliminary Eelgrass Macro Algae Habitat Survey, Jen-Jay Inc., August 9, 2020
- B9. EPA Region 10 Best Management Practices for Piling Removal and Placement in WA State, February 18, 2016

B10. Water Quality Monitoring and Protection Plan, Widener & Associates, January 2022

Appeals:

Type I-A – Administrative without notice; administrative appeal by the applicant only (unless the development code provides for an appeal); appealable to the hearing examiner.

For specific detail on the appeal process, see relevant cites in the PTMC

<http://www.codepublishing.com/wa/porttownsend.html> and RCWs

<http://www1.leg.wa.gov/LawsAndAgencyRules>

3. The City's Shoreline Master Program (SMP) has been updated consistent with the state guidelines, and the Department of Ecology (DOE) has adopted the SMP. The SMP incorporates the Critical Areas Ordinance (CAO) by reference (Chapter 6 of the SMP). Critical areas review is incorporated into the shoreline permit process; a separate Critical areas permit is not required.
4. According to the City's Critical Areas maps, the site contains four different critical areas: Seismic Hazard; Aquifer Recharge; Frequently Flooded; and, Fish and Wildlife Habitat.
5. Pursuant to PTMC 19.05.040(E)(1)(l), compliance with the Critical Areas chapter for development in seismic hazard, aquifer recharge and frequently flooded areas may be waived when the DSD Director is satisfied that the performance standards will be met and no purpose established by the CAO ordinance would be furthered by requiring compliance with those specific performance standards. For this project, the Director grants such a waiver for the seismic hazard, aquifer recharge and flood hazard critical areas.
6. In regards to the mapped Fish and Wildlife Habitat Critical area, the existing breakwater is an over-water structure; however, its footprint or use will not be expanded. No work associated with the proposal involves activities on any nearby beach face. As clarified by applicant (Exhibit B – *Port e-mail on construction scope*), all repair work will be done from the water using a barge with crane and the necessary rock materials. If Best Management Practices (BMP's) are adhered to, the repair work will not adversely affect near shore habitat. Pursuant to PTMC 19.05.040(C)(2), the Director finds the work qualifies for an exemption from further review under the City's Critical Area chapter. Consistent with Condition No. 2, below, the applicant is responsible for securing any permits required by other agencies.
7. As conditioned, the proposal is consistent with the policies of the Shoreline Management Act and the City's Shoreline Master Program.

Conditions

1. All development shall be in substantial conformance with the development plans submitted in the application for Shoreline Exemption. There shall be no further expansions to or addition of any structures seaward of the existing development without prior review for conformance with the Shoreline Master Program and any other applicable laws and ordinances.
2. This exemption does not excuse the proponent from complying with other local, state and federal ordinances, regulations, or statutes applicable to the proposed development including but not limited to the City's Critical Areas ordinance. Best Management Practices (BMP's) must be followed at all times during

construction. No construction debris or materials is allowed to enter the waters of Port Townsend Bay.

3. A City of Port Townsend building permit must be applied for and issued prior to commencing with the repair work.

In consideration of the above, the proposal is found exempt from the requirement of a shoreline substantial development permit.

Lance Bailey, DSD Director
Development Services Department
City of Port Townsend

Date of Issuance

DRAFT



Development Services Department
250 Madison St., Suite 3
Port Townsend, WA 98368
360-379-5095 Fax 360-344-4619

SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT
EXEMPTION APPLICATION

LUP# 16-066

Associated Permits#

The City of Port Townsend's Shoreline Master Program (SMP) exempts certain developments from its permit requirements pursuant to the Washington State Shoreline Management Act (RCW 90.58). Please answer the following questions completely, and please print legibly.

APPLICANT: Port of Port Townsend
ADDRESS: P.O. Box 1180, Port Townsend, WA 98368
TELEPHONE: (Home): 385-0656 (Business): 385-0680
CONTACT PERSON: Eric Toews, Dir. of Planning
ADDRESS (if different from Applicant): Same
TELEPHONE: (Home): Same (Business): Same

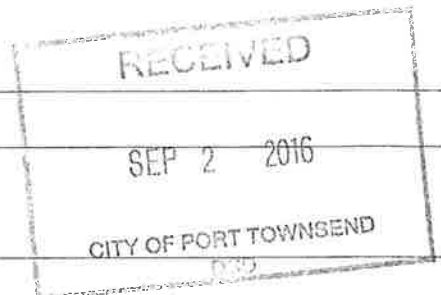
PROPERTY DESCRIPTION

GENERAL LOCATION: Easternmost 125' (approx.) of the Boat Haven Breakwater

LEGAL: Identify each affected property with information from the property tax statement. Describe the nearest "upland site" if the proposal is within a water body.

X Proposal Site Or Upland Site
Owner: Port of Port Townsend
Address: Same as Above
Parcel #: 957602301
Legal Description: NW 1/4, S11, T30N, R1W, W.M.

Proposal Site Or Upland Site
Owner:
Address:
Parcel #:
Legal Description:



ADJACENT WATERBODY: Port Townsend Bay (south); Boat Haven Marina (North)

PROPOSAL DESCRIPTION

PROPOSED DEVELOPMENT: Please see attached description.

USE: Marina Breakwater

ESTIMATED COST OR FAIR MARKET VALUE: \$75,000

COMPLETION DATE: 10/14/16

ARMY CORPS PERMIT:

Required:

Not Required:

Applied For (date Wk of 9/4/16) - After the fact

Notice Number:

permit may be issued due to emergency nature of repairs

SITE PLAN

A site plan must accompany the exemption request. It shall be no larger than 8 1/2 x 11 inches, to scale, and suitable for copying. It shall illustrate and identify the following features:

- ◆ North arrow and scale
- ◆ Development area (property boundary lines, section lines, etc.)
- ◆ Property improvements (existing and proposed structures, utilities, development, etc.)
- ◆ Property features (existing and proposed changes to topography, ground relief, vegetation, etc.)
- ◆ Water bodies and wetlands
- ◆ Ordinary high or mean higher high water line

APPLICATION FEE

\$243.00 (Due at application submittal)

ACKNOWLEDGMENT

I hereby declare that the information provided in this application is true and correct to the best of my knowledge. Further, I acknowledge that development of the proposal may not occur until approval has been granted by the City of Port Townsend Development Services Department.

