



US Army Corps  
of Engineers  
Seattle District

# Public Notice of Application for Permit

US Army Corps of Engineers  
Regulatory Branch  
4735 E. Marginal Way S., Bldg  
1202  
Seattle, WA 98134-2388  
Telephone: (206) 348-3999  
ATTN: Danette L. Guy,  
Senior Project Manager

Public Notice Date: February 26, 2025  
Expiration Date: March 28, 2025

Reference No.: NWS-2025-170  
Name: Port of Port Angeles (Seawall  
Replacement)

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Interested parties are hereby notified that an application has been received for a Department of the Army permit in accordance with Section 10 of the Rivers and Harbors Act of 1899, for certain work described below and shown on the enclosed drawings dated April 27, 2023.

The Corps will also review the work in accordance with Section 404 of the Clean Water Act (CWA).

APPLICANT: Port of Port Angeles  
Attention: Jesse Waknitz  
P.O. Box 1350  
Port Angeles, Washington 98362  
Telephone: (360) 452-3959

LOCATION: In Port Angeles Harbor, at the Port of Port Angeles log yard, near Marine Drive, at Port Angeles, Clallam County, Washington

WORK: Install a 1.25-inch-thick fiberglass encasement waterward of the existing 335 linear foot sheetpile wall and construct a mechanically stabilized earth (MSE) wall.

PURPOSE: To maintain existing erosion control for the protection of upland operations.

ADDITIONAL INFORMATION: The existing Cofferdam Dock Facility is composed of a steel sheet pile wall running approximately 335 linear ft along the shoreline. This sheet pile wall is tied back to a second, parallel sheet pile wall located approximately 30 ft (ft) landward. These sheet pile walls are connected by tie rods attached to a double channel waler beam above the high tide line and backfill between these walls consists of loose dirt fill and wood debris. Work would include excavating up to 16,000 square feet of existing backfill material to a depth of 12 ft below ground surface. The removed material would be stockpiled onsite for future use or transported offsite to an approved upland disposal facility if it is unsuitable for reuse. Then after removing the waler beam and installing the fiberglass encasement using land based

excavators, the gap between the encasement and the existing sheet pile wall would be dewatered allowing divers to connect the structures using grout. After it is secured, the replacement water beams and end caps would be installed, with backfill material placed to an elevation of +9 ft mean lower low water and the MSE wall constructed. The MSE wall would be constructed using layers of compacted gravel with sheets of geogrid reinforcement, quarry spalls, crushed surface base coarse rock, ecology blocks, and a 1-foot-wide section of free draining rock to allow for stormwater infiltration and drainage.

Additional work includes installing a three-stage biofiltration facility to treat stormwater from the upland structures and raise the surface elevation and repave 14.4 acres of the facility to improve operational efficiency and stormwater conveyance.

Copies of this public notice which have been mailed or otherwise physically distributed feature project drawings in black and white. The electronic version features those drawings in color, which we think more accurately communicates the scope of project impacts. To access the electronic version of this public notice, go to the Seattle District's web page at <http://www.nws.usace.army.mil/> and under the heading Open Public Comment Periods select Regulatory Public Notices. Recently issued public notices are listed in chronological order of the date of issuance. Select and view the listing for this project.

The location of the high tide line shown on the project drawings have not yet been verified by the U.S. Army Corps of Engineers (Corps). If the Corps determines the boundaries of the wetland/waters are substantially inaccurate a new public notice may be published.

MITIGATION: No mitigation is proposed.

ENDANGERED SPECIES: The Endangered Species Act (ESA) requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the ESA on all actions that may affect a species listed (or proposed for listing) under the ESA as threatened or endangered or any designated critical habitat. The U.S. Department of Transportation Maritime Administration (MARAD), as the lead agency for ESA consultation, consulted with the NMFS and the USFWS as required under Section 7 of the ESA. They have determined that the project is not likely to adversely affect USFWS ESA proposed and/or listed species and their designated critical habitat and issued a Letter of Concurrence on January 22, 2024. They have also determined the project is not likely to jeopardize the continued existence of NMFS ESA proposed and/or listed species and their designated critical habitat. A Biological Opinion was issued on March 20, 2024.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The proposed action would impact EFH in the project area. The MARAD, as the lead agency for a determination regarding EFH, consulted with the National Marine Fisheries Services. They have determined that the project has the potential to adversely affect EFH species.

**CULTURAL RESOURCES:** The MARAD, as the lead agency for determining compliance with Section 106 of the National Historic Preservation Act and consulted with the State Historic Preservation Officer and Native American Nations as appropriate.

**PUBLIC HEARING:** Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

**EVALUATION:** The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. The Washington Department of Ecology has or will evaluate the proposed project in accordance with Section 401 of the Clean Water Act and for consistency with the Coastal Zone Management Act.

The U.S. Army Corps of Engineers is soliciting comments from the public; Native American Nations or tribal governments; Federal, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for the work. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

**COMMENT AND REVIEW PERIOD:** Conventional mail or e-mail comments on this public notice will be accepted and made part of the record and will be considered in determining whether authorizing the work would not be contrary to the public interest. In order to be accepted, e-mail comments must originate from the author's e-mail account and must include on the subject line of the e-mail message the permit applicant's name and reference number as shown below. All e-mail comments should be sent to [danette.l.guy@usace.army.mil](mailto:danette.l.guy@usace.army.mil). Either conventional mail or e-mail comments must include the permit applicant's name and reference number, as shown below, and the commenter's name, address, and phone number. All comments received will become part of the administrative record and are subject to public release under the Freedom of Information Act including any personally identifiable information such as names, phone numbers, and addresses. All comments whether conventional mail or e-

NWS-2025-170; Port Angeles, Port of

mail must reach this office, no later than the expiration date of this public notice to ensure consideration.

You may also now submit project specific comments to the Corps through the new Regulatory Request System (RRS) through this link: <https://rrs.usace.army.mil/rrs> ; Click Public Notices and filter to Washington State to see all current Seattle District Public Notices, including this notice. You may submit your comments directly through this portal.

Conventional mail comments should be sent to:  
U.S. Army Corps of Engineers, Regulatory Branch, Attention: Danette L. Guy,  
4735 E. Marginal Way S, Bldg 1202, Seattle, Washington, 98134-2388.

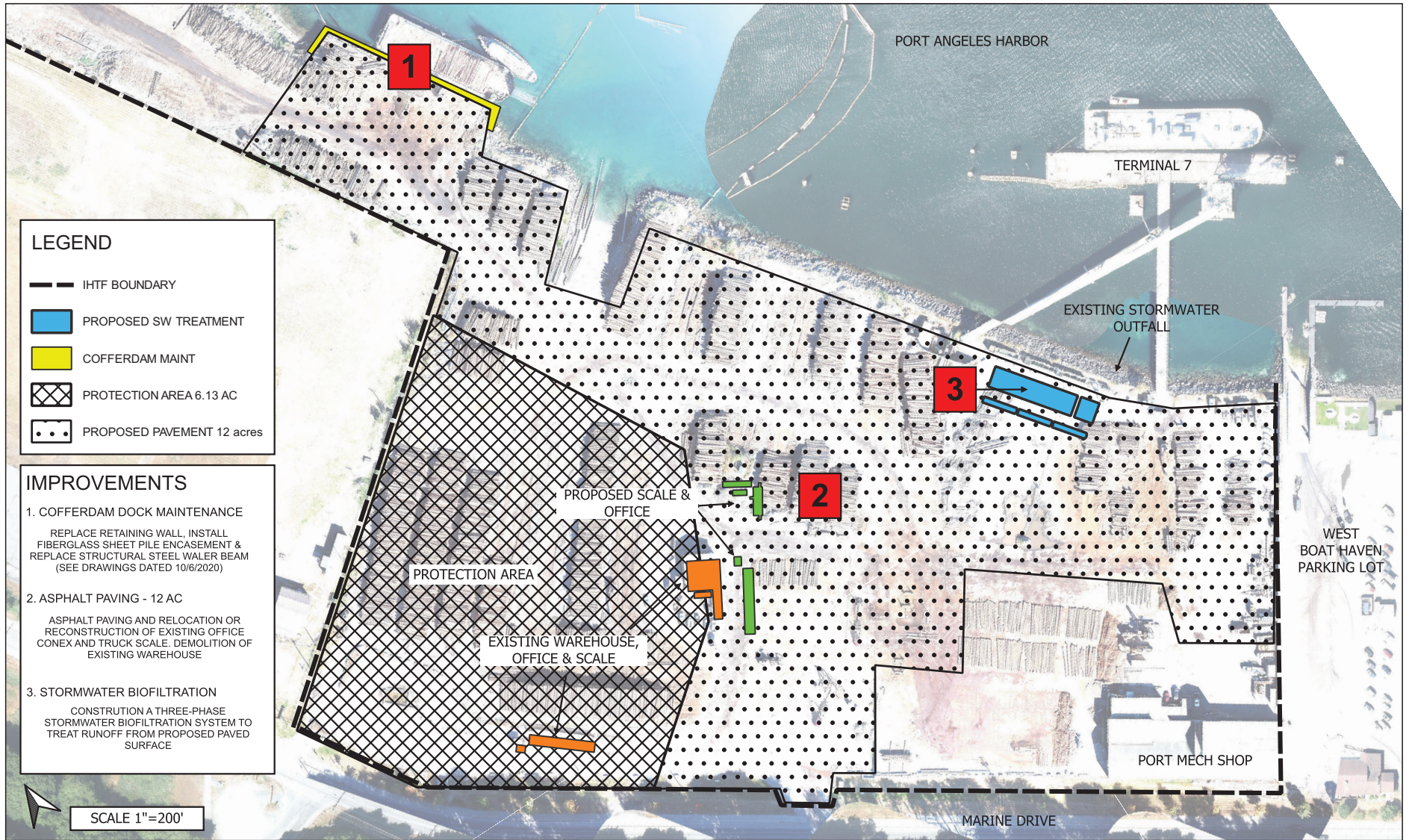
To ensure proper consideration of all comments, responders must include the following name and reference number in the text of their comments:

Port Angeles, Port of; NWS-2025-170.

