



## Land Use Application #1292270 - North Portwalk and Seawall Reconstruction

## Applicant

First Name		Last Name		Company Name	
Bob		McChesney		Port of Edmonds	
Number	Street		Apartment or Suite Number		E-mail Address
336	Admiral Way				bmcchesney@portofedmonds.org
City	State	Zip	Phone Number		Extension
Edmonds	WA	98020	(425) 774-0549		

## Contractor

Company Name					
Number	Street			Apartment or Suite Number	
City	State	Zip	Phone Number		Extension
State License Number		License Expiration Date	UBI #	E-mail Address	

## Project Location

Number	Street		Floor Number	Suite or Room Number	
336	ADMIRAL WAY				
City	Zip Code	County Parcel Number			
EDMONDS	98020	27032300401400			
Associated Building Permit Number			Tenant Name		
Additional Information (i.e. equipment location or special instructions).					
Work Location					

## Property Owner

First Name		Last Name or Company Name			
*		EDMONDS PORT OF			
Number	Street		Apartment or Suite Number		
300	ADMIRAL WAY				
City	State	Zip			
EDMONDS	WA	98020			

## Certification Statement - The applicant states:

I certify that I am the owner of this property or the owner's authorized agent. If acting as an authorized agent, I further certify that I have full power and authority to file this application and to perform, on behalf of the owner, all acts required to enable the jurisdiction to process and review such application. I have furnished true and correct information. I will comply with all provisions of law and ordinance governing this type of application. If the scope of work requires a licensed contractor to perform the work, the information will be provided prior to permit issuance.

Date Submitted: 3/31/2023 Submitted By: Bob McChesney

April 26, 2023



## CITY OF EDMONDS



### Land Use Application #1292270 - North Portwalk and Seawall Reconstruction

#### Project Contact

**Company Name:** CG Engineering

**Name:** Carmel Gregory

**Email:** Carmelg@cgengineering.com

**Address:** 250 4th Ave S. Suite 200  
Edmonds WA 98020

**Phone #:** (425) 778-8500

#### Project Type

New

#### Activity Type

Use Approval

#### Scope of Work

Conditional Use

**Project Name:** North Portwalk and Seawall Reconstruction

**Description of Work:** The project is located at the Port of Edmonds Marina and will include the reconstruction and repair of a deteriorating section of seawall; reconstruction and renovation of a portion of the waterfront boardwalk (North Portwalk); and construction of two new pedestrian plazas including new restrooms.

#### Project Details

##### Project Information

Use (s) - proposed

Recreational use

Use - existing

Recreational use

Zoning - existing

CW

RECEIVED

April 26, 2023

CITY OF EDMONDS  
PLANNING & DEVELOPMENT  
JURISDICTION



**Project Name:** North Portwalk and Seawall Reconstruction  
**Application ID:** 1292270

### Supplemental Name: Land Use Application

If this is a new parcel or lot that does not yet have an address or a County tax account number, please describe the property and its location (otherwise, you may skip this question):

**Please describe the project and/or proposed use(s) you are seeking approval for with this application (you can upload a more detailed file/letter later in the application, as necessary):**

The project is located at the Port of Edmonds Marina and will include the reconstruction and repair of a deteriorating section of seawall; reconstruction and renovation of a portion of the waterfront boardwalk (North Portwalk); and construction of two new pedestrian plazas including new restrooms. In addition to a Shoreline Conditional Use Permit, we are also applying for Design Review concurrently. See Technical Memorandum for more detail.

Check the boxes indicating all of the related approvals you are seeking for this project (including this application). NOTE THAT A SEPARATE APPLICATION IS REQUIRED FOR EACH APPROVAL.

Shoreline Permit

**RECEIVED**

April 26, 2023

CITY OF EDMONDS  
PLANNING & DEVELOPMENT  
Jurisdiction



**Project Name:** North Portwalk and Seawall Reconstruction  
**Application ID:** 1292270

**Supplemental Name: Applicant Certification - Planning**

The applicant, and his/her/its heirs, and assigns, in consideration on the processing of the application agrees to release, indemnify, defend and hold the City of Edmonds harmless from any and all damages, including reasonable attorney's fees, arising from any action or infraction based in whole or part upon false, misleading, inaccurate or incomplete information furnished by the applicant, his/her/its agents or employees. The property affected by the application is in the exclusive ownership of the applicant or that the application has been submitted with the consent of all owners of the affected property.

I certify, under the penalty of perjury under the laws of the State of Washington, that the information and exhibits herewith submitted are true and correct to the best of my knowledge and that I am authorized to file this application on behalf of the owner of the subject property.

I do so certify.

April 26, 2023

**Technical Memorandum**CITY OF EDMONDS  
PLANNING & DEVELOPMENT  
DEPARTMENT

**TO:** David Levitan, City of Edmonds  
**CC:** Bob McChesney and Brittany Williams, Port of Edmonds  
**FROM:** Steven Quarterman  
**DATE:** April 25, 2023  
**RE:** Shoreline Master Program Consistency Evaluation  
North Portwalk and Seawall Reconstruction  
Port of Edmonds  
Edmonds, Washington  
Project No. 0173038.010.017

**Introduction**

The Port of Edmonds (Port) is proposing to reconstruct the approximately 900-foot section of waterfront boardwalk that starts near the Port of Edmonds Administration Building and extends north along the edge of the waterfront to Olympic Beach (project; Site). Reconstruction of the approximately 13-foot-wide boardwalk is necessary due to significant deterioration and to provide upgraded public access and amenities to the waterfront.