 (Eric Toews)

Signature of applicant or other authorized representative

9/2/16

Date

PROPOSAL DESCRIPTION

PROPOSED DEVELOPMENT: The proposal is to undertake emergency repairs to the approximately east 125' of the Boat Haven Breakwater. This portion of the breakwater, which is a portion of the original east 600' of the original Boat Haven marina constructed in 1935, has been severely compromised by wind driven waves, with large sinkholes and partial collapses occurring over the past year (including the night of 9/1/16). Emergency repairs have been previously been conducted on this portion of the breakwater, but the scope and magnitude of the damage last season was substantially greater than in previous events.

This original portion of the breakwater construction can be characterized as follows (see the construction schematic labeled "Figure #13", in the attachments):

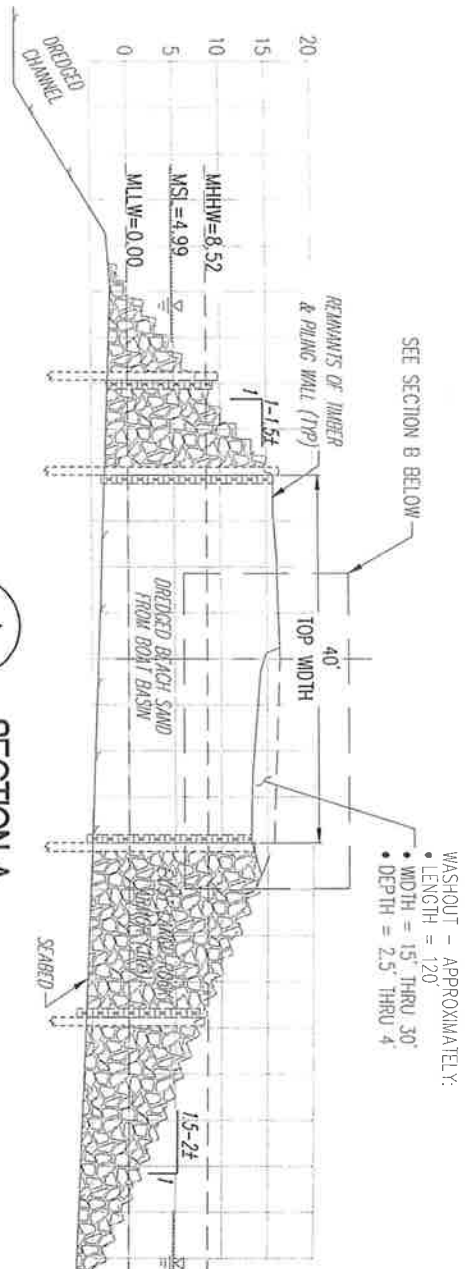
- An internal creosote impregnated timber pile wall "cofferdam";
- Cofferdam filled with granular spoils dredged from the commercial basin marina and main entrance channel; and
- Outer layer large (2 and 3-man) basalt/rip rap armor rock.

Over the past 80 years, the timber pile cofferdam has partially disintegrated. Late last year, this situation reached a critical threshold, when fall and winter wave action eroded the dredge spoils from within, leaving large sinkholes on the Bay side (south) of the structure (see the attachment labeled "Plan – Breakwater Repair Area", consisting of 2 sheets). If the structure is not immediately repaired, continued wave action is likely to scour the remaining dredge spoils from within the structure, leading to further collapses of the armor rock, and potentially, a blockage of the entrance channel into the marina.

Accordingly, the following repairs are proposed:

- Sinkhole/washout areas will be excavated – involving an area approximately 120' in length, 15' to 30' in width, and 2' to 6' deep;
- Excavated areas will be lined with geotextile fabric (9-33.2 table and high survivability, non-woven);
- Voids will be backfilled with quarry spalls and 3-man rocks.

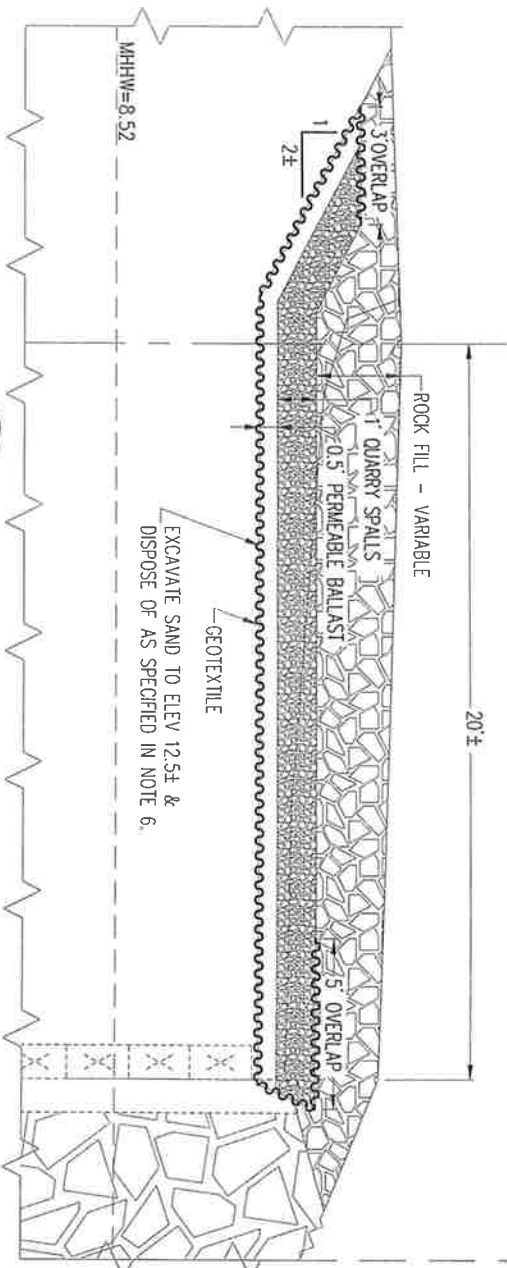
It should be noted that the Port is proceeding with a full engineering condition assessment/reconnaissance study of original portion of the breakwater, which may lead to a substantial capital replacement project over the coming years. Narrative text from the Port's draft Capital Repair and Replacement Plan (December 2015) has been included for further background information.