Encl: Figures (19 OF PAGES)







**IN:** ADJACENT TO PORT ANGELES HARBOR

**AT:** PORT OF PORT ANGELES LOG YARD, 1301 MARINE DRIVE

**CITY:** PORT ANGELES **COUNTY:** CLALLAM

**STATE:** WASHINGTON

**APPLICATION BY:** PORT OF PORT ANGELES

**REFERENCE NO:**

**PURPOSE:** IMPROVE CARGO HANDLING INFRASTRUCTURE AT IHTF THAT INCLUDES MAINTENANCE TO COFFERDAM DOCK, ASPHALT PAVING OF 12-ACRES AND CONSTRUCTION OF STORMWATER TREATMENT SYSTEM

**SECTION:** NW 4

**LAT:** 48.130634 N

**TOWNSHIP:** 30 N

**LONG:** -123.460395 W

**RANGE:** 6 W

**DATUM:** MLLW = 0.0'

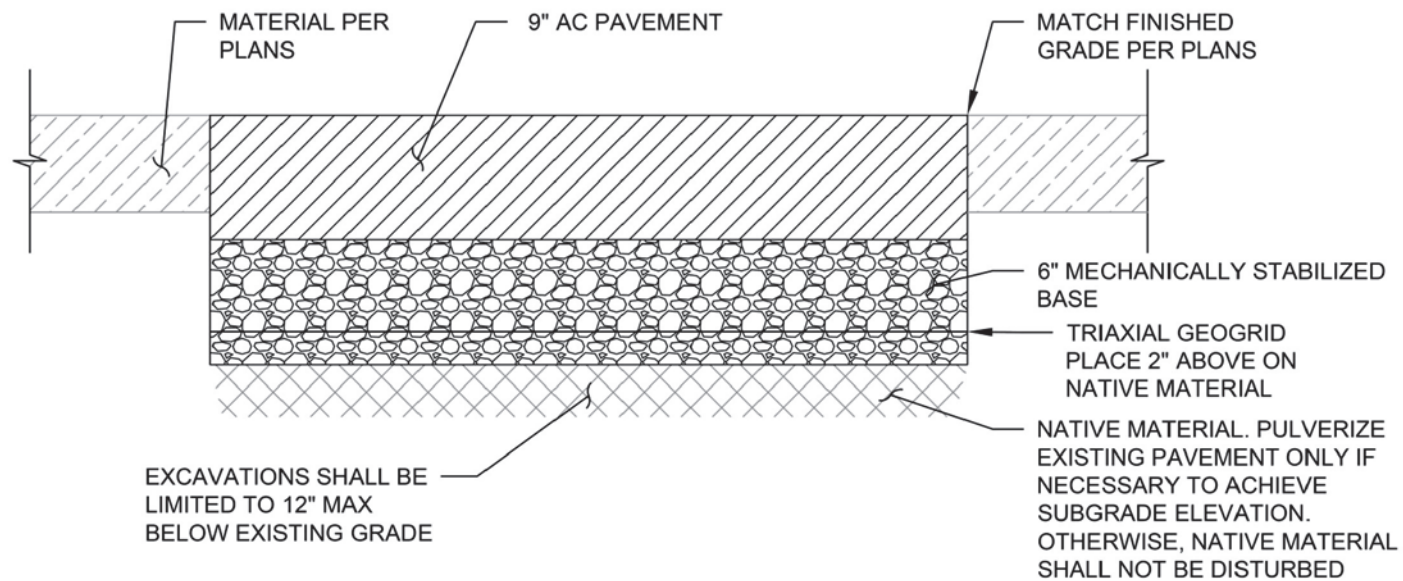
## INTERMODAL HANDLING AND TRANSFER FACILITY (IHTF) IMPROVEMENTS PROJECT

### PROPOSED IMPROVEMENTS

**DATE:** 11/27/2024  
**REVISED** 1/28/2025

**SHEET:** 02 OF 05





### TYPICAL PAVEMENT SECTION - NTS

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CITY: PORT ANGELES COUNTY: CLALLAM

STATE: WASHINGTON

APPLICATION BY: PORT OF PORT ANGELES

REFERENCE NO:

**PURPOSE:** IMPROVE CARGO HANDLING INFRASTRUCTURE AT IHTF THAT INCLUDES MAINTENANCE TO COFFERDAM DOCK, ASPHALT PAVING OF 14.4-ACRES AND CONSTRUCTION OF STORMWATER TREATMENT SYSTEM

**SECTION:** NW 4

**LAT:** 48.130634 N

**TOWNSHIP:** 30 N

**LONG:** -123.460395 W

**RANGE:** 6 W

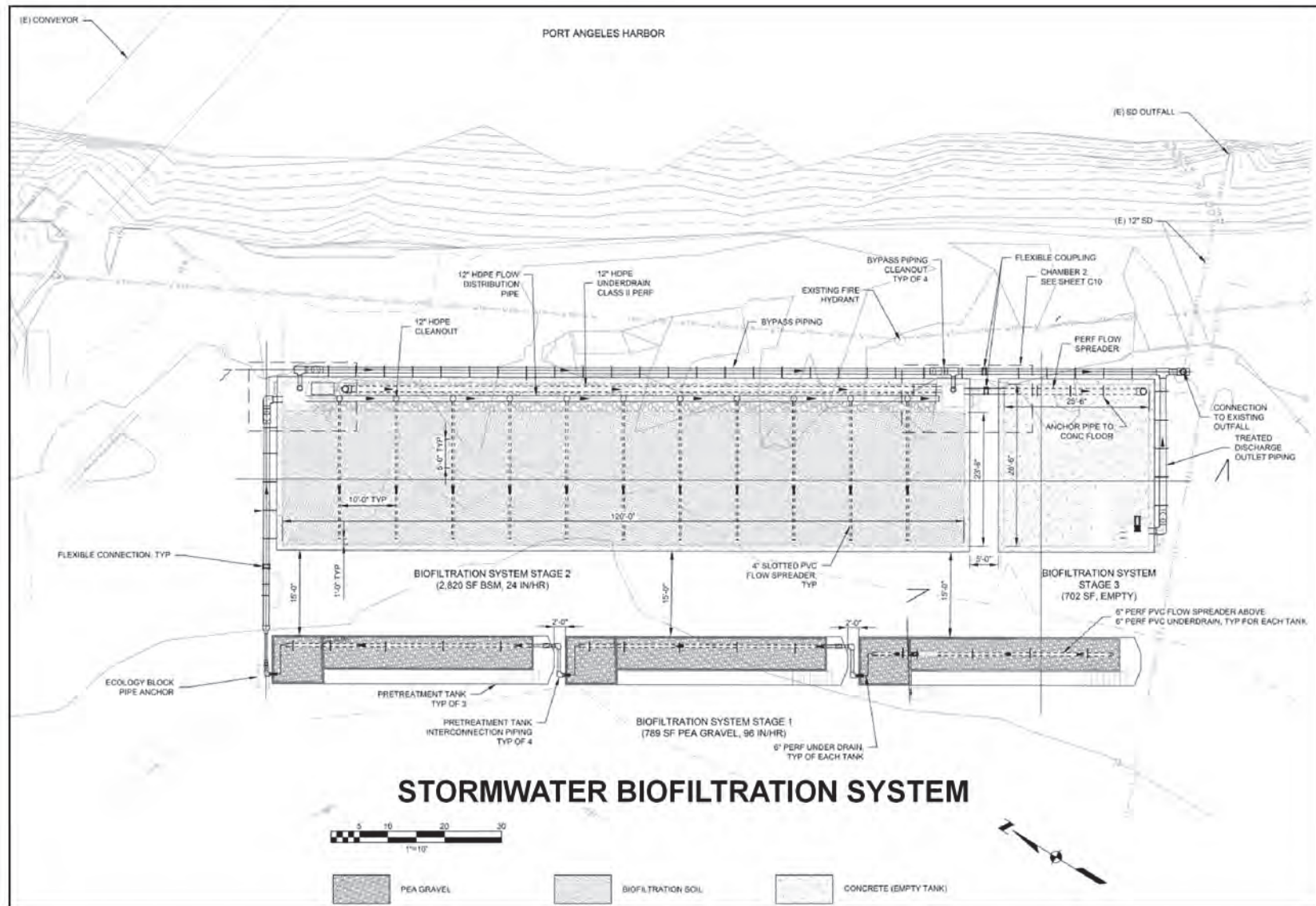
**DATUM:** MLLW = 0.0'

### INTERMODAL HANDLING AND TRANSFER FACILITY (IHTF) IMPROVEMENTS PROJECT

#### PAVEMENT SECTION

DATE: 4/27/2023

SHEET: 03 OF 05



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AT: PORT OF PORT ANGELES LOG YARD, 1301 MARINE DRIVE

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## INTERMODAL HANDLING AND TRANSFER FACILITY (IHTF) IMPROVEMENTS PROJECT