In-water and upland areas of the Site within 200 feet (ft) of the Port of Edmonds Marina (Puget Sound) are within the jurisdiction of the City of Edmonds's (City's) Shoreline Master Program (SMP; the Edmonds Community Development Code [ECDC], Chapter 24). The Site's SMP environmental designations are **Urban Mixed Use II** and **Aquatic II**, in which the seawall and adjacent upland is located in the Urban Mixed Use II designation and the overwater portion of the boardwalk is in the Aquatic II shoreline environment. As a waterfront boardwalk, the proposed project is a reconstruction of an existing water-dependent recreational development.

Landau Associates, Inc. (Landau) has prepared this technical memorandum to assist the Port with demonstrating project consistency with the regulations presented in the City's SMP. Information presented in the project plans, Structural Assessment and Feasibility Study, Biological Evaluation, State Environmental Policy Act (SEPA) checklist, Geotechnical Report, and Joint Aquatic Resources Permit Application (JARPA) prepared for the project provide supplemental information to this technical memorandum and collectively provide the minimum application requirements specified in ECDC 24.80.070. The regulations applicable to the project include those provided in the SMP related to Archaeological and Historic Resources (ECDC 24.40.010), Critical Areas (ECDC 24.40.020), Public Access (24.40.040), Bulk and Dimensional Standards (ECDC 24.40.090), General Shoreline Modification Regulations (24.50.010[B]), Shoreline Stabilization (ECDC 24.50.020), Recreational Development (ECDC 24.60.060), and Shoreline Substantial Development Permit Criteria (ECDC 24.80.040).

## Project Description

The Port proposes to reconstruct and renovate an approximately 900-foot-long section of deteriorated waterfront boardwalk (i.e., North Portwalk) at the Port of Edmonds Marina and repair a segment of seawall that extends between the Port of Edmonds Administration Building and Olympic Beach. Repair and renovation of the approximately 13-foot-wide boardwalk and underlying seawall are necessary due to significant deterioration; the boardwalk was constructed in the 1960s. The renovated boardwalk will provide upgraded public access to the water/shoreline and enhance amenities along the waterfront. Two plazas (i.e., Upper Plaza and Central Plaza) will also be added adjacent to the boardwalk and will provide public gathering spaces and restroom access. The Upper Plaza will be added in a segment of existing esplanade between the boardwalk and Arnie's Restaurant, and the Central Plaza will be added in an area currently occupied by a parking lot and the Port of Edmonds Administration Building (to be demolished).

The existing boardwalk is a treated-wood structure, supported by piling, that projects over the water from an asphalt walkway along the shoreline. The deck consists of continuous, parallel, treated-wood planks. The boardwalk extending north of the marina N dock is supported along the east (upland) side by creosote-treated timber piles, spaced 8 ft apart, and along the west (waterward) side by pairs of steel piles, one vertical and one battered, spaced 16 ft apart. Tiebacks embedded behind the marina's seawall terminate at the timber seawall. The boardwalk south of N dock is supported along the east (upland) side by a concrete bulkhead and along the west (waterward) side by timber piles.

North of N dock, a two-tiered seawall forms the eastern boundary of the marina basin, where the boardwalk abuts the upland pavement. The lower tier is a (subtidal) concrete bulkhead that forms the toe of the marina basin's east side. Behind the concrete bulkhead is an earthen slope with a rock-armored surface. The upper tier is a vertical timber bulkhead. The bulkhead and the timber piles along the landward edge of the boardwalk retain the shoreline above the armored slope.

The steel piles that support the west side of the boardwalk will be repaired in-place with pipe sleeves. The timber piles that support the east side of the boardwalk (north and south of N dock) and the timber bulkhead will be replaced. The upper (timber) section of seawall will be replaced with a steel sheet pile wall, whereas the lower (concrete) section of seawall and the filled slope between the sections will remain unchanged along with the existing concrete bulkhead south of N dock. The bulkhead timber piles will be cut at grade, and the new sheet pile wall will be installed landward. The existing piles cannot be completely removed because they are connected below grade to an original lower timber bulkhead that is buried behind the current concrete bulkhead.

The timber boardwalk will be replaced along the same alignment but elevated 6 inches to create better pedestrian separation from the adjacent drive/fire lane and to improve pedestrian and boater accessibility. The new walkway will have steel framing and a deck of concrete panels inset with clear

glass blocks. The replacement structure will have new aluminum railings and way-finding signage. The marina's existing electrical utility panels and dock-cart storage will be relocated from the over-water side of the new walk to the opposite side, over land. Marina gates to the gangways will be replaced in the same locations but aligned with the new walkway railings. The five existing boardwalk "viewing" bump-outs will be consolidated in a single area to provide enhanced public access, an enhanced gathering space, and better views of Puget Sound.

The asphalt pavement abutting the boardwalk will be replaced with concrete on the same level as the elevated walkway, and the adjacent parking lot will be resurfaced.

## Permitted Use

Project activities that occur in SMP jurisdiction include boardwalk and seawall reconstruction with additional public access amenities.

The existing and proposed reconstructed/renovated boardwalk and associated Portwalk support recreational use in addition to providing public access to the marina (Puget Sound) and adjacent areas. In accordance with ECDC 24.40.080, recreational development in the Aquatic II and Urban Mixed Use II shoreline environments are permitted as a shoreline substantial development.