WASHOUT - APPROXIMATELY:
 • LENGTH = 120'
 • WIDTH = 15' THRU 30'
 • DEPTH = 2.5' THRU 4'

DATUM REFERENCE:
 BENCH MARK "R 257 1944": EPOCH 1983-2001
 = PD# "R0559" @ 19.22 NAVD-88, SUPERCEDES
 19.25 NAVD-88, NATIONAL GEODETIC SURVEY
 = VM# "1123" @ 20.33 ABOVE MLLW OF MAP
 STATION 9444900, NOAA/NOS/CO-OPS
 = RLW1 @ 15.79 NGVD29, FEMA, FIRM
 COMMUNITY PANEL # 530007000108
 MHHW=8.52 MHW=7.84
 MSI=4.99 NGVD29=4.79 MTL=5.17
 MLLW=0.00 NAVD88=1.11 MLLW=2.49

A
SECTION A
 SCALE: 1" = 20' ± (H&V)



B
REPAIR SECTION B
 SCALE: 1" = 5' ± (H&V)

- NOTES:
1. GEOTEXTILE SHALL BE NON-WOVEN, HIGH SURVIVABILITY PER WSDOT 9-33.2(1), TABLE 3, FOR SOIL STABILIZATION.
 2. PERMEABLE BALLAST SHALL BE PER WSDOT 9-03.9(2), GRADATION FOLLOWS:
 - 2 1/2" - 100% PASSING
 - 2" - 65 TO 100%
 - 3/4" - 40 TO 80%
 - NO 4 - 5% MAX
 3. QUARRY SPALLS SHALL BE PER WSDOT 9-13.6, GRADATION FOLLOWS:
 - 6" - 100% PASSING
 - 5" - 40% MAX PASSING
 - 3/4" - 10% MAX PASSING
 4. ROCK FILL AND ARMORING SHALL BE PER WSDOT 9-13.7, APPROXIMATE WEIGHT AND SIZES FOLLOW:
 - 3 MAN ROCK - 700 TO 2000 POUNDS WITH AVERAGE DIMENSIONS OF 28" TO 36"
 - 4 & 5 MAN ROCK - 2000 TO 6000 POUNDS WITH AVERAGE DIMENSIONS OF 36" TO 54"
 5. APPROXIMATE QUANTITIES:
 - EXCAVATE & SPREAD SAND 250-CY
 - GEOTEXTILE 650-SY
 - PERMEABLE BALLAST 1504-TON
 - QUARRY SPALLS 300-TON
 - 3 MAN ROCK 750-TON
 - 4 & 5 MAN ROCK 550-TON
 6. EXCAVATED SAND SHALL BE SPREAD ON TOP OF BREAKWATER, WEST OF THE WORK AREA. AN APPROXIMATE VOLUME OF 250 CY WILL REQUIRE AN AREA 30' WIDE X 225' LONG X 1' DEEP.

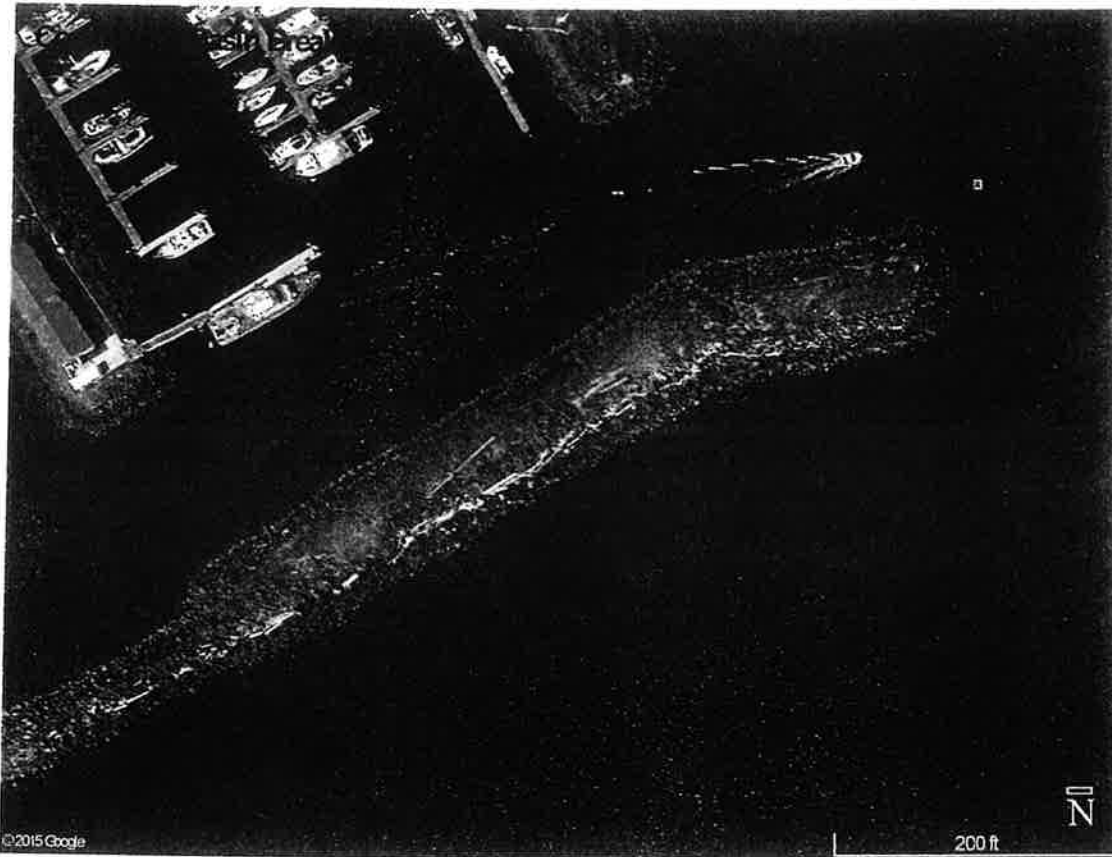
REFERENCE:
 APPLICANT: PORT OF PORT TOWNSEND

PROPOSED: BREAKWATER REPAIR
 LOCATION: PORT TOWNSEND BOAT HAVEN
 PN: 957602301
 SHEET 1 OF 2 DATE: 9/1/16

PARTIAL DRAFT #1

Project 3: Boat Haven – Engineering Reconnaissance Survey & Recommendations - East 600' of Original Breakwater