### STORMWATER BIOFILTRATION SYSTEM

DATE: 4/27/2023

SHEET: 04 OF 05





PHOTO1 - LOOKING WEST AT PROJECT AREA



PHOTO 2 - LOOKING SOUTH AT PROJECT AREA



PHOTO 4 - EXISTING SITE SURFACE



PHOTO 5 - EXISTING SITE SURFACE

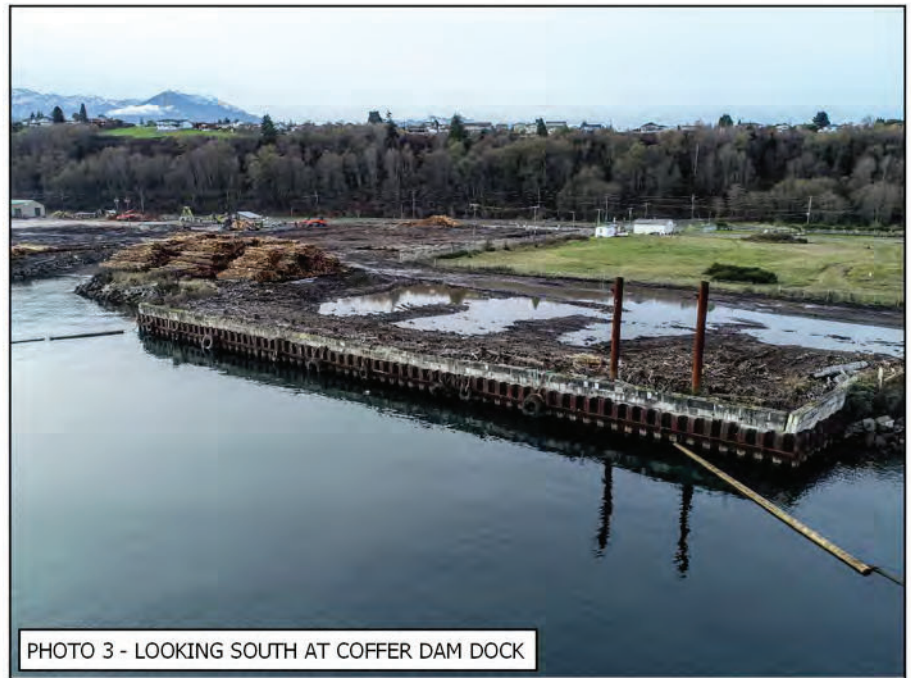


PHOTO 3 - LOOKING SOUTH AT COFFER DAM DOCK

IN: ADJACENT TO PORT ANGELES HARBOR

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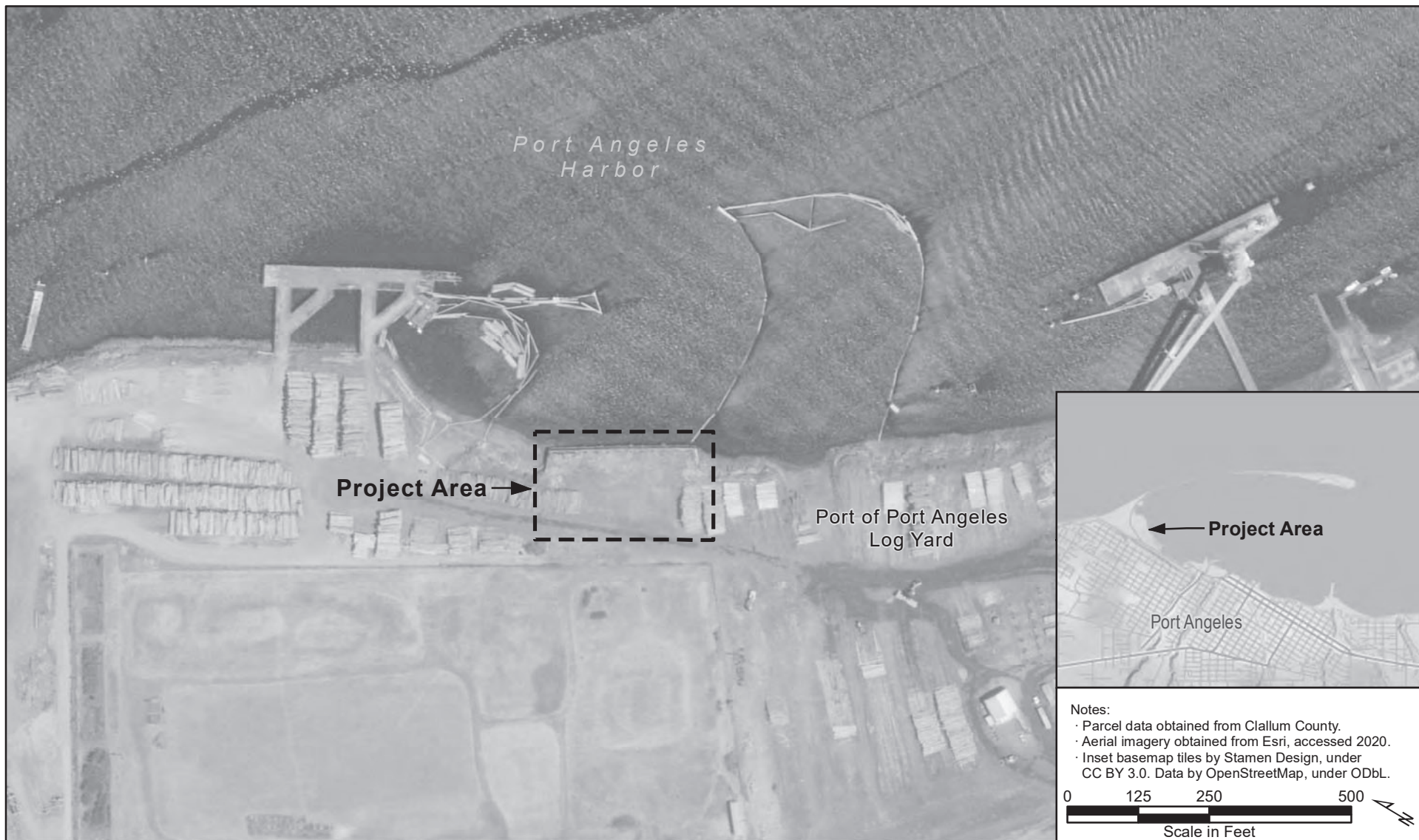
## INTERMODAL HANDLING AND TRANSFER FACILITY (IHTF) IMPROVEMENTS PROJECT

### SITE PHOTOS

DATE: 4/27/2023

SHEET: 05 OF 05





<b>IN:</b> STRAIGHT OF JUAN DE FUCA		<b>PURPOSE:</b> PROVIDE MAINTENANCE AND REPAIRS TO EXISTING COFFFERDAM STRUCTURE AT THE PORT OF PORT ANGELES LOG YARD FACILITY		<b>PORT OF PORT ANGELES COFFERDAM</b>	
<b>AT:</b> PORT OF PORT ANGELES COFFERDAM				<b>LOADING STRUCTURE MAINTENANCE AND REPAIR PROJECT</b>	
<b>CITY:</b> PORT ANGELES	<b>COUNTY:</b> CLALLAM	<b>SECTION:</b> S4	<b>LATITUDE:</b> 48° 7' 42.49" N	<b>VICINITY MAP</b>	<b>DATE:</b> 10/06/2020
<b>STATE:</b> WASHINGTON	<b>PARCEL:</b> 063099190035	<b>TOWNSHIP:</b> 30N	<b>LONGITUDE:</b> 123° 28' 26.4" W		<b>SHEET:</b> 1 of 14
<b>APPLICATION BY:</b> PORT OF PORT ANGELES		<b>RANGE:</b> 6W	<b>DATUM:</b> MLLW = 0.00'		
<b>REFERENCE NO:</b> NWS-2020-779					

BMPs FOR IMPLEMENTATION DURING CONSTRUCTION

CONTRACTOR SHALL PROTECT-IN-PLACE ALL STRUCTURES, UTILITIES AND OBJECTS NOT IDENTIFIED AS BEING DEMOLISHED ON THE PLANS. ANY DAMAGE TO ITEMS NOT BEING DEMOLISHED SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE.

CONTRACTOR SHALL IMPLEMENT THE FOLLOWING BMPs AND COMPLY WITH ALL PERMIT CONDITIONS PRIOR TO CONSTRUCTION.

1. ALL EQUIPMENT THAT WILL OPERATE OVERWATER WILL BE CLEANED OF ACCUMULATED GREASE, OIL, OR MUD. ALL LEAKS WILL BE REPAIRED PRIOR TO ARRIVING ON-SITE. EQUIPMENT WILL BE INSPECTED DAILY FOR LEAKS, ACCUMULATIONS OF GREASE, AND THE LIKE, AND ANY IDENTIFIED PROBLEMS WILL BE FIXED BEFORE OPERATING OVER WATER.
2. CONTRACTOR WILL HAVE EMERGENCY SPILL EQUIPMENT AVAILABLE WHENEVER WORKING IN OR NEAR THE WATER.
3. CONTRACTOR SHALL IMPLEMENT ALL BMPs NECESSARY TO PREVENT WORK MATERIALS OR DEBRIS FROM ENTERING THE WATER.
4. ANY MATERIALS DROPPED INTO THE WATER WOULD IMMEDIATELY BE PICKED UP BY THE CONTRACTOR.
5. SURFACE PREPARATION AREA WILL BE CONTAINED TO PREVENT DUST AND ABRASIVE MATERIAL FROM ENTERING THE SURROUNDING ENVIRONMENT.

SURVEY CONTROL

EXISTING CONDITIONS SURVEY PROVIDED BY ZENOVIC AND ASSOCIATES DATED DECEMBER 19TH, 2018.

HORIZONTAL DATUM = NORTH AMERICAN VERTICAL DATUM OF 1983 (91 ADJUSTMENT)

VERTICAL DATUM IS MLLW = 0 (NAVD88;+0.42)

HIGH TIDE LINE:

FOR THE PURPOSE OF THIS PROJECT, THE HTL IS DEFINED AS THE HIGHEST ASTRONOMICAL TIDE (HAT) WHICH IS 9.06 FT MLLW (NOAA STATION #9444090).

MEAN HIGH WATER (MHW) = 6.51’ (NAVD88;+0.42)

ABBREVIATIONS

ANCH	ANCHOR	INFO	INFORMATION
ARCH	ARCHITECTURAL	ISGP	INDUSTRIAL STORMWATER GENERAL PERMIT
BLDG	BUILDING	JST	JOIST
BLKG	BLOCKING	JT	JOINT
BM	BEAM	K	KIP (1,000 LBS.)
CAP	CAPACITY	KSF	KIPS PER SQUARE FOOT
CIP	CAST IN PLACE	LF	LINEAL FOOT
CL	CENTERLINE	MAX	MAXIMUM
CLG	CEILING	MECH	MECHANICAL
CMU	CONCRETE MASONRY UNIT	MIN	MINIMUM
CONC	CONCRETE	MISC	MISCELLANEOUS
CONST	CONSTRUCTION	NTS	NOT TO SCALE
CONT	CONTINUOUS	OC	ON CENTER
COORD	COORDINATE	PL	PROPERTY LINE
CY	CUBIC YARD	PT	POINT
DBL	DOUBLE	R	RADIUS
DEMO	DEMOLISH	SECT	SECTION
DET	DETAIL	SHT	SHEET
DIA	DIAMETER	SIM	SIMILAR
DIAG	DIAGONAL	SPEC	SPECIFICATION
DOE	DEPARTMENT OF ECOLOGY	STD	STANDARD
DWG	DRAWING	STRUCT	STRUCTURAL
EA	EACH	SWMMWW	STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON STORMWATER POLLUTION PREVENTION PLAN
EL	ELEVATION	SWPPP	STORMWATER POLLUTION PREVENTION PLAN
ELECT	ELECTRICAL	TBD	TO BE DETERMINED
EQUIP	EQUIPMENT	THRU	THROUGH
EXIST	EXISTING	TYP	TYPICAL
EXP	EXPANSION	VERT	VERTICAL
EXT	EXTERIOR	WL	WATER LINE
FT	FEET	WP	WORK POINT
FTG	FOOTING		
GA	GAUGE		
GALV	GALVANIZED		
GEN	GENERAL		
GOVT	GOVERNMENT		
GR	GRADE		
HAT	HIGHEST ASTRONOMICAL TIDE		
HORIZ	HORIZONTAL		
HP	HIGH POINT		
HTL	HIGH TIDE LINE		
IBC	INTERNATIONAL BUILDING CODE		
IE	INVERT ELEVATION		
IN	INCH		

SHEET NO.	DESCRIPTION
01	VICINITY MAP
02	SHEET INDEX, GENERAL NOTES AND ABBREVIATIONS
03	EXISTING SITE PLAN
04	TESC PLAN
05	TESC DETAILS
06	DEMOLITION AND EXCAVATION PLAN AND SECTION
07	GRADING PLAN
08	GRADING SECTION
09	STRUCTURAL PLAN
10	TYPICAL SECTION AND DETAILS
11	FIBERGLASS ENCASEMENT DETAILS

**IN:** STRAIT OF JUAN DE FUCA

**AT:**PORT OF PORT ANGELES COFFERDAM

**CITY:**PORT ANGELES      **COUNTY:** CLALLUM

**STATE:** WASHINGTON      **PARCEL #:** 063099190035

**APPLICATION BY:** PORT OF PORT ANGELES

**REFERENCE NO:** NWS-2020-779

**PURPOSE:** PROVIDE MAINTENANCE AND REPAIRS TO EXISTING COFFERDAM STRUCTURE AT THE PORT OF PORT ANGELES LOG YARD FACILITY

**SECTION:** NW 4      **LAT:** 48° 7’ 42.49” N

**TOWNSHIP:** 31N      **LONG:** 123° 28’ 26.4” W

**RANGE:** 6W      **DATUM:** MLLW = 0.00’

**PORT OF PORT ANGELES COFFERDAM**  
LOADING STRUCTURE MAINTENANCE AND REPAIR PROJECT

**SHEET INDEX, GENERAL NOTES, AND ABBREVIATIONS**

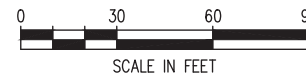
**DATE:** 10/6/2020  
**SHEET:** 02 OF 14





## EXISTING SITE PLAN

SCALE: 1" = 60'