In accordance with ECDC 24.50.020.F(2)(b), bulkheads or revetments are prohibited in the Aquatic II shoreline environment, except for an approved water-dependent development subject to policies and regulations of the SMP, and are permitted subject to the policies and regulations of the SMP. The City has indicated the project is subject to approval as a shoreline substantial development.

## Shoreline Regulations

The following regulations (**in bold**) were copied from the SMP, which identifies applicable shoreline regulations.

### Archaeological and Historic Resources (ECDC 24.40.010)

The discussion below includes evaluation of the project's consistency with applicable regulations related to archaeological and historic resources for projects in jurisdiction of the SMP.

- 1) **Where practicable, consistent with constitutional and statutory limitations, public or private developments shall be prevented from destroying or destructively altering potential or recognizable sites having historic, cultural, scientific, or educational value as identified by appropriate authorities.**

The Department of Archaeology and Historic Preservation's (DAHP's) Washington Information System for Architectural and Archaeological Records Data does not list any recorded cemeteries, publicly available Traditional Cultural Properties, or precontact archaeological sites within or adjacent to the project location, and no adverse impacts to sites having

historic, cultural, scientific, or educational value are anticipated. An Inadvertent Discovery Plan (IDP) will be provided to the construction contractor. The IDP would address procedures in case of an unanticipated discovery: notification procedures (including for the State Historical Preservation Officer [SHPO] and affected tribes if archaeological, historic, or culturally significant items are discovered, and for the Snohomish County Medical Examiner if human remains are found), the authority to temporarily stop construction, and procedures for evaluating and recovering intact materials.

- 2) The city may require that a site be redesigned or that development be postponed for a definite or indefinite period if this is reasonably necessary to protect a historic site or items of historic, archeological, or cultural significance.

Refer to response to item 1 above.

- 3) **Upon receipt of application for a shoreline permit or request for a statement of exemption for development on properties with[in] 500 feet of a site known to contain an historic, cultural or archaeological resource(s), the city shall require a cultural resource site assessment; provided, that this requirement may be waived if the administrator determines that the proposed development activities do not include any ground disturbing activities and will not impact a known historic cultural or archaeological site. The site assessment shall be conducted by a professional archaeologist or historic preservation professional, as applicable, to determine the presence of significant historic or archaeological resources. The fee for the services of the professional archaeologist or historic preservation professional shall be paid by the landowner or responsible party.**

A cultural resources overview, which includes a summary of the precontact and historical land use of the project Site and the cultural resources that may be encountered, is provided with this application. In addition, the Port of Edmonds Administration Building will be inventoried for potential listing on state and/or national registers, and results of consultation with DAHP will be provided when available.

- 4) **Whenever historic, cultural, or archaeological sites or artifacts are discovered in the process of development on shorelines, work on that portion of the development site shall be stopped immediately, the site secured, and the find reported as soon as possible to the administrator. Upon notification of such find, the property owner shall notify the Washington State Department of Archaeology and Historic Preservation and appropriate Native American Tribes. In such cases, the developer shall allow site inspection and evaluation by a professional archaeologist and tribal representative to ensure that all possible valuable archaeological data are properly salvaged. Work should not resume until approval is obtained from the shoreline administrator.**

An IDP will be provided to the construction contractor. The IDP would address procedures in case of an unanticipated discovery, notification procedures (including for the SHPO and affected tribes if archaeological, historic, or culturally significant items are discovered, and for the Snohomish County Medical Examiner if human remains are found), the authority to temporarily stop construction, and procedures for evaluating and recovering intact materials.



**Critical Areas (ECDC 24.40.020)**

The discussion below includes evaluation of the project's consistency with applicable regulations related to critical areas for projects in jurisdiction of the SMP.

**Geologically Hazardous Areas:**

- 1) **New development or the creation of lots should not be allowed that would cause foreseeable risk from geological conditions to people or improvements during the life of the development.**

The project design is supported by geotechnical engineering evaluation and recommendations that minimize risk caused by existing geological conditions.

- 2) **New development should not be allowed that would require structural shoreline stabilization over the normal, useful life of the development. Exception may be made for instances where stabilization is necessary to protect allowed uses where no alternative locations are available, and no net loss of ecological functions will result. The stabilization measures shall conform to ECDC 24.50.020, Shoreline stabilization.**

While the proposed bulkhead reconstruction is considered new development, it is necessary to maintain and support the reconstruction of the existing boardwalk. The proposed project will not result in a net loss of ecological functions (refer to item 5 under Public Access Goal 2 above), and no feasible alternative locations are available because the project is a component of the Port's Public Access Plan for the waterfront boardwalk, which also includes planned improvements to the Central Portwalk and South Portwalk that extend from the North Portwalk and collectively run the length of the Port of Edmonds Marina. Evaluation of the regulations in ECDC 24.50.020, Shoreline Stabilization, is provided below.

- 3) **Where no alternatives, including relocation or reconstruction of existing structures, are found to be feasible and less expensive than the proposed stabilization measure, stabilization structures or measures to protect existing primary residential structures may be all in conformance with ECDC 24.50.020 requirements and then only if no net loss of ecological functions will result.**

Not applicable; the proposed project does not involve existing primary residential structures.

**Critical Saltwater Habitats:**

- 1) **Development shall not intrude into or over critical saltwater habitats except when all of the conditions below are met:**
  - a. **The public's need for such an action or structure is clearly demonstrated and the proposal is consistent with protection of the public trust, as embodied in Revised Code of Washington (RCW) 90.58.020.**

Reconstruction and renovation of the approximately 13-foot-wide boardwalk and underlying seawall are necessary due to significant deterioration. The renovated boardwalk will provide upgraded public access to the water/shoreline and enhance amenities along the waterfront.