FIGURE #12: Boat Haven Engineering Reconnaissance Project – Study Area



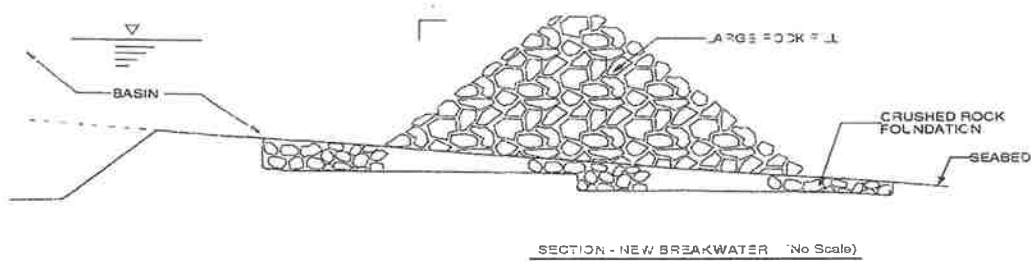
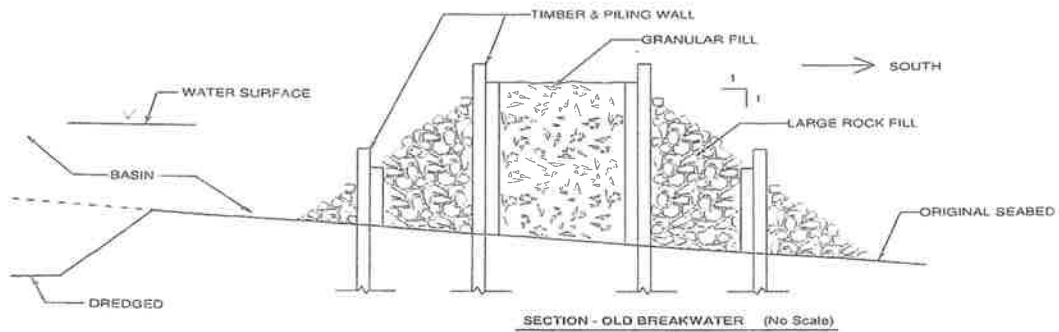
Project Description & Need: The east 600 feet (approximately) of the Boat Haven Breakwater is part of the marina originally constructed in 1934. It has been damaged by wind driven wave events twice during the past decade, with emergency repairs being completed each time. Because of the age and deteriorated state of the structure, a future storm-caused failure could be more serious, and would potentially jeopardize marina entrance channel navigation and use of the Commercial Basin.

Because of its design, this original length of breakwater is far more vulnerable than the newer breakwater (c. 1964) protecting the Recreational Basin lying to the west. The original breakwater section was constructed with an outer layer of rock spalls on each side of the structure, with granular fill between the outer armor rocks. Two rows of timber walls on wood pilings are visible on each side of the breakwater. The Port's engineer posits that that these walls were used to support large rocks being installed more or less concurrently with placement of the interior fill (which was dredged from the new harbor. The newer section of breakwater to the west is similar in appearance, but is constructed entirely from rock quarry spalls and has no internal fill.

PARTIAL DRAFT #1

Figure #13, below, shows the differences in construction between the old and new sections of the Boat Haven Breakwater. This original section of breakwater is particularly vulnerable because of its thin outer layer of rock armoring, and its south toe is unprotected from wind driven wave erosion occurring at low tide.

FIGURE #13: Boat Haven – Construction Schematics of Original (c. 1934) 600' Section & "New" (c. 1965) Sections of Breakwater



PARTIAL DRAFT #1

Accordingly, it is recommended that a coastal engineer with specific experience in breakwater construction and renovation be retained to prepare a detailed Engineering Reconnaissance Study. This study would further assess breakwater condition and identify repair options and recommendations. This study would likely necessitate near-term CFP revisions to reflect recommended repairs and renovations to the facility. For planning purposes, it is assumed that future repairs and renovations to this facility may require capital expenditures of up to \$3,000,000 within the timeframe of the initial six-year CFP.

Estimated Project Cost & Proposed Funding:

- \$60,000 - detailed Engineering Reconnaissance Study and recommendations
- Potential to require up to \$3,000,000 for renovation within the next 6 years

Figure #14 – Boat Haven Breakwater: Potential Spending & Funding Plan

SPENDING PLAN:							
Cost Category	2016	2017	2018	2019	2020	2021	Total
Soft Costs (Preliminary Engineering Reconnaissance)	\$60,000	\$0	\$0	\$0	\$0	\$0	\$60,000
Soft Costs (A&E, Permitting)	\$0	\$0	\$135,000	\$135,000	\$0	\$0	\$270,000
Construction	\$0	\$0	\$0	\$0	\$1,365,000	\$1,365,000	\$2,730,000
TOTAL SPENDING	\$60,000	\$0	\$135,000	\$135,000	\$1,365,000	\$1,365,000	\$3,060,000
FUNDING SOURCES & PLAN:							
Property Taxes + Operating Revenue	\$60,000	\$0	\$33,750	\$33,750	\$341,250	\$341,250	\$810,000
USACOE Direct Funding Support	\$0	\$0	\$101,250	\$101,250	\$1,023,750	\$1,023,750	\$2,250,000
TOTAL FUNDING	\$60,000	\$0	\$135,000	\$135,000	\$1,365,000	\$1,365,000	\$3,060,000
ADDITIONAL SOURCES SOUGHT: None identified; Port share of costs could be funded through proceeds from issuing additional revenue bonds, rather than property tax proceeds or operating budget revenues							

**CITY OF PORT TOWNSEND
RESPONSIBLE OFFICIAL'S
THRESHOLD DETERMINATION OF NON-SIGNIFICANCE (DNS)**

Proposal: Port of Port Townsend, Point Hudson Marina Breakwater Replacement Project

The project involves phased removal and replacement of the Port's 75-year old breakwater entrance to the Point Hudson Marina. The project would demolish, in sections, both arms of the existing breakwater/bulkhead structure. All basalt rock armoring, bracing, cables, walkway, piles and rubble fill would be removed along with dredged accumulated sediment from the breakwater/bulkhead toe.

Rock armoring removed as part of the demolition which is still suitable (competent) for re-use may be placed inside (as fill) the new parallel sheet pile structure built within the former structure's footprint. Removed armoring may also be placed along the toe of the new sheet pile structure or transported for reuse at the Port's Boat Haven rubble mound breakwater to fill in gaps above Mean Higher High Water (MHHW). Dredged sediment will be barged to the Puget Sound Dredged Disposal Analysis (PSDDA) Port Townsend disposal site. All other non-re-useable demolition debris from the breakwater/bulkhead replacement project will be disposed of at licensed upland facilities.