## SURVEY NOTES:

1. BASIS OF BEARINGS: NAD 83 (1991 ADJUSTMENT) PER MEASUREMENTS MADE TO MONUMENTS SHOWN ON VOLUME 34 OF SURVEYS, PAGE 22, RECORDS OF CLALLAM COUNTY, WASHINGTON.
2. VERTICAL DATUM: MLLW, BASED ON THE ABOVE CITED MEASUREMENTS AND CONVERTED FROM NAVD 88 USING THE TIDAL DATUM FOR PORT ANGELES (STATION 9444090) AS PROVIDED AT "WWW.TIDESANDCURRENTS.NOAA.GOV". MLLW ELEVATION AT PORT ANGELES (STATION 9444090) = -0.42 FEET (NAVD 88).
3. TIDE LEVELS:
 

A. HAT	9.06'
B. MHHW	7.06'
C. MHW	6.51'
D. MLLW	0.00'
4. THE SUBJECT LANDS ARE USED AS A LOG PROCESSING AND STORAGE YARD. CONDITIONS AND GRADES ARE SUBJECT TO FREQUENT CHANGES.
5. SURVEY SHOWN PERFORMED BY ZENOVIC AND ASSOCIATES IN DECEMBER 2018.
6. BATHYMETRY SHOWN PERFORMED BY SUNCHASERS IN MAY 2010.
7. UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON OBSERVED FIELD EVIDENCE, CITY OF PORT ANGELES GIS MAPPING, AND DRAWINGS PROVIDED BY THE PORT OF PORT ANGELES. ADDITIONAL UTILITY ROUTES AND ALIGNMENTS MAY EXIST. ZENOVIC AND ASSOCIATES IS NOT TO BE HELD LIABLE FOR THE ACCURACY AND/OR THE COMPLETENESS OF THE UNDERGROUND UTILITIES SHOWN HEREON.
8. GEOTECHNICAL TEST PITS WERE DUG IN 2019 AS PART OF PROJECT DESIGN. THE TEST PITS WERE OBSERVED BY AN ARCHAEOLOGIST; NO PRECONTACT ARCHEOLOGICAL MATERIALS WERE DISCOVERED.

## LEGEND:

	GRADE CONTOUR
	STORM DRAIN
	FENCE
	PLUGGED CATCH BASIN
	TEST PIT

**IN:** STRAIT OF JUAN DE FUCA

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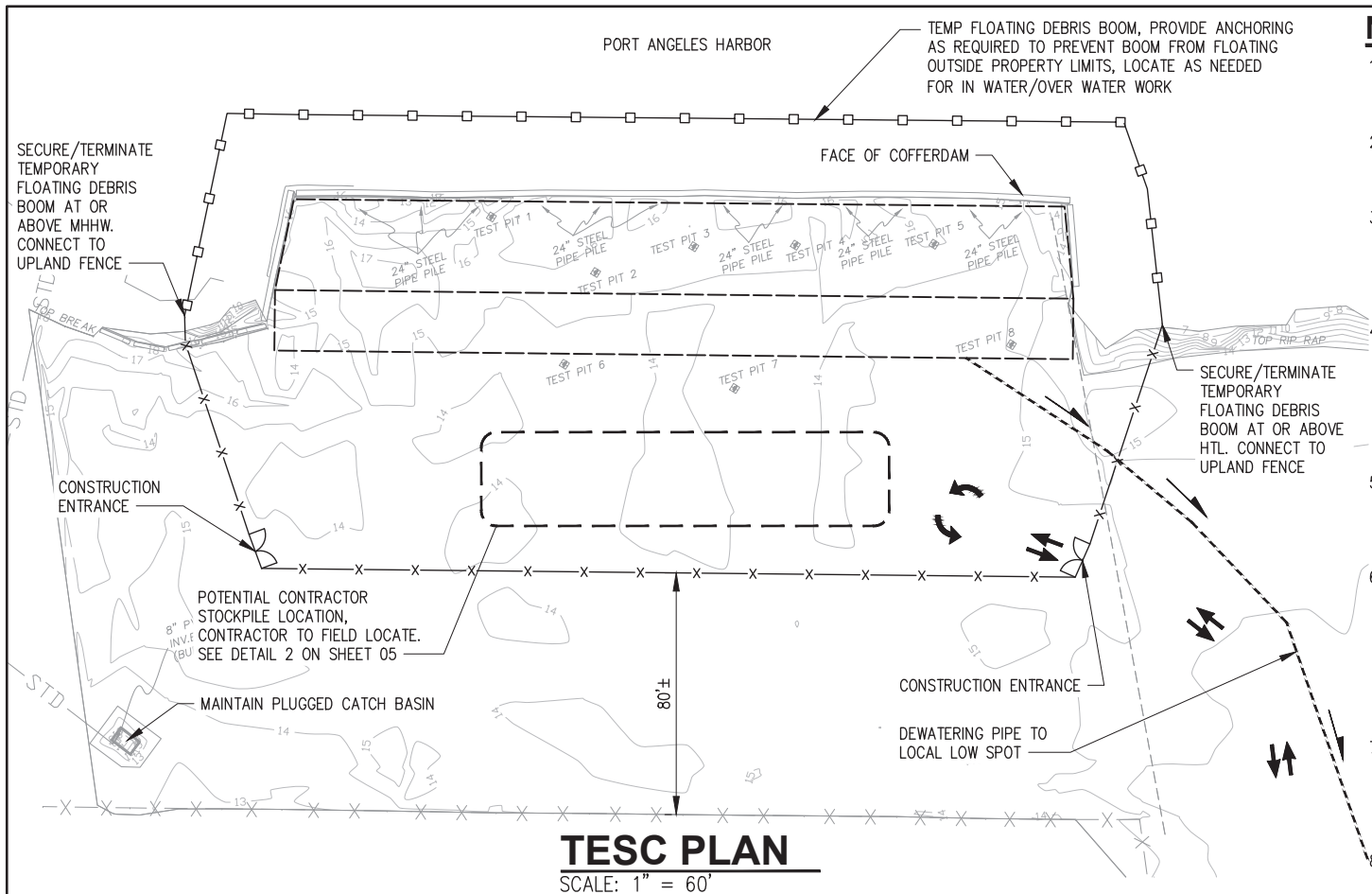
## PORT OF PORT ANGELES COFFERDAM

LOADING STRUCTURE MAINTENANCE AND REPAIR PROJECT

### EXISTING SITE PLAN

**DATE:** 10/6/2020

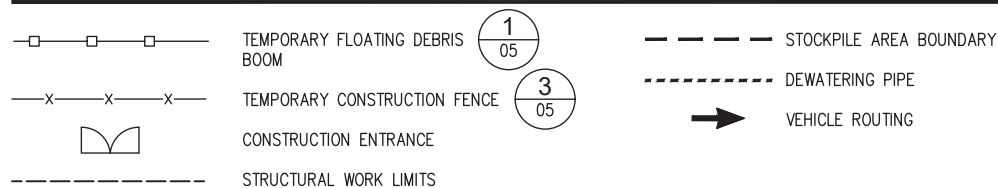
**SHEET:** 03 OF 14



## NOTES:

1. CONTRACTOR TO MAINTAIN PLUGGED CATCH BASINS, NOTE THAT NO STORM DRAINAGE FROM WITHIN PROJECT LIMITS SHALL DRAIN TO THE PORT DRAINAGE SYSTEM.
2. THE CONTRACTOR SHALL COMPLY WITH, MAINTAIN, AND MODIFY AS NEEDED THE APPROVED CONSTRUCTION SWPPP IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
3. THE IMPLEMENTATION OF THESE TESC PLANS AND CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED.
4. THE TESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS ANTICIPATED FOR SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE TESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DOES NOT LEAVE THE SITE.
5. ON-SITE EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF WORK AND SHALL BE MAINTAINED DURING AND AFTER EXCAVATION AND GRADING OPERATIONS TO THE APPROVAL OF THE PORT.
6. THE TESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTION. DAILY INSPECTION REPORTS MUST BE REVIEWED BY THE CONTRACTOR, SIGNED AND MADE AVAILABLE TO THE PORT, CITY AND ANY OTHER ENVIRONMENTAL AUTHORITIES AT ALL TIMES. A COPY OF ALL INSPECTION RECORDS SHALL BE KEPT ON SITE.
7. THE TEMPORARY FLOATING DEBRIS BOOM SHALL BE INSTALLED AT THE START OF WORK AND MAINTAINED, UPGRADED, REPAIRED OR REPLACED THE ENTIRE CONSTRUCTION PERIOD UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED.
8. CONTRACTOR SHALL PROVIDE ALL PUMPS, TANKS, SHORING, LABOR, AND EQUIPMENT NECESSARY TO ADEQUATELY DEWATER AND STABILIZE EXCAVATIONS SEE GEOTECHNICAL REPORT FOR ANTICIPATED GROUNDWATER ELEVATIONS.

## LEGEND:



**IN:** STRAIT OF JUAN DE FUCA

**AT:** PORT OF PORT ANGELES COFFERDAM

**CITY:** PORT ANGELES

**COUNTY:** CLALLUM

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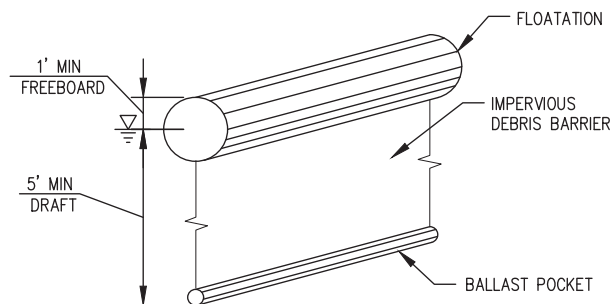
## PORT OF PORT ANGELES COFFERDAM