RCW 90.58.020 specifies uses in the following order of preference:

- (1) Recognize and protect the statewide interest over local interest;
- (2) Preserve the natural character of the shoreline;
- (3) Result in long term over short term benefit;
- (4) Protect the resources and ecology of the shoreline;
- (5) Increase public access to publicly owned areas of the shorelines;
- (6) Increase recreational opportunities for the public in the shoreline;
- (7) Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary

The project is consistent with RCW 90.58.020, such that:

- The project is designed to protect statewide interest in compliance with the City SMP, which was developed and adopted in accordance with RCW 90.58 and Washington Administrative Code (WAC) 173-26.
- The natural character of the shoreline is impacted by existing development on/adjacent to the shoreline, and Ports are provided a priority for alterations to the shoreline in facilitating public access.
- The project will protect the resources and ecology of the shoreline to the extent feasible (refer to item 5 under Public Access Goal 2 above), and
- The completed project will improve public access to and recreational opportunities at the shoreline.

- b. Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible or would result in unreasonable and disproportionate cost to accomplish the same general purpose.**

The project is reconstruction/renovation of an existing shoreline Portwalk; no alternative alignment is feasible.

- c. The project, including any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat.**

Refer to item 5 under Public Access Goal 2 above, which also applies to critical saltwater habitat.

- d. The project is consistent with the state's interest in resource protection and species recovery.**

The project includes best management practices (BMPs) and conservation measures for resource and species protection, including:

- Temporary Erosion and Sediment Control (TESC) and Spill Prevention, Containment, and Control (SPCC) plans will be developed and implemented throughout construction.

- Work below high tide line (HTL)/mean higher-high water (MHHW) will occur during regulatory-approved in-water work windows.
- A debris boom will be installed around the boardwalk and will be maintained throughout construction.
- Wood products shall comply with the standards established by the Western Wood Preserves Institute in "Best Management Practices for use of Treated Wood in Aquatic Environments."
- Barges used in support of construction will be prohibited from grounding.
- Piles and other construction debris will be disposed of offsite at an approved upland facility.
- Work below the HTL/MHHW will result in a balance of cut and fill volumes.
- Installation of the sheetpile bulkhead will occur landward of the existing timber bulkhead, thereby avoiding in-water construction for this component of the project.

- 3) **Where inventory of critical saltwater habitat has not been completed, all overwater and nearshore developments in marine and estuarine waters shall be required to conduct a habitat assessment of the site and adjacent beach sections to assess the presence of critical saltwater habitats and functions.**

Assessment of habitat conditions in the project area is included in the project Biological Evaluation (Refer to Section 6.0, Environmental Conditions of the Biological Evaluation).

## **Public Access (24.40.040)**

The discussion below includes evaluation of the project's consistency with applicable regulations related to public access for projects in jurisdiction of the SMP.

- 1) **Except as provided in subsections (B)(2) through (4) of this section, shoreline substantial developments or conditional uses shall provide public access where any of the following conditions are present:**

Criteria (a) through (f) are omitted because the project provides improved public access.

- 2) **An applicant need not provide public access where one or more [of] the following conditions apply:**

Criteria (a) through (f) are omitted as the project provides improved public access.

- 3) **In order to meet any of the conditions in subsections (B)(2)(a) through (e) of this section, the applicant must first demonstrate, and the city determine in its findings that all reasonable alternatives have been exhausted, including but not limited to:**

Criteria (a) through (c) are omitted because the project provides improved public access.

- 4) **Exceptions.** The following uses, developments, modifications, and activities are exempt from providing public pedestrian access under this section:

Criteria (a) and (b) are omitted because the project provides improved public access.

- 5) **Shoreline development by public entities, such as local governments, port districts, state agencies, and public utility districts, should provide public access measures as part of each development project, unless such access is shown to be incompatible due to reasons of safety, security, or impact to the shoreline.**

The proposed project provides public access improvements to the shoreline.

- 6) **Public Use Facilities.**

- a. **In addition to the public pedestrian areas required by subsection (B)(1) of this section, the applicant may propose and/or the city may require that benches, picnic tables, a public access pier or boardwalk, or other public use facilities be constructed on the subject property.**

The proposed project includes reconstructed boardwalk and additional amenities to improve public access to the shoreline.

- b. **If public use facilities are required or proposed, the city will determine the size, location, and other regulations (design considerations) on a case-by-case basis.**

Condition noted.

- 7) **Timing.** The public pedestrian access required by this section must be completed and available at the time of occupancy or completion of work; provided, however, that the city may on a case-by-case basis defer the physical availability of public access in the following cases:

Criteria (a) and (b) are omitted because the project provides improved public access that will be accessible upon completion of construction.

- 8) **Easements Recorded.** In each case where public pedestrian access is required, whether it is physically available at the end of development or deferred until a later date, all owners of the subject property must record a public pedestrian easement, in a form approved by the city attorney, establishing the right of the public to access, use and traverse that portion of the subject property.

Not applicable.

- 9) **Signs.** The city shall require the posting of signs, obtained from the city at the city's cost, designating public pedestrian access. The planning manager or his/her designee is authorized to establish reasonable rules and regulations governing the public's use of public pedestrian access and use areas under this chapter. Where appropriate, these rules and regulations shall be included within the document recorded under subsection (B)(8) of this section.