File Reference: LUP16-064

Applicant: Port of Port Townsend
c/o Eric Toews, Planning Director
P.O. Box 1180
Port Townsend, WA 98368

Agent: Allison Reak
Sea-Run Consulting
6531 10th Ave. NW
Seattle, WA 98117-5208

Location/Legal Description: The Point Hudson Marina Breakwater Project is an unaddressed site located at the marine opening to Pt. Hudson Marina. The project site lies entirely within the waters of Port Townsend Bay and is located in the SW 1/4, Section 1, Township 30N, Range 1 West, Jefferson County.

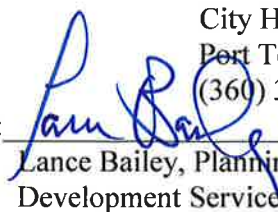
Lead Agency: City of Port Townsend, Development Services Department

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030 (2) (c). This decision was made after review of a completed environmental checklist and other information in file with the lead agency. This information is available to the public on request.

This DNS is issued under WAC 197-11-340; the lead agency will not act on this proposal for 15 days from the date below. Comments or a written statement appealing the threshold determination must be filed with the Development Services Department by 4:00 p.m., November 3, 2016.

Contact: John McDonagh, Senior Planner (360) 344-3070

Responsible Official: Lance Bailey, Planning Director
City Hall, 250 Madison Street, Suite 3
Port Townsend, WA 98368
(360) 390-4048

Signature: 
Lance Bailey, Planning Director
Development Services Department

Date: October 19, 2016

Appeal Deadline: November 3, 2016

TO: All Permit and Review Authorities

ENVIRONMENTAL RECORD

The environmental review consisted of analysis based on the following documents included in the environmental record.

DOCUMENTS/ REFERENCES:

- Exhibit A: SEPA Environmental Checklist (annotated), dated August 5, 2016.
- Exhibit B: SEPA Checklist Additional Responses, including Project Figures, Project Conservation Measures and Dredged Materials Characterization Report, dated August 5, 2016.
- Exhibit C: JARPA form (minus figures), dated August 17, 2016.
- Exhibit D: Biological Assessment/Biological Evaluation and Essential Fish Habitat Assessment, dated August 18, 2016.
- Exhibit E: Notice of Application and Pending SEPA Threshold Determination, dated August 17, 2016.
- Exhibit F: NMFS Concurrence Letter, dated October 13, 2016.
- Exhibit G: Applicant clarification on upland staging, stockpiling and traffic, dated October 14, 2016.
- City of Port Townsend Shoreline Master Program (2007)
- City of Port Townsend Zoning Ordinance - Title 17 (amended April, 1997)
- City of Port Townsend Critical Areas Ordinance – Chapter 19.05 (amended July, 2006)
- City of Port Townsend Comprehensive Plan (1996)

Unless otherwise noted, the above information is available for review at the Development Services Department, 250 Madison Street, Suite 3, between the hours of 8:00 AM to 4:00 PM Monday through Friday.

I. PROPOSAL DESCRIPTION

The project involves phased removal and replacement of the Port's 75-year old breakwater entrance to the Point Hudson Marina. The project would demolish, in sections, both arms of the existing breakwater/bulkhead structure. All basalt rock armoring, bracing, cables, walkway, piles and rubble fill would be removed along with dredged accumulated sediment from the breakwater/bulkhead toe.

Rock armoring removed as part of the demolition which is still suitable (competent) for re-use may be placed inside (as fill) the new parallel sheet pile structure built within the former structure's footprint. Removed armoring may also be placed along the toe of the new sheet pile structure or transported for reuse at the Port's Boat Haven rubble mound breakwater to fill in gaps above Mean Higher High Water (MHHW). Dredged sediment will be barged to the Puget Sound Dredged Disposal Analysis (PSDDA) Port Townsend disposal

site. All other non-re-useable demolition debris from the breakwater/bulkhead replacement project will be disposed of at licensed upland facilities.

II. PUBLIC COMMENT

No written comments were received in response to the *Notice of Application and Pending Threshold Determination* (Exhibit E). This *Notice* was mailed to adjoining property owners within 300 feet of the site, posted on or near the project location and published in the local newspaper on August 17, 2016. The initial *Notice* comment period concluded September 6, 2016. No comments, written or otherwise, have been received to date.

III. PERMITS/APPROVALS REQUIRED PRIOR TO CONSTRUCTION:

City of Port Townsend Shoreline Substantial Development Exemption (with Critical Area review)
City of Port Townsend Building Permit
City of Port Townsend Clearing & Grading Permit (for any upland work; may be processed as part of the building permit)
Washington St. Dept. of Fish & Wildlife Hydraulic Project Approval
Washington St. Dept. of Ecology Water Quality Certification
National Marine Fisheries Service and U.S. Fish and Wildlife Service (joint) Biological Concurrence
U.S. Army Corps of Engineers Individual Permit (includes NEPA review)
Dredge Material Management Office disposal authorization

IV. RESPONSIBLE OFFICIAL'S AMENDMENTS TO CHECKLIST ITEMS

The Applicant's environmental checklist and Exhibits are incorporated by reference. The following discussion is intended to identify any potential environmental impacts not addressed by the environmental checklist.

A. EARTH

The environmental checklist description together with the Supplemental SEPA Responses (Exhibit B) concerning potential for earth-related environmental impacts is adequate. The project site consists of: cut and fill material, including the riprap and other earthen material which comprise the breakwater arms; and, sand (on both the marine floor and immediately adjacent uplands). Aside from the approximate 30% slopes locate along the breakwater riprap sides, land areas associated with the project are generally flat.

In-water fill activities involve removal of approximately 9,218 cubic yards (CY) of existing breakwater fill along with 827 creosote wood piles. In place of these existing materials are approximately 3,198 CYU of new rock/fill and 109 steel piles. For upland areas, particularly adjacent to the southern breakwater arm, fill areas behind an existing timber bulkhead have washed out leaving a pattern of voids and solids. Fill removed from upland areas, including scattered ground covers and some asphalt/pavement, will be removed (47 CY) and replaced with new clean fill.

Much of the removed rock and fill from the breakwater will be deposited at an in-water location

approved via an outside agency permit (Dredge Material Management Office disposal authorization). Any treated materials which require disposal at upland locations will be transported there via a barge to truck transfer at an off-site location. The Biological Assessment/Biological Evaluation (BA/BE) (Exhibit D) includes discussion of as-yet-to-be defined upland areas for stockpiling of materials used in the project. A subsequent clarification by the applicant's agent (Exhibit G – *Applicant clarification on upland staging, stockpiling and traffic*) confirms that no upland staging, material stockpiling or heavy truck traffic is expected at this time for construction of the project.