LOADING STRUCTURE MAINTENANCE AND REPAIR PROJECT

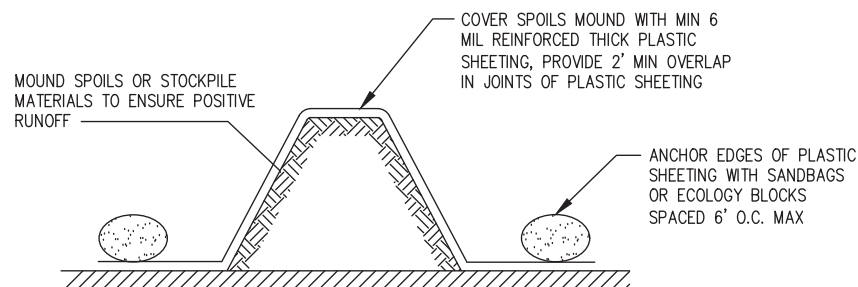
**TESC PLAN**

**DATE:** 10/6/2020

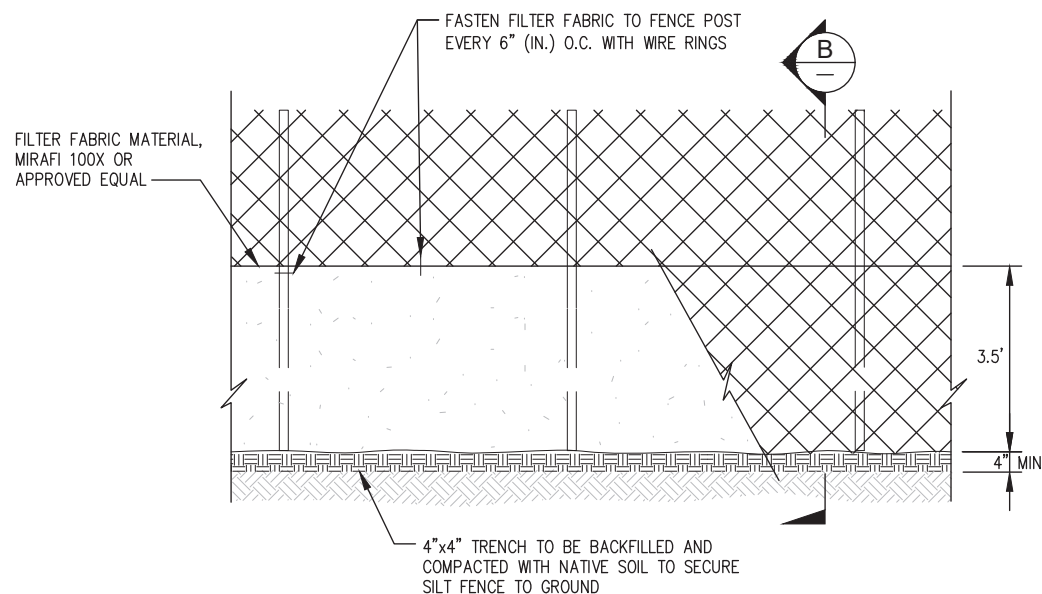
**SHEET:** 04 OF 14



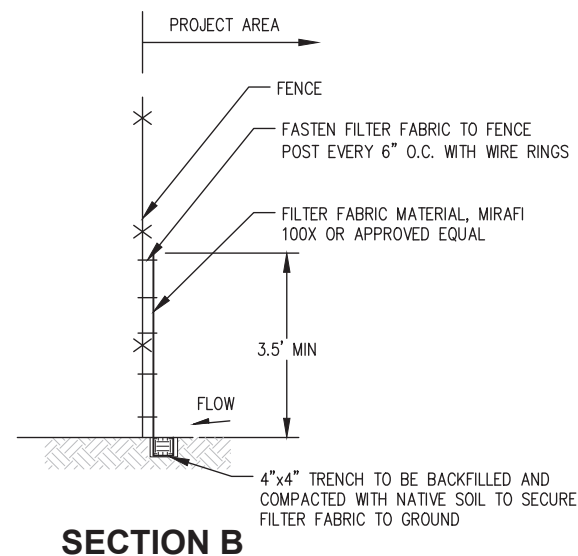
**1 DEBRIS BOOM**  
04 NTS



**2 STOCKPILE PROTECTION DETAIL**  
04 NTS



**3 CONSTRUCTION FENCE**  
04 NTS



**IN:** STRAIT OF JUAN DE FUCA

**AT:** PORT OF PORT ANGELES COFFERDAM

**CITY:** PORT ANGELES

**COUNTY:** CLALLUM

**STATE:** WASHINGTON

**PARCEL #:** 063099190035

**APPLICATION BY:** PORT OF PORT ANGELES

**REFERENCE NO:** NWS-2020-779

**PURPOSE:** PROVIDE MAINTENANCE AND REPAIRS TO EXISTING COFFERDAM STRUCTURE AT THE PORT OF PORT ANGELES LOG YARD FACILITY

**SECTION:** NW 4

**LAT:** 48° 7' 42.49" N

**TOWNSHIP:** 31N

**LONG:** 123° 28' 26.4" W

**RANGE:** 6W

**DATUM:** MLLW = 0.00'

## PORT OF PORT ANGELES COFFERDAM

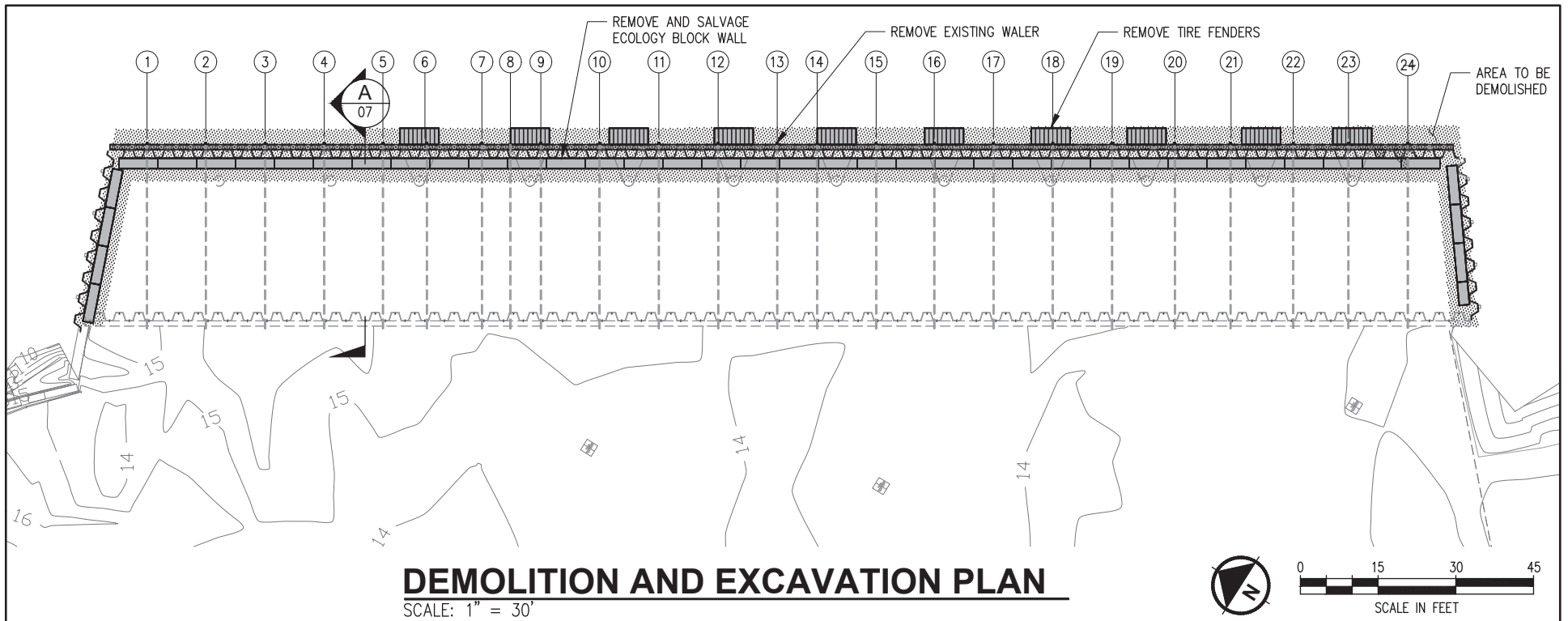
LOADING STRUCTURE MAINTENANCE AND REPAIR PROJECT

### TESC DETAILS

**DATE:** 10/6/2020

**SHEET:** 05 OF 14





## NOTES

- CONTRACTOR TO DETERMINE LAYBACK SLOPE AS NEEDED FOR WORK. 2:1 BACKSLOPE SHOWN IS MAXIMUM BACKSLOPE ANTICIPATED.

## LEGEND

	AREA OF DEMOLITION WORK
	REMOVE

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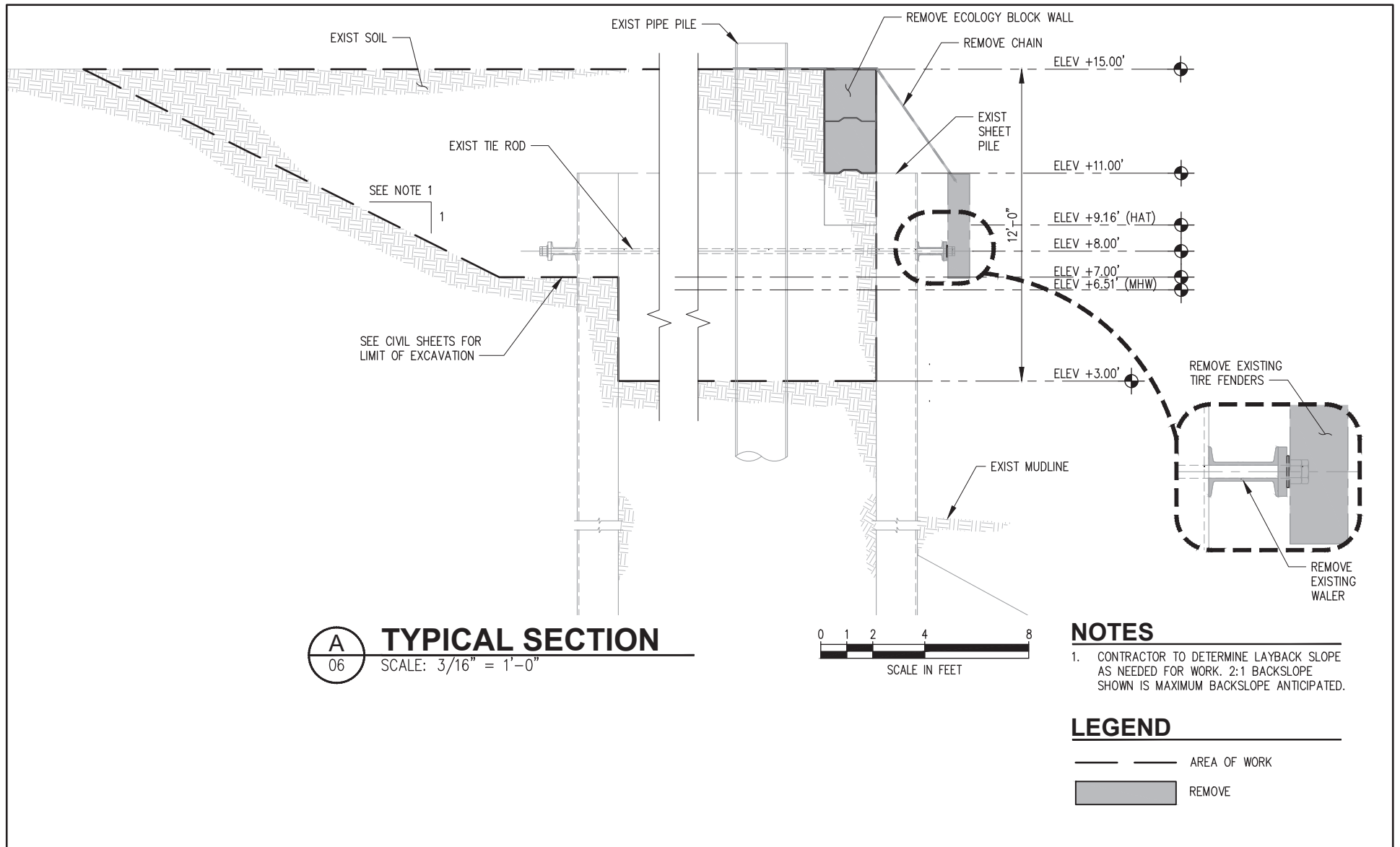
## PORT OF PORT ANGELES COFFERDAM