Not applicable.

- 10) Shoreline uses, modifications and activities shall be designed and operated to avoid blocking, reducing, or adversely interfering with the public's existing physical and visual access to the water and shorelines.**

The objective of the proposed project is to improve public access to the shoreline.

- 11) View Protection Regulations.**

- a. **Within the urban mixed use I, urban mixed use II and adjacent aquatic I and aquatic II shoreline designations no building or other major structure may be located within the following required view corridors:**

Criteria (i) and (ii) are omitted because no building or other major structures will be located in view corridors.

- 12) Public access provided by shoreline street ends, public utilities and rights-of-way shall not be diminished (RCW 35.79.035 and 36.87.130).**

The proposed project includes reconstructed boardwalk and additional amenities to improve public access to the shoreline.

- 13) Public access sites shall be connected directly to the nearest public street and shall include provisions for disabled and physically impaired persons, where feasible.**

The North Portwalk does not have direct connections to public streets but is indirectly connected to Dayton Avenue and Admiral Way via sidewalk and a public parking lot. The boardwalk will include curb ramps to facilitate access by disabled and physically impaired persons.

- 14) Public access easements and permit conditions shall be recorded on the deed of title and/or on the face of a plat or short plat as a condition running contemporaneous with the authorized land use, at a minimum. Said recording with the county auditor's office shall occur at the time of permit approval (RCW 58.17.110).**

Not applicable.

- 15) The minimum width of public access easements shall be 25 feet, unless the administrator determines that undue hardship would result. In such cases, easement width may be reduced only to the minimum extent necessary, as determined by the administrator, to relieve the hardship. Provided the larger easement is not needed for emergency access.**

Not applicable.

- 16) Future actions by the applicant successors in interest or other parties shall not diminish the usefulness or value of the public access provided.**

Condition noted.

- 17) Visual access shall be maintained, enhanced, and preserved on shoreline street ends, public utilities and rights-of-way and within public view corridors as designated by the city.

The project consists of reconstruction/renovation of an existing Portwalk, and visual access may be improved as a result of demolition of the Port Administration Building in support of development of the Central Plaza.

### **Bulk and Dimensional Standards (ECDC 24.40.090)**

The bulk and dimensional standards for overwater structures indicate no shore setback requirements in the Urban Mixed Use II or Aquatic II shoreline environment designations. The maximum height above deck of overwater structure is three ft in both the Urban Mixed Use II and Aquatic II shoreline environment designations, and the boardwalk will be approximately 4 ft above MHHW. The proposed boardwalk will be raised approximately 6 inches above its current elevation.

### **General Shoreline Modification Regulations (24.50.010[B])**

The discussion below includes evaluation of the project's consistency with the applicable general shoreline modification regulations provided for projects in jurisdiction of the SMP.

- 1) Shoreline modification activities that do not support a permitted shoreline use are considered "speculative" and are prohibited by this master program, unless it can be demonstrated to the satisfaction of the shoreline administrator that such activities are in the public interest and necessary and for the maintenance of shoreline environmental resource values.

Not applicable, the proposed project is permitted shoreline use.

- 2) Structural shoreline modification measures shall be permitted only if nonstructural measures are unable to achieve the same purpose. Nonstructural measures considered shall include alternative site designs, increased setbacks, relocation, and bioengineering.

No feasible alternative locations are available because the project is reconstruction/renovation of an existing Portwalk and is a component of the Port's Public Access Plan for the waterfront boardwalk, which also includes planned improvements to the Central Portwalk and South Portwalk that extend from the North Portwalk and collectively run the length of the Port of Edmonds Marina. The property is developed with existing recreational/commercial land uses, and bioengineering design options are not feasible due to the extent of adjacent development to the shoreline.

- 3) Shoreline modification activities, with the exception of restoration or enhancement efforts, are prohibited in wetlands, and undeveloped spits, hooks, bars, barrier beaches, or similar accretion terminals or accretion shore forms.

Not applicable; no wetlands and no undeveloped spits, hooks, bars, barrier beaches, or similar accretion terminals or accretion shore forms occur in the project area.

- 4) **Proponents of shoreline modification projects shall obtain all applicable federal and state permits and shall meet all permit requirements.**

The Port will be acquiring permits from the US Army Corps of Engineers (USACE) and Washington Department of Fish and Wildlife (WDFW).

- 5) **Best Available Science. All reports prepared in support of a shoreline modification shall use scientifically valid methods and studies in the analysis of shoreline environment and field reconnaissance and reference the source of science used.**

The geotechnical report and Biological Evaluation were prepared by respective qualified critical area consultants applying applicable best available science and guidance.

### **Shoreline Stabilization (ECDC 24.50.020)**

The discussion below includes evaluation of the project's consistency with the applicable shoreline stabilization regulations provided for projects in jurisdiction of the SMP.

- 1) **For the purposes of this section, standards on shoreline stabilization, "replacement" means the construction of a new structure to perform a shoreline stabilization function of an existing structure which can no longer adequately serve its purpose. Addition to or increases in size of existing shoreline stabilization measures shall be considered new structures.**

The proposed sheetpile bulkhead to be installed behind the existing upper timber bulkhead is considered "replacement" in accordance with the above condition.

- 2) **Structural stabilization methods shall be permitted when necessary for reconfiguration of the shoreline for mitigation or enhancement purposes.**

Not applicable; the proposed project includes sheetpile bulkhead to replace a section of deteriorating timber bulkhead.