The BA/BE also indicates that some of the removed breakwater rock, if found suitable, may be re-used at the Port's Boat Haven breakwater. Unless formally removed from the project scope by the applicant, the pending Shoreline Exemption decision being prepared for the Pt. Hudson breakwater project will address the need to secure additional shoreline permitting in order to relocate any of the competent rock from Pt. Hudson to other facilities like the Boat Haven.

In recognition of the upland work occurring as part of the breakwater replacement, and in accordance with the City's adopted Engineering Design Standards (EDS), temporary erosion and sedimentation control measures that utilize Best Management Practices will be implemented throughout the construction schedule. By following the City's EDS measures concerning earth and erosion control, no adverse impacts to earth are anticipated and no mitigation measures are necessary.

B. AIR

The environmental checklist description concerning potential for air-related environmental impacts is adequate. During construction, emissions from heavy equipment and vehicles associated with the development would be created. Upon project completion, automotive traffic to and from the site would return to pre-project levels. Long-term air emission impacts resulting from the project are not considered significant.

In accordance with the City's Engineering Design Standards (EDS), water shall be applied as a suppressant should dust at upland portions of the site become a problem during the project. Vehicle idling will be minimized. If standard EDS measures concerning water suppressants and vehicle conditions are adhered to, no adverse impacts to air are anticipated and no mitigation measures are necessary.

C. WATER

The environmental checklist concerning the potential for water-related environmental impacts is adequate. A majority of project work involves activities both in and over the waters of the Pt. Townsend Bay and Pt. Hudson Marina. Work will occur from floating barge(s) using mechanized equipment. Smaller segments of the project involve upland work where the breakwater arms connect to land.

As noted in the analysis above under EARTH, in-water fill activities involve removal of approximately 9,218 cubic yards (CY) of existing breakwater fill along with 827 creosote wood piles.

In their place, approximately 3,198 CYU of new rock/fill and 109 steel piles will be installed. For upland areas, particularly adjacent to the southern breakwater arm, fill areas behind an existing timber bulkhead have washed out leaving a pattern of voids and solids. Fill removed in upland areas, including scattered ground covers and some asphalt/pavement, will be removed (47 CY) and replaced with new clean fill. Drawings of all existing and proposed structures are in Exhibit B - SEPA Checklist Additional Responses.

Direct rainfall on the replaced breakwater arms and upland improvements would continue to be the only source of project-related stormwater. Stormwater for this project does not require collection and/or treatment before it dispersed directly into marine waters.

DSD review and approval of clearing and grading measures will allow for oversight of potential water quality impacts from erosion during upland portions of the construction. If the City's Engineering Design Standards (EDS) standards concerning erosion control are adhered to during project activities, no mitigation measures are necessary.

D. PLANTS

The environmental checklist with regards to plants, including the description of species found in the Biological Assessment/Biological Evaluation (BA/BE) (Exhibit D) is adequate to conduct SEPA review. No threatened or endangered plant species have been observed on site or near the site.

Upland portions of the project site include scattered ground cover above the timber bulkhead on the southern breakwater arm. These upland areas, along with various macroalgae species lying in-water would be disturbed during removal of the existing breakwater. In addition, a small patch of eelgrass (approx. 600 square feet in size) lying within the marina-side bend of the northern breakwater arm would be removed as part of the project.

The conservation measures established by the BA/BE (Exhibits C & D) adequately addresses any potential project impacts to plants. After construction of both breakwater arms is complete, over 16,500 sq. ft. of intertidal and shallow subtidal habitat will be uncovered allowing for natural recovery and recolonization of aquatic vegetation. No adverse impacts to plants or vegetation have been identified and no mitigation measures are necessary.

E. ANIMALS

The environmental checklist description with regards to animals coupled with analysis found in the BA/BE (Exhibit D) is adequate to conduct SEPA review. The National Marine Fisheries Service (NMFS) has indicated they concur with the Conservation Measures set forth by the BA/BE (Exhibit F – NMFS Concurrence Letter) Port Townsend is home to a wide array of aquatic, terrestrial and avian wildlife.

Through Exhibit D, threatened and endangered species on or near the site have been fully inventoried

and any potential project impacts to them identified. As part of the BA/BE, numerous conservation measures have been incorporated into the project. A partial list of these include:

- Adherence to the state-designated in-water work period of July 16 to February 15 (in-water construction to begin in late September) to avoid disturbing ESA-listed fish and wildlife species.
- The breakwater will change design from a massive rock-filled wall contained by piles to a sheet- and pipe-pile wall. This design change will result in the removal of 19,156 ft² of hard substrate (15,600 ft² of rock and 3,556 ft² of piles) to be replaced with 7,308 ft² of hard substrate (6,380 ft² of rock and 928 ft² of piles) for a net recovery subtotal of 11,848 ft² of intertidal and shallow subtidal natural sandy substrate.
- Extraneous rockfall and rubble outside the breakwater will be removed, uncovering an additional 4,680 ft² of shallow subtidal habitat for a net total of 16,528 ft² of recovered habitat at Point Hudson.
- The entrance channel width will be narrowed from about 140 ft to about 95 ft between the jetties, and the north jetty will be shortened and moved further into the marina, reducing the breakwater area that protrudes into the bay.
- Within the marina, a small area of low intertidal habitat along the base of the bulkhead will be covered by new rock armoring behind the new sheet pile bulkhead; however, the loss will be compensated for by the excavation of a slightly larger area of high intertidal habitat.
- Approximately 827 creosote-treated wood piles will be removed from marine waters (a surface area of about 76,000 ft² of creosote-treated wood).
- Rock reinforcement (armoring) at the base of the new breakwater will be placed below grade with voids filled and surfaces covered by rounded gravel to enhance habitat conditions of the substrate surface layer.
- The partial-height soldier pile wall (for abrasion protection on the north breakwater arm) will be untreated timber, instead of HDPE, to avoid the release of particulate plastic in the marine environment.
- The use of improved materials, including galvanized steel instead of creosote piling, untreated timber instead of plastic abrasion protection, and pea-gravel over rock armoring, will improve substrates for epibenthic and benthic invertebrate density and diversity.
- Fractured basalt from the existing breakwater will be re-used where suitable on site and at the Boat Haven, to reduce emissions generated by quarrying and importing new material.
- A debris boom (during breakwater demolition) and/or turbidity curtain will be employed, as required, to protect water quality and comply with State water quality rules and regulations.
- Demolition and construction will adhere to the federal and state-

designated in-water work period of July 16 to February 15 to avoid disturbing ESA-listed species.