LOADING STRUCTURE MAINTENANCE AND REPAIR PROJECT

## DEMOLITION AND EXCAVATION PLAN

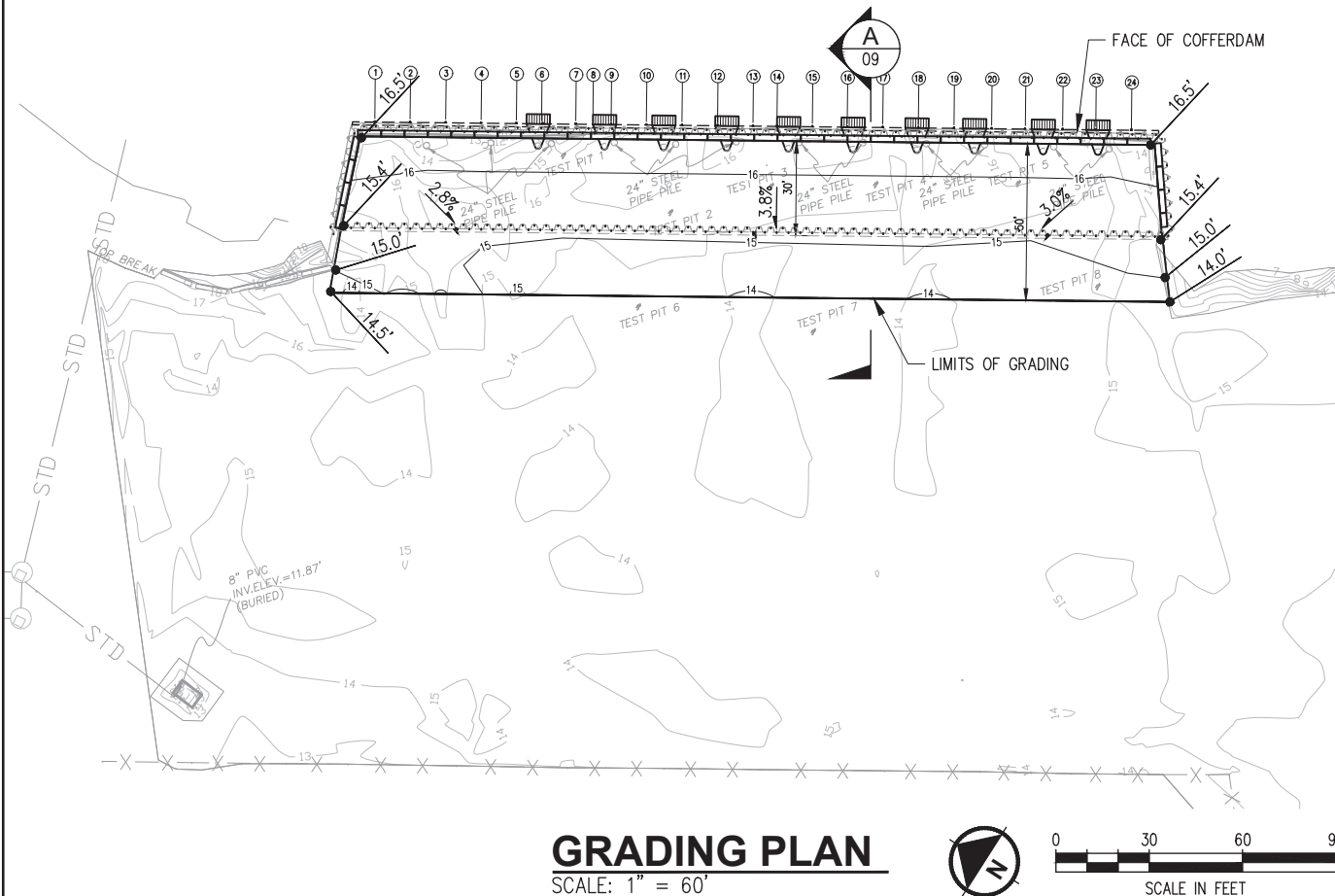
**DATE:** 10/6/2020

**SHEET:** 06 OF 14



<b>IN:</b> STRAIT OF JUAN DE FUCA <b>AT:</b> PORT OF PORT ANGELES COFFERDAM <b>CITY:</b> PORT ANGELES <b>COUNTY:</b> CLALLUM <b>STATE:</b> WASHINGTON <b>PARCEL #:</b> 063099190035 <b>APPLICATION BY:</b> PORT OF PORT ANGELES <b>REFERENCE NO:</b> NWS-2020-779		<b>PURPOSE:</b> PROVIDE MAINTENANCE AND REPAIRS TO EXISTING COFFERDAM STRUCTURE AT THE PORT OF PORT ANGELES LOG YARD FACILITY <b>SECTION:</b> NW 4 <b>LAT:</b> 48° 7' 42.49" N <b>TOWNSHIP:</b> 31N <b>LONG:</b> 123° 28' 26.4" W <b>RANGE:</b> 6W <b>DATUM:</b> MLLW = 0.00'		<b>PORT OF PORT ANGELES COFFERDAM</b> <b>LOADING STRUCTURE MAINTENANCE AND REPAIR PROJECT</b> <b>DEMOLITION AND EXCAVATION SECTION</b> <b>DATE:</b> 10/6/2020 <b>SHEET:</b> 07 OF 14	
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# PORT ANGELES HARBOR



**GRADING PLAN**  
SCALE: 1" = 60'



## NOTES:

1. ALL SPOT ELEVATIONS REPRESENT TOP OF GRADING.
2. STRAIGHT GRADES SHALL BE MAINTAINED BETWEEN SPOT ELEVATIONS UNLESS OTHERWISE NOTED.
3. ALL AREAS DISTURBED OR OVER-EXCAVATED DURING CONSTRUCTION SHALL BE COMPACTED PER SPECIFICATIONS.
4. CONTRACTOR SHALL FOLLOW THE WSDOT SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION (2018).
5. CONTRACTOR SHALL PROVIDE THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).

## LEGEND:

- 15— EXISTING GRADE CONTOUR
- 15— PROPOSED GRADE CONTOUR
- ... FLOW LINE
- LIMITS OF GRADING
- STD— EXISTING STORM DRAIN
- 0.7% FLOW DIRECTION
- SPOT ELEVATION
- ① TIE ROD GRID

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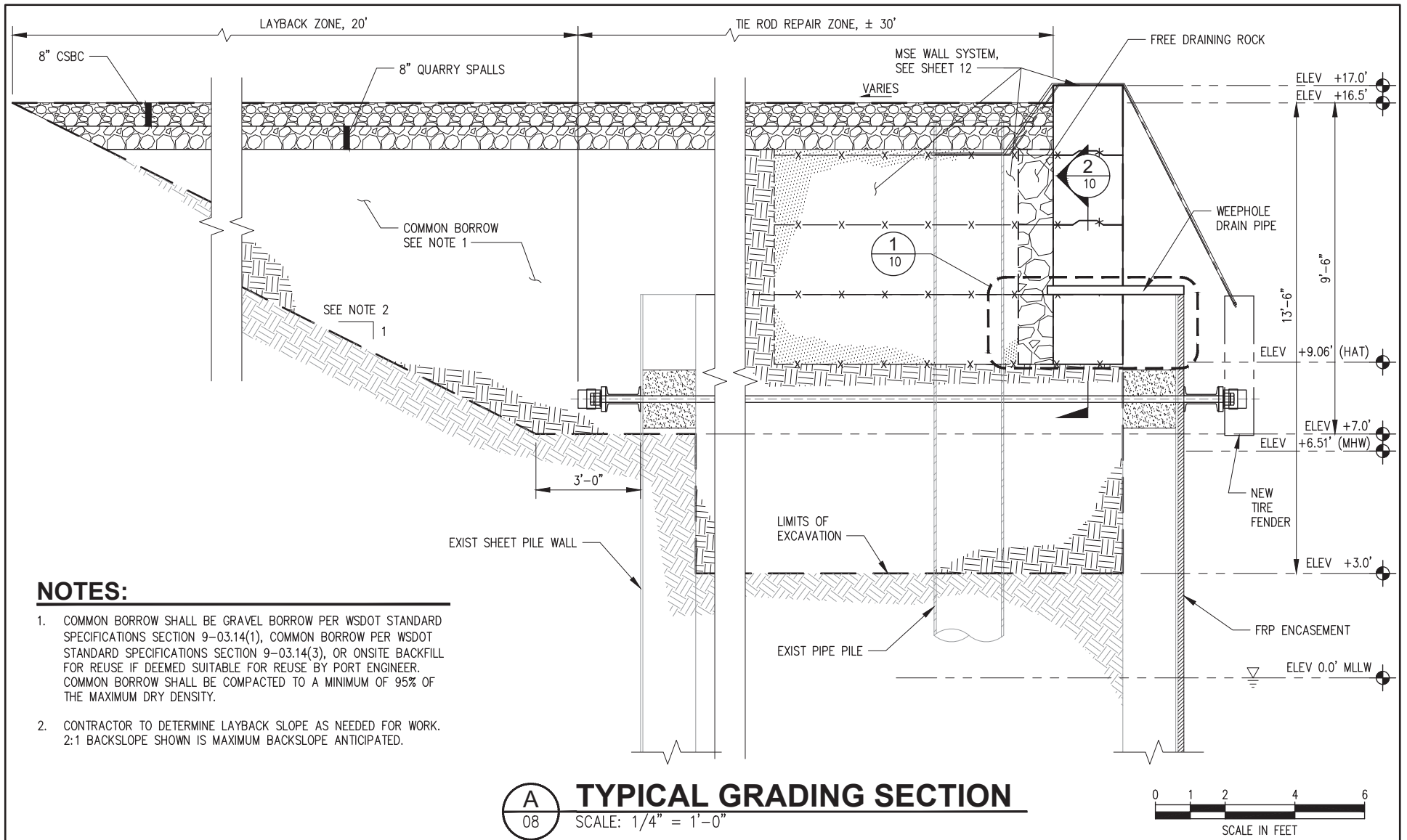
LOADING STRUCTURE MAINTENANCE AND REPAIR PROJECT