- 3) **New development that would require shoreline stabilization which causes significant negative impacts to adjacent or down-current properties and shoreline areas should not be allowed.**

The proposed project is reconstruction/renovation of an existing Portwalk and associated bulkhead. Renovations to the bulkhead rely on the underlying bulkhead for support; however, negative impacts to shoreline areas are avoided (refer to item 5 under Public Access Goal 2 above).

- 4) **New development on steep slopes or bluffs shall be set back sufficiently to ensure that shoreline stabilization is unlikely to be necessary during the normal, useful life of the structure, as demonstrated by a geotechnical analysis.**

Not applicable; no steep slopes or bluffs occur in the project area.



- 5) New structural stabilization measures shall not be allowed except when necessity is demonstrated in the following manner:

Criteria (a) through (d) are omitted because the proposed shoreline stabilization is a replacement of an existing segment of deteriorating timber bulkhead as opposed to “new structural stabilization.”

- 6) Geotechnical reports pursuant to this section that address the need to prevent potential damage to a primary structure shall address the necessity for shoreline stabilization by estimating time frames and rates of erosion and report on the urgency associated with the specific situation. As a general matter, hard armoring solutions should not be authorized except when a report confirms that there is a significant possibility that such a structure will be damaged within three years as a result of shoreline erosion in the absence of such hard armoring measures, or where waiting until the need is that immediate would foreclose the opportunity to use measures that avoid impacts on ecological functions. Thus, where the geotechnical report confirms a need to prevent potential damage to a primary structure, but the need is not as immediate as the three years, that report may still be used to justify more immediate authorization to protect against erosion using soft measures.

Not applicable, because the shoreline stabilization is replacement of an existing segment of deteriorating timber bulkhead that supports an existing boardwalk (overwater and upland). Need for repair of the bulkhead was determined through a Structural Assessment and Feasibility Study (CG Engineering 2020).

#### Shoreline Stabilization Siting and Design Regulations.

- 1) When any structural shoreline stabilization measures are demonstrated to be necessary, pursuant to above provisions.
- a. Limit the size of stabilization measures to the minimum necessary. Use measures designed to assure no net loss of shoreline ecological functions. Soft approaches shall be used unless demonstrated not to be sufficient to protect primary structures, dwellings, and businesses.
  - b. Ensure that publicly financed or subsidized shoreline erosion control measures do not restrict appropriate public access to the shoreline except where such access is determined to be infeasible because of incompatible uses, safety, security, or harm to ecological functions. Where feasible, incorporate ecological restoration and public access improvements into the project.

Not applicable, the proposed project will improve/enhance public access to the shoreline.



- c. **Mitigate new erosion control measures, including replacement structures, on feeder bluffs or other actions that affect beach sediment-producing areas to avoid and, if that is not possible, to minimize adverse impacts to sediment conveyance systems.**

Not applicable, the project includes replacement of an existing bulkhead that limits sediment conveyance from the shoreline. The existing conditions of onsite sediment conveyance will be maintained as part of the completed project.

- 2) **Bulkheads and other shoreline protective structures may not be constructed within a marsh, bog, or swamp or between a marsh, bog or swamp and the primary body of water (Puget Sound or Lake Ballinger).**

Not applicable, no marsh, bog, or swamp occurs in the project area.

- 3) **Bulkheads and other shoreline protective structures may not be placed waterward of the ordinary high water mark, unless:**

Not applicable, criteria (a) and (b) are omitted as the proposed sheetpile bulkhead will be installed landward of the existing timber bulkhead.

- 4) **Bulkheads and other shoreline protective structures shall be located landward of the ordinary high water mark and generally parallel to the natural shoreline unless geotechnical evaluation demonstrates the necessity for alternative design. In addition:**

- a. **Where no other bulkheads are adjacent, the construction of a bulkhead shall be as close to the eroding bank as possible and in no case shall it be more than six feet from the toe of the bank.**

Not applicable.

- b. **A bulkhead for a permitted landfill shall be located at the toe of the fill.**

Not applicable.

- c. **Where permitted, a bulkhead must tie in flush with existing bulkheads on adjoining properties, except where the adjoining bulkheads extend waterward of the ordinary high water mark.**

Not applicable.

- 5) **An existing bulkhead or other shoreline stabilization structure may be replaced with a similar structure if there is a demonstrated need to protect principal uses or structures from erosion caused by currents, tidal action, or waves.**

Need for replacement of the bulkhead was determined through a Structural Assessment and Feasibility Study (CG Engineering 2020).

- a. **The replacement structure should be designed, located, sized, and constructed to assure no net loss of ecological functions.**

The proposed project will not result in a net loss of ecological functions (refer to item 5 under Public Access Goal 2 above).

- b. Replacement walls or bulkheads shall not encroach waterward of the ordinary high water mark or existing structure unless the residential structure to which it is appurtenant was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement structure may abut the existing shoreline stabilization structure.

Not applicable.

- c. Where a net loss of ecological functions associated with critical saltwater habitats would occur by leaving the existing structure, remove it as part of the replacement measure.

Not applicable. The project will not result in a net loss of ecological functions (refer to item 5 under Public Access Goal 2 above), and a section of the existing upper timber bulkhead will be removed.

- d. Soft shoreline stabilization measures that provide restoration of shoreline ecological functions may be permitted waterward of the ordinary high water mark.

Not applicable. No soft shoreline stabilization measures are proposed.