- Hydrographic surveys will be used to determine and maintain the correct dredge prism.
- Construction of one breakwater jetty during one construction season would additionally limit the amount of habitat disruption and noise per year and decrease the chance of wildlife exposure to construction-generated noise during migrations.
- Vibratory hammering will be the standard method of installing sheet and pipe piles to reduce percussive noise in the marine environment. Impact hammering of pipe piles will adhere to all conditions required as part of the Biological Letters of Concurrence from the National Marine Fisheries Service and U.S. Fish and Wildlife Service.
- A wooden pile cushion would be used between the hammer head and pile top to reduce noise generated by impact hammering. Each combi-wall pipe pile would have two steel flanges and would be attached to a sheet pile and/or the sheet pile template during installation, which would alter the impact resonance and may reduce peak frequencies.
- The number of piles to be vibrated and proofed per day would be restricted to two, three, or four, based on pile diameter, to reduce noise duration.
- The duration of proofing (i.e., 15 min/pile) and vibratory hammering (i.e., 30 min/pile), would be short (i.e., 45 min/pile total noise duration) and intermittent.
- Impact hammering would be preceded

by a period of vibratory pile driving, which would alert wildlife near the construction site in advance of impact hammering.

- The limits on pile installation would reduce all hammering noise to a daily total duration of 90 minutes for 48-in-dia piles to 3hrs. for 36-in-dia piles.
- To minimize the potential effects of noise disturbance, steel piles would not be proofed within 2 hours of sunrise or sunset at any time during the construction period.
- The limits on pile installation would reduce all impact hammering noise to less than ten percent of available daylight hours during the seven-month construction period (i.e., five percent of summer daylight hours to nine percent of winter daylight hours).
- Pile-driving noise would be interrupted by periods of “quiet” construction activities, such as barge repositioning, alignment and installation of the sheet piling template, installation of sheet piling, alignment of pile piles, hammer head changes, breakwater demolition and excavation, and dredging.
- Local noise regulations would limit all construction activity to eight hours a day (or less, depending on marbled murrelet noise restrictions), five days a week, leaving significant periods during which the action area would be quiet.
- The breakwater jetties, marina, and shoreline would contain and absorb much of the project noise, so that more than half the energy radiating from each pile would be prevented from spreading into aquatic habitat.
- The land masses surrounding Port

SEPA DNS

Pt. Hudson breakwater replacement

LUP16-064

Townsend Bay, including, Indian, Marrowstone, and Whidbey islands, would absorb or attenuate noise in water and in air to the extent that no sea lion haulout, SRKW or humpback whale forging habitat, or salmon or Pacific herring spawning areas would be affected.

- A clamshell dredge will be used to limit the volume of suspended sediment in the water column at the dredging location.
- Water quality will be protected during construction through the use of silt

fences, mulch, sod, plastic liners, and/or plastic covering of exposed upland areas during bulkhead and retaining wall replacement (if needed).

- Waste materials (e.g., concrete, creosote-treated timber, rock, etc.) will be separated and categorized for re-use or proper disposal. If temporary stockpiling is necessary before debris disposal, creosote piles will be stored on tarps and covered, to prevent oils from entering the water.

Construction of the project will require a Hydraulic Project Approval (HPA) from the State Department of Fish and Wildlife, as well as permit approvals from the U.S. Army Corps of Engineers, the National Marine Fisheries Service and U.S. Fish and Wildlife Service. As long as the conservation measures set forth in the BA/BE are adhered to, no mitigation measures concerning impacts to animals are necessary or warranted.

F. ENERGY & NATURAL RESOURCES

The environmental checklist description with regards to energy & natural resources is adequate. No adverse environmental impacts are anticipated and no mitigation measures are necessary.

G. ENVIRONMENTAL HEALTH

The environmental checklist description with regards to environmental health is adequate. Standard construction and traffic control measures consistent with the City's Engineering Design Standards (EDS) will be employed throughout the construction project. If the City's EDS measures concerning environmental health are followed, no adverse impacts are anticipated and no mitigation measures are necessary.

H. NOISE

The environmental checklist, coupled with analysis in the BA/BE (Exhibit D) regarding potential noise impacts, is adequate to conduct SEPA review. During construction, surrounding upland properties would be subject to moderate increases heavy equipment noise; however, these increases will be temporary for the several weeks of project construction and are not inconsistent with typical Port operations. Project-generated noise would be generated during day light hours by:

- Pile extraction and driving;
- Removal and installation of the rock and fill materials, including installation of the new southern arm bulkhead, the soldier pile wall and adjacent pavement; and,
- Vessel/barge movement as the construction takes place.

Conservation measures outlined in the BA/BE (Exhibit C & D) were specifically selected to reduce noise impacts. All piles will be installed using a vibratory hammer and finished with an impact hammer. A wood cushion pad will be placed between the pile and hammer head to reduce noise. Pile installation has numerous time-related restrictions (e.g. duration of hammering limits; limits on the # of piles driven each day; time of day windows for pile driving, etc.).

Consistent with the City's Engineering Design Standards (EDS), the hours of construction are limited to between 7 a.m. and 6 p.m. Monday through Friday, and prohibited on weekends and national holidays. Under special circumstances, and if requested in advance, the DSD Director may grant exceptions to these construction hour limits. All construction equipment is required to have mufflers.

If the EDS construction hour limits and noise reduction measures identified in the BA/BE (Exhibit D) are followed, no adverse impacts concerning noise are anticipated and no mitigation measures are necessary.

I. LAND AND SHORELINE USE

The environmental checklist description of land and shoreline use is adequate to conduct SEPA review. The subject property is located within the M-II(B) (Point Hudson Marine Trades) zoning district. The Point Hudson marina is a roughly 4-acre recreational boat moorage facility owned and maintained by the Port of Port Townsend. Upland areas at Point Hudson contain a variety of water-related uses including marine trades; however, a range of water-enjoyment uses (e.g. restaurant) are also present. Surrounding lands outside of Port ownership are primarily zoned C-III (Historic Commercial) with some areas of C-II (General Commercial), PO/S (Public Park and Open Space) and R-II (Medium Density Single-Family Residential). Consistent with these zoning designations, surrounding lands contain a mixture of commercial, public park, and residential uses.