### GRADING PLAN

**DATE:** 10/6/2020

**SHEET:** 08 OF 14





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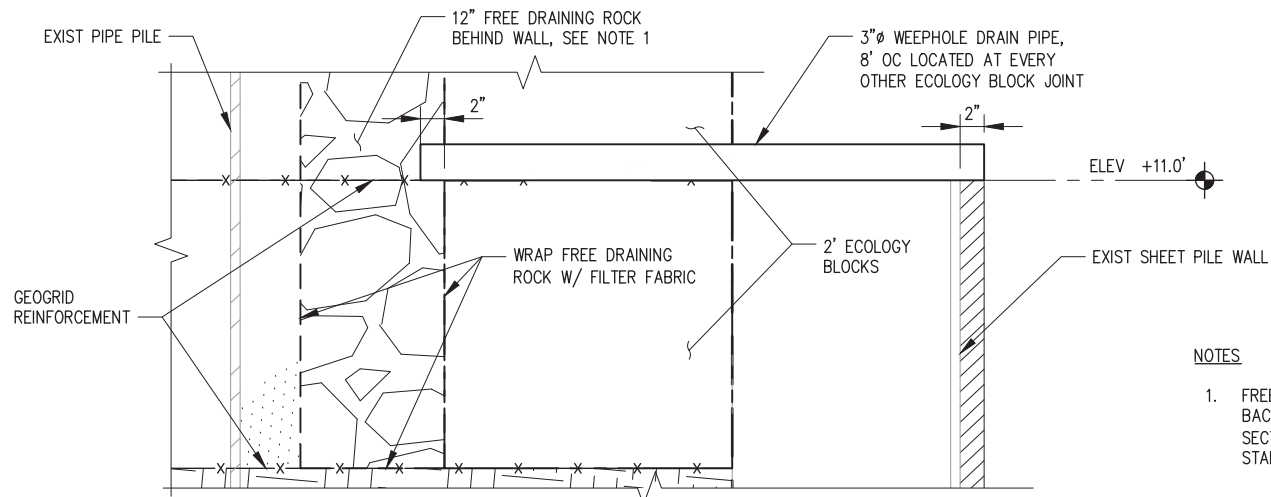
## PORT OF PORT ANGELES COFFERDAM

LOADING STRUCTURE MAINTENANCE AND REPAIR PROJECT

### TYPICAL GRADING SECTION

**DATE:** 10/6/2020

**SHEET:** 09 OF 14

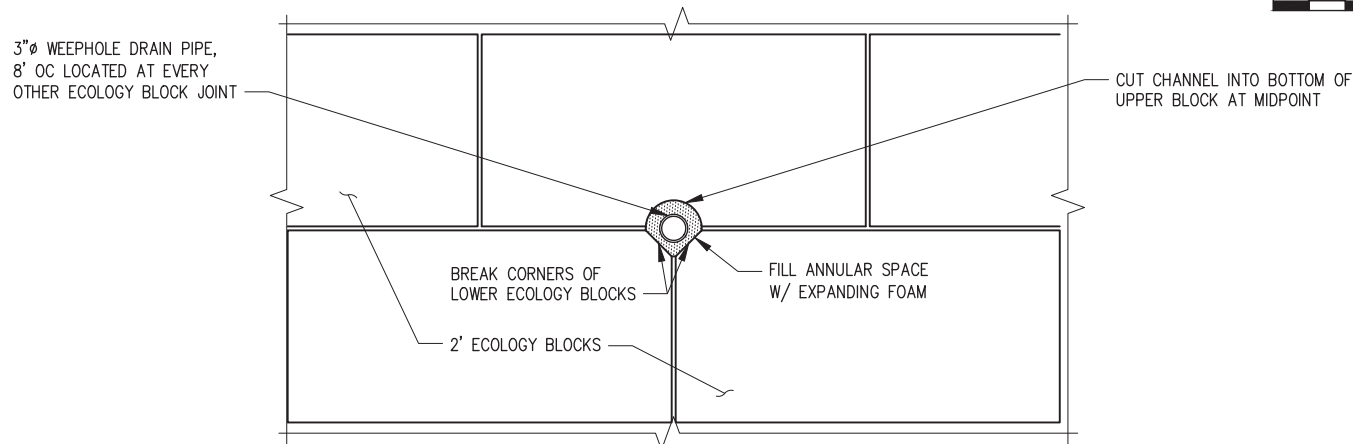


#### NOTES

1. FREE DRAINING ROCK SHALL BE GRAVEL BACKFILL FOR WALLS, AS DEFINED BY SECTION 9-03.12(2) IN THE WSDOT STANDARD SPECIFICATIONS..

## 1 FREE DRAINING ROCK AND WEEPHOLE DRAIN PIPE DETAIL

SCALE:  $\frac{3}{4}" = 1'-0"$



## 2 WEEPING DRAIN PIPE AT ECOLOGY BLOCK JOINT DETAIL

NTS

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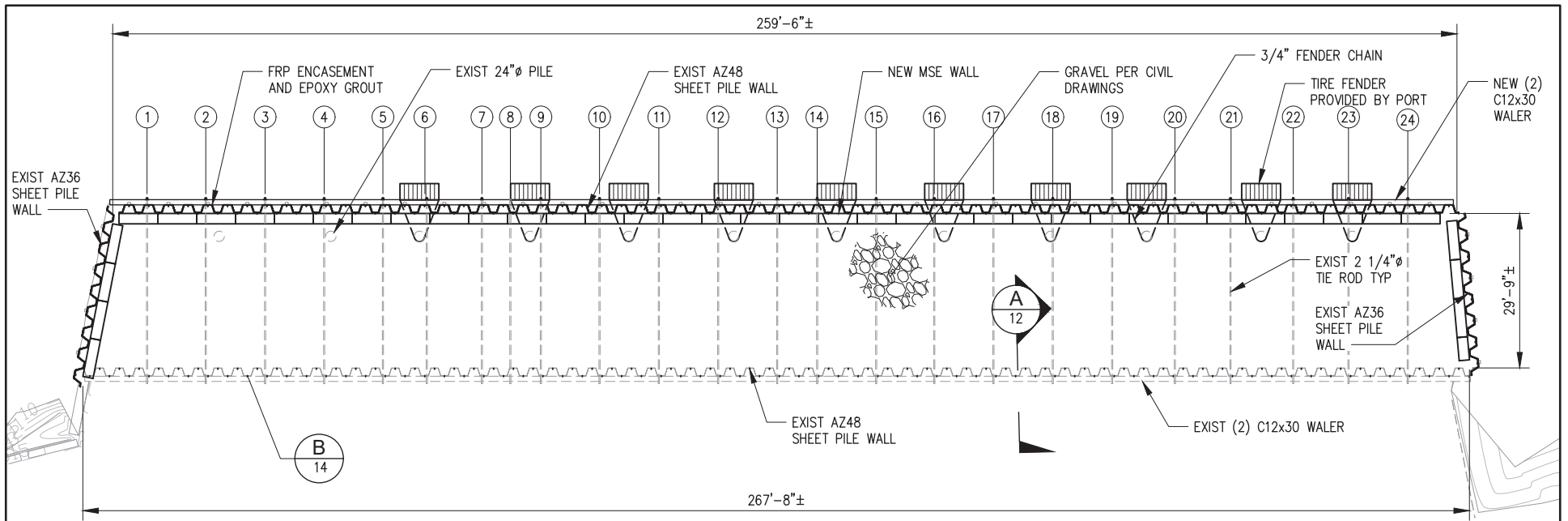
### PORT OF PORT ANGELES COFFERDAM

LOADING STRUCTURE MAINTENANCE AND REPAIR PROJECT

#### GRADING DETAILS

**DATE:** 10/6/2020

**SHEET:** 10 OF 14



## STRUCTURAL PLAN

SCALE: 1" = 30'



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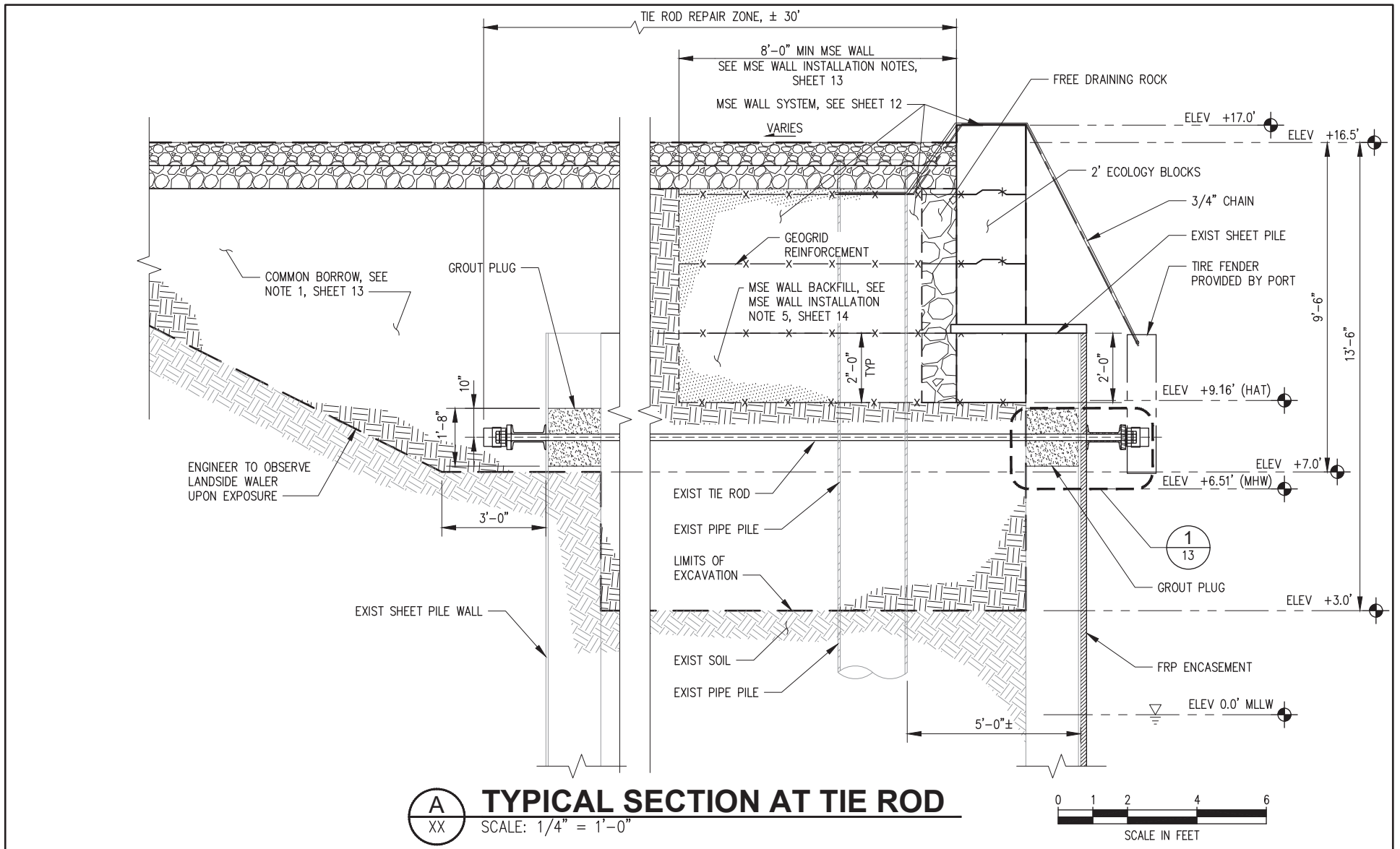
LOADING STRUCTURE MAINTENANCE AND REPAIR PROJECT

### STRUCTURAL PLAN

**DATE:** 10/6/2020

**SHEET:** 11 OF 14





A  
XX

## TYPICAL SECTION AT TIE ROD

SCALE: 1/4" = 1'-0"