- e. For purposes of this section standards on shoreline stabilization measures, "replacement" means the construction of a new structure to perform a shoreline stabilization function of an existing structure which can no longer adequately serve its purpose. Additions to or increases in size of existing shoreline stabilization measures shall be considered new structures.

The proposed sheetpile bulkhead to be installed behind the existing upper timber bulkhead is considered "replacement" in accordance with the above condition.

**6) Materials used in bulkhead construction shall meet the following standards:**

- a. Bulkheads shall utilize stable, nonerodible materials such as concrete, wood, and rock that are consistent with the preservation and protection of the ecological habitat.

The project includes installation of a steel sheetpile bulkhead to replace a deteriorating section of timber bulkhead. The existing ecological habitat conditions relative to the bulkhead will be maintained as part of the completed project. Additional project components (i.e., glass blocks in boardwalk decking) will provide ecological improvements adjacent to the bulkhead (refer to item 5 under Public Access Goal 2 above).

- b. Shore materials shall not be used for fill behind bulkheads, except clean dredge spoil from a permitted off-site dredge and fill operation.

Not applicable.

- c. The extent and nature of any backfill proposed landward of a bulkhead or other shoreline protective structure shall comply with adopted city standards.

Not applicable.

**7) If hard stabilization methods are employed the following design criteria shall be met:**

- a. **The size and quantity of the material shall be limited to the minimum necessary to withstand the estimated energy intensity of the hydraulic system;**

The project includes installation of a steel sheetpile bulkhead to replace a deteriorating section of timber bulkhead. Deterioration of the existing structure is due to age, and the replacement is designed to provide similar or better shoreline protection.

- b. **Filter cloth must be used to aid drainage and help prevent settling;**

Not applicable.

- c. **The toe reinforcement or protection must be adequate to prevent a collapse of the system wave action; and**

Not applicable; the existing shoreline consists of an upper timber bulkhead and lower concrete bulkhead. The lower concrete bulkhead (toe protection) will not be impacted by the project.

- d. **Fish habitat components shall be considered in the design subject to hydraulic project approval by the Washington Department of Fish and Wildlife.**

Conditions of the Hydraulic Permit Approval (HPA) to be issued by WDFW will be incorporated into project design as needed.

**8) When hard stabilization measures are required at a public access site, provision for safe pedestrian access to the water shall be incorporated into bulkhead design.**

The proposed sheet pile bulkhead will support reconstruction/renovation of the overlying boardwalk, which will improve public access to the shoreline.

**9) Stairs or other permitted structures may be built into a hard stabilization structure but shall not extend waterward of it.**

The renovated boardwalk will be located on top of the proposed steel sheet pile bulkhead and will extend over the water surface.

**E. Geotechnical Reports. Geotechnical reports required pursuant to this section shall address the need for shoreline stabilization and shall include the following:**

**1) A scaled site plan showing:**

- a. **The location of existing and proposed shore stabilization, structures, fill, and vegetation, with dimensions indicating distances to the ordinary high water mark.**
- b. **Existing site topography with two-foot contours.**

Refer to project Geotechnical Report for Site plan showing requirements (a) and (b) above.

**2) A description of the processes affecting the site, and surrounding areas that influence or could be influenced by the site, including areas in which lake or marine geomorphic processes affect the site, including, but not limited to:**

**a. Soil erosion, deposition, or accretion;**

The marine geomorphic processes of the Site are impacted by the existing marina and bulkhead. Soil erosion and accretion do not occur along the shoreline of the Site, which is protected by existing bulkhead. Similarly, no significant deposition of sediments occur in the marina.

**b. Evidence of past or potential erosion due to tidal action and/or waves;**

Not applicable; the potential for erosion from tidal action and/or waves are interrupted by the marina.

**c. Littoral drift; and**

The SMP Shoreline Inventory and Characterization (Sea-Run Consulting 2007) identifies the project vicinity as an area of No Appreciable Net Shore Drift. Furthermore, longshore currents in the project area are interrupted by the surrounding marina.

**d. An estimate of shoreline erosion rates.**

Not applicable; shoreline erosion in the project area is not significant due to the existing bulkhead and the effect on longshore currents from the surrounding marina.

**3) A description and analysis of the urgency and risk associated with the specific site characteristics.**

Need for replacement of the bulkhead was determined through a Structural Assessment and Feasibility Study, with recommendation for replacement in a 5-to-10-year timeframe (CG Engineering 2020).

## **Recreational Development (ECDC 24.60.060)**

The discussion below includes evaluation of the project's consistency with the applicable recreational development regulations provided for projects in jurisdiction of the SMP. Water-oriented recreational development is permitted in the Urban Mixed Use II and Aquatic II shoreline environment subject to the policies and regulations of the SMP.

**1) The following recreational uses and developments are prohibited:**

Criteria (a) and (d) are omitted because the proposed project will not provide prohibited uses.

**2) Recreational facilities shall make adequate provisions for:**

**a. Vehicular and pedestrian access, both on site and off site;**

The project includes improvements to the adjacent parking lot, development of plazas in the Portwalk, and curb ramps on the boardwalk to improve and enhance vehicular

and pedestrian access. No offsite improvements are needed because the Site is served by existing roadways and sidewalks.