Shoreline Master Program (SMP)

The proposed construction lies over the waters of Port Townsend Bay, a shoreline regulated under the City's Shoreline Master Program (SMP). The work qualifies for a Shoreline Substantial Development Exemption as "*normal maintenance and repair of existing structures or developments...*" (SMP Section 2.4 (D)(2)). Review and issuance of a Shoreline Exemption from the substantial development process is not an exemption from the Shoreline Management Act (SMA), the City's SMP or any other regulatory requirements (such as critical areas; see below).

Two (2) different SMP designations, or environments, apply to the breakwater replacement project. The first is "Pt. Hudson Marina" with a sub-district designation of "Marina" (see SMP Chapter 5.13). The second SMP designation is "Aquatic" (see SMP Chapter 5.6). As a water-dependent use, the breakwater replacement project is permitted within all of these SMP designations. Various other SMP provisions also apply to the breakwater replacement project and will be analyzed as part of issuing a Shoreline Exemption decision.

Shoreline Exemption applications are classified at Type I-A applications under Port Townsend Municipal Code (PTMC) 20.01 – Land Development Administrative Procedures. Type I-A permit applications are administrative decisions issued by the City's DSD Director. Type I-A permits normally do not require circulation of a *Notice of Application*, except for those projects which also require review under SEPA. Administrative appeals of a Type I-A permit decision is available first to the City's Hearing Examiner. Appeals beyond the City's Hearing Examiner level are made to the Washington State Shoreline Hearings Board.

Critical Areas Ordinance (CAO)

The proposed construction site also involves several Critical Areas designations as defined by the City's Critical Areas Ordinance – Chapter 19.05. According to the City's Critical Area (CA) maps, the site contains three different sensitive area features: Seismic Hazard; Frequently Flooded; and,

Fish and Wildlife Habitat ESA. Specific review of applicable Critical Area regulations and performance standards will be integrated into the Shoreline Substantial Development Exemption permit.

No adverse environmental impacts related to land use have been identified and no mitigation measures are necessary.

J. HOUSING

The environmental checklist description with regards to housing is adequate. No existing housing units would be created or displaced as part of the project. The project is designed to augment existing shoreline protective measures serving the existing commercial structure. No impacts to housing have been identified and no mitigation measures are needed.

K. AESTHETICS

The environmental checklist description concerning aesthetics is adequate. The proposal involves removal of a two (2) existing rip rap marine breakwater arms, including all associated creosote-treated wood piles, wooden bracing, cables, fill and other materials. 2 new breakwater arms will be built using a smaller footprint and alternate materials (i.e. steel piles, sheet pile walls, concrete caps, wooden bulkhead and soldier pile walls).

The project lies outside of the Port Townsend National Landmark Historic District (NHLD) and is not subject to the City's Historic Design Review procedures. Views of the completed project from adjacent upland areas, the water or surrounding properties will not be adversely impaired or altered. No impacts to aesthetics have been identified and no mitigation measures are needed.

L. LIGHT AND GLARE

The environmental checklist description of light & glare is adequate. The completed project will replace an existing navigational light with a similar, solar-powered navigation light. No additional lighting is sought by the project. No impacts related to lighting have been identified and no

mitigation measures are needed.

M. RECREATION

The environmental checklist description regarding recreation is adequate. Pt. Hudson Marina provides transient and permanent moorage for boaters. The public can access Pt. Hudson's shoreline areas for a variety of activities, including (but not limited to) sightseeing, beach walking, wildlife viewing, fishing and kayaking/canoeing.

An existing 245-foot long pedestrian walkway runs along the southern breakwater arm; however, the outer 120 feet of this pedestrian facility is currently closed due to hazardous conditions. Temporary removal of this entire walkway is unavoidable during construction. Consistent with the City's Shoreline Master Program (SMP) and Non-Motorized Transportation Plan (NMTP), the southern breakwater walkway is being replaced as part of the breakwater replacement project. Atop both

breakwater arms, a 5-foot wide concrete cap is being poured. The southern arm will have protective railings installed on each side consistent with the building code. The northern arm will not be made accessible to pedestrians. As long as the exiting pedestrian walkway is replaced, no impacts to recreation would result from the completed project and no mitigation measures are necessary.

N. HISTORICAL AND CULTURAL RESOURCES

The environmental checklist description concerning historical and cultural resources is adequate. No known cultural or historical resources are known to exist on the site. Removal of the breakwater arms is not seen by the Responsible Official as involving a historic structure under City historic preservation codes. Comments on the Threshold SEPA Determination will be solicited from the State Historic Preservation Office (SHPO).

If such historic or cultural materials are discovered during construction activities, work must be stopped immediately and the SHPO contacted. Work would not be allowed to resume until approval is obtained from the DSD Department.

O. TRANSPORTATION

The environmental checklist concerning transportation is adequate to conduct SEPA review.

Vehicular access to the site is provided via existing City rights-of-way, most particularly State Highway 20 (SR 20) and Water Street. The southern breakwater arm is accessed from the intersection of Water and Jackson Streets. The northern breakwater arm is accessed off of Jefferson Street through Pt. Hudson. Dozens of parking spaces exist adjacent to the project area; no parking spaces would be eliminated by the completed project.

At this time, all construction work is anticipated to occur from the water via mechanized equipment and materials mounted atop floating barges. Upland vehicle traffic (trucks) is not expected for any aspect of the construction (Exhibit F); however, all of the streets serving the site operate at a

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sufficient Level of Service (LOS) to accommodate any limited construction traffic that would occur associated with the proposed upland work elements. As presently described, any transportation impacts would be short term, limited in scope and pose no adverse environmental impacts.

As a replacement project, no increases in post-construction traffic are expected. The project would be built in phases over 2 consecutive years (with the southern arm removal and replacement in 2017, followed by the northern arm work in 2018). Each annual work session is expected to take 3 to 5 months to complete.

No adverse impacts to transportation have been identified from construction or completion of the project and no mitigation measures are necessary.

P. PUBLIC SERVICES & UTILITIES

The environmental checklist description concerning public services and utilities is adequate. No increases in public services to the completed project are anticipated. No change in existing utility service is proposed. No adverse impact to public services or utilities has been identified; therefore, no mitigation measures are necessary.

V. ANALYSIS CONCLUSIONS

Based on the above analysis and the conservation measures proposed by the applicant, the project is essentially self-mitigating. Issuance of a Determination of Non-Significance (DNS) for the subject proposal is warranted.