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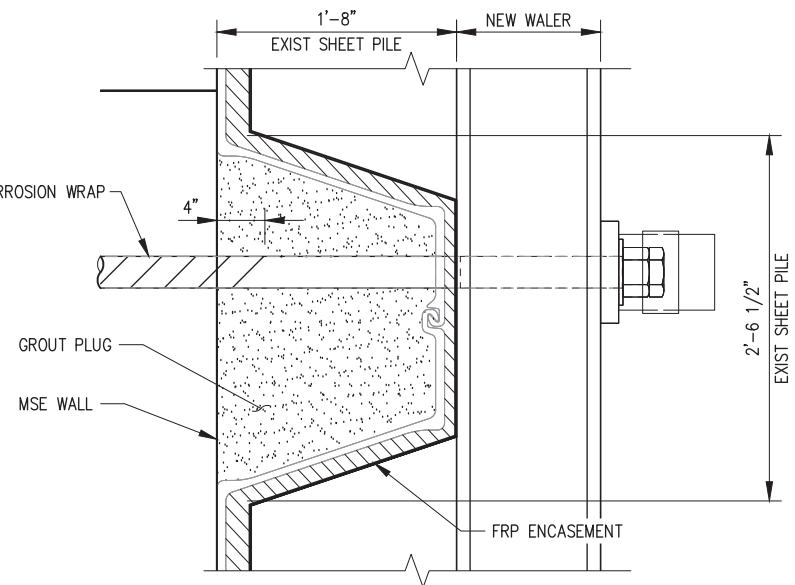
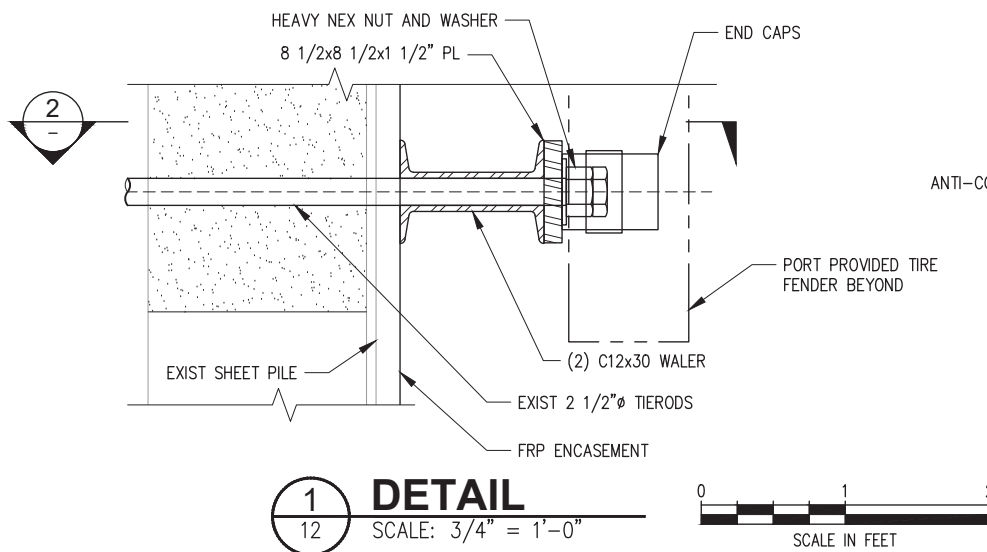
## PORT OF PORT ANGELES COFFERDAM

LOADING STRUCTURE MAINTENANCE AND REPAIR PROJECT

### TYPICAL SECTION

**DATE:** 10/6/2020

**SHEET:** 12 OF 14



## NOTES

WATERSIDE WALER REPLACEMENT—CONSTRUCTION SEQUENCE REQUIREMENTS;  
MEANS AND METHOD TO BE DETERMINED BY CONTRACTOR:

1. LANDSIDE EXCAVATION DOWN TO ELEVATION +3.00' MIN BEFORE REMOVING WALER.
2. ENGINEER TO OBSERVE LANDSIDE WALER. CONTRACTOR TO NOTIFY ENGINEER WHEN WALER IS AVAILABLE FOR OBSERVATION.
3. REMOVE AND REPLACE WALER WITH (2) C12x30 WALER BEAMS.
4. APPLY TRENTON PILE PRIMER, WAX TAPE #2, AND MC0110 OUTER WRAP OR BETTER ON ALL EXIST TIE RODS.
5. REPLACE WASHER AND NUT ON TIE ROD END AND TIGHTEN UNTIL WALL IS PLUMB. BEGIN BACK FILLING.
6. INSTALL A 20" GROUT PLUG CENTERED ABOUT THE TIE ROD ON LANDSIDE AND WATERSIDE.
7. MONITOR WALL FOR PLUMBNESS AND CONTINUALLY ADJUST THE ROD NUT ASSEMBLY TO ENSURE WALL IS PLUMB DURING BACKFILL OPERATION.
8. ENCAPSULATE WATERSIDE AND LANDSIDE TIE ROD ENDS USING WILLIAMS FORM GREASE FILLED FIBER REINFORCED NYLON END CAPS OR BETTER.

## MSE WALL INSTALLATION NOTES

1. MSE WALL SHALL BEGIN APPROXIMATELY 2 FT BELOW TOP OF EXIST SHEET PILE.
2. REUSE EXIST ECOLOGY BLOCKS OR PURCHASE NEW ECOLOGY BLOCKS AT CONTRACTOR'S OPTION.
3. GEOGRID REINFORCEMENT SHALL CONFORM TO WSDOT STANDARD SPECS AND HAVE A MINIMUM ULTIMATE TENSILE STRENGTH OF 5,500 POUNDS PER FOOT.
4. GEOGRID SHALL BE INSTALLED IN CONTINUOUS SHEETS AT A VERTICAL SPACING OF 2 FEET. MANUFACTURER SHALL DESIGN AND SUBMIT SHOP DRAWINGS OF CONNECTION OF GEOTEXTILE BETWEEN ECOLOGY BLOCKS PRIOR TO INSTALLATION.
5. MSE WALL BACKFILL SHALL BE GRAVEL BORROW BACKFILL, AS DEFINED BY WSDOT STANDARD SPECIFICATIONS SECTION 9-03.14(1), COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DEFINED BY THE MODIFIED PROCTOR TEST, ASTM D1557.
6. MSE SUBGRADE SHALL BE COMPACTED TO A FIRM AND UNYIELDING SURFACE AND SHOULD BE OBSERVED AND APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER.

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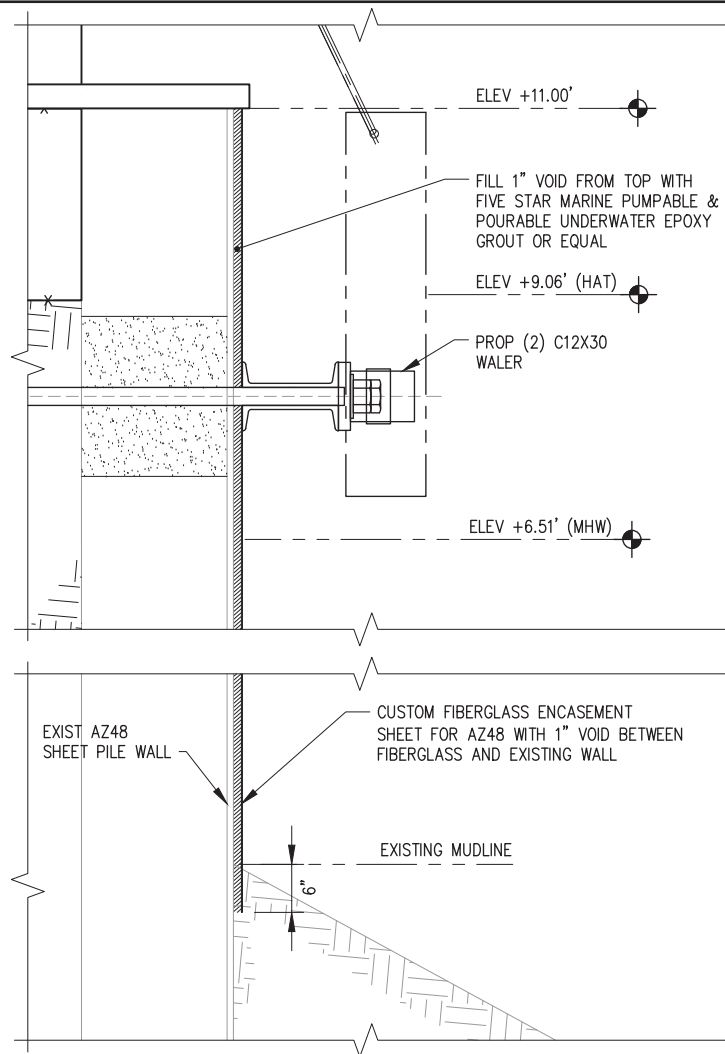
## PORT OF PORT ANGELES COFFERDAM

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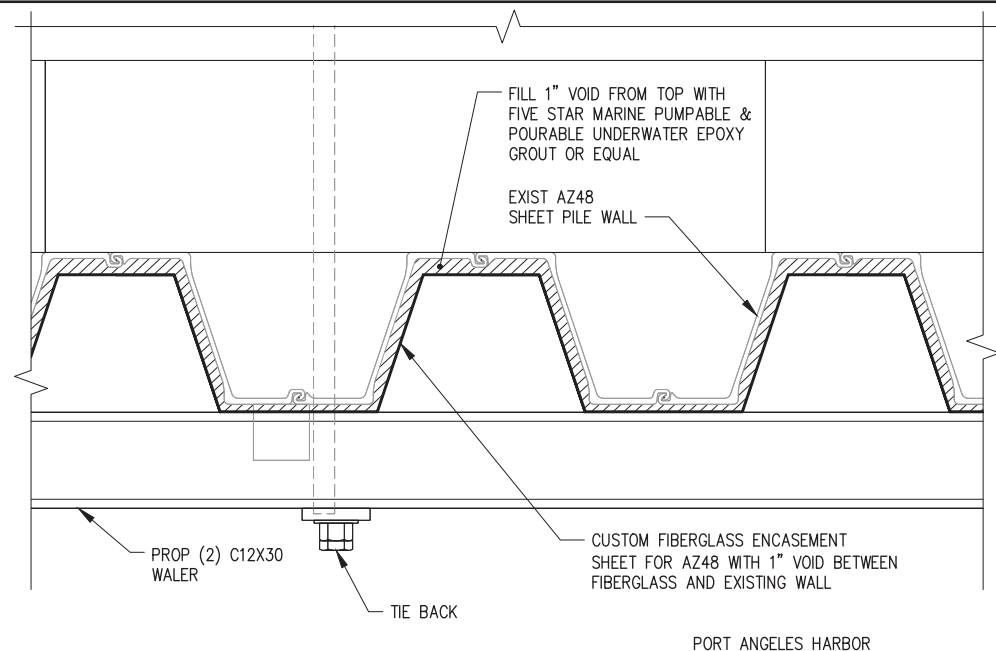
### DETAILS AND NOTES

**DATE:** 10/6/2020

**SHEET:** 13 OF 14



**A**  
XX **SECTION - FRP ENCASEMENT**  
SCALE: 1/2" = 1'-0"



**1**  
XX **DETAIL - FRP ENCASEMENT**  
SCALE: 1/2" = 1'-0"



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### FIBERGLASS ENCASEMENT DETAILS

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**SHEET:** 14 OF 14