- b. Vehicular traffic, both inside and outside the facility;**  
The project includes improvements to the adjacent parking lot, and no offsite improvements are needed because the Site is served by existing roadways.
  - c. Vehicular parking;**  
A net gain of three parking stalls will be provided as part of the completed project. A total of 142 parking stalls will be provided.
  - d. Water supply, sewage disposal, and garbage collection;**  
The project includes water utilities for the adjacent marina and onsite restrooms. The restroom facilities will be connected to the City wastewater collection system. Onsite garbage facilities will be relocated as part of the project.
  - e. The prevention of overflows and trespasses onto adjacent properties;**  
Not applicable. The project is a component of public access to the waterfront and provides connection to adjacent City parks (i.e., Olympic Beach and Marina Beach Park).
  - f. Screening, buffer strips, fences, and signs to prevent park overflow and to protect the value and enjoyment of adjacent or nearby private or public properties;**  
Not applicable. The project is a component of public access to the waterfront and provides connection to adjacent City parks (i.e., Olympic Beach and Marina Beach Park).
  - g. Security; and**  
Pedestrian lighting will be provided on the landward side of the boardwalk and in the Central and Upper Plazas; security gates will be located at dock entrances.
  - h. Maintenance.**  
The Port will maintain the project as needed to ensure public safety and enjoyment of the facility.
- 3) Valuable shoreline resources and fragile or unique areas, such as wetlands and accretion shore forms, shall be used only for nonintensive recreation activities.**  
Not applicable.
- 4) Encourage recreational facilities to provide signage and enforce regulations that prohibit tree cutting and limit the taking of marine life, driftwood, and the like.**  
Condition noted, however, such signage would not be necessary due to characteristic of the Portwalk facility, in which limited tree cover is provided at the Site in parking lot/Portwalk

planters and that the boardwalk is located over the water surface and does not provide direct access to marine life.

- 5) **Signs associated with recreational facilities shall be kept to a minimum in number and size and shall be erected as informational or directional aids only.**

Signs associated with the project are limited to Dock designations on gangway security gates.

- 6) **Stairways and landings shall be located upland of existing bulkheads, banks, and the ordinary high water mark unless integral to a water-dependent use or overwater structure permitted by this master program.**

Landings associated with the marina gangways, which are integral to water-dependent use of the marina, will be incorporated into the boardwalk.

### **Shoreline Substantial Development Permit Criteria (ECDC 24.80.040)**

As specified in ECDC 24.80.040(B), in order for a substantial development permit to be approved, the decision maker must find that the proposal is consistent with the following criteria:

- 1) **All regulations of the city of Edmonds shoreline master program appropriate to the shoreline designation and the type of use or development proposed shall be met, except those bulk and dimensional standards that have been modified by an approval of a shoreline variance under ECDC 24.80.060;**

The evaluation in this technical memorandum demonstrates project consistency with the City SMP.

- 2) **All policies of the city of Edmonds shoreline master program appropriate to the shoreline designation and the type of use or development proposed shall be considered and substantial compliance demonstrated.**

ECDC 24.20.000 indicates that the goals and policies that form the foundation of the SMP are implemented through the regulations in ECDC 24.40 through 24.60. This technical memorandum demonstrates project consistency with the applicable regulations in ECDC 24.40 through 24.60, and therefore, consistency with the applicable policies of the SMP.

### **Conclusion**

The Port is proposing a project to reconstruct the approximately 900-foot-long, 13-foot-wide section of waterfront boardwalk that starts near the Port of Edmonds Administration Building and extends north along the edge of the waterfront to Olympic Beach. This project is required to comply with the requirements of the SMP. This technical memorandum demonstrates that the proposed project's purpose and design are consistent with the goals, objectives, and policies of the City's SMP for shoreline development. The discussion and analysis of project elements, with respect to the applicable ECDC, demonstrates that the proposed project's design and construction conform to the rules and conditions of Shoreline Substantial Development under the City's SMP and will result in no net loss of shoreline ecological functions.

## Use of This Technical Memorandum

This technical memorandum has been prepared for the exclusive use of the Port and City for specific application to the North Portwalk and Seawall Reconstruction Project. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of Landau. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Landau, shall be at the user's sole risk. Landau warrants that within the limitations of scope, schedule, and budget, these services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. Landau makes no other warranty, either express or implied. Re-assessment of permit/compliance needs may be needed based on changes to the project as described above.

This document has been prepared under the supervision and direction of the following key staff.

LANDAU ASSOCIATES, INC.



Steven Quarterman  
Senior Associate

SJQ/JAF/tac

[\\VEDMDATA01\PROJECTS\173\038.010\RI\SHORELINE\PEDM PORTWALK SMP\_TM\_FINAL\_04.25.2023.DOCX]

## References

CG Engineering. 2020. Structural Assessment & Feasibility Study, Port of Edmonds Waterfront Boardwalk. May 19.

Sea-Run Consulting, TetraTech, Inc., Reid Middleton, Inc., Pentec. 2007. Shoreline Master Program Update, Shoreline Inventory & Characterization, SMA Grant Agreement No. 60600108. November.



# Port of Edmonds Portwalk Project

## VICINITY MAP

Edmonds Bay Bldg

BNSF

Arnie's Restaurant

Jacobsen Marine

Edmonds Yacht Club

Port of Edmonds

Anthony's Restaurant

Railroad Ave

W Daytona St










Admiral Way

Shellabarger Creek

Edmonds Marsh

Edmonds Way

### Legend

- |                                                                                                     |                                                                                               |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
|  Project Area      |  Shoreline |
|  Vicinity Building |  Creek     |
|  Other Buildings   |  Wetland   |
|  Roads             |  Railroad  |
|  Parking           |                                                                                               |



Feet 0 150 300 600