US Army Corps of Engineers
Seattle District

Joint Public Notice

Application for a Department of the Army Permit and a Washington Department of Ecology Water Quality Certification

US Army Corps of Engineers
Regulatory Branch
Post Office Box 3755
Seattle, WA 98124-3755
Telephone: (206) 316-3975
ATTN: Brian Hooper,
Project Manager

WA Department of Ecology
SEA Program
Post Office Box 47600
Olympia, WA 98504-7600
Telephone: (360) 407-6068
ATTN: SEA Program,
Federal Permit Coordinator

Public Notice Date: September 9, 2016
Expiration Date: October 9, 2016

Reference No.: NWS-2013-243
Name: U.S. Navy (Bangor) Land Water Interface

Interested parties are hereby notified that the U.S. Army Corps of Engineers (Corps) and the Washington Department of Ecology (Ecology) have received an application to perform work in waters of the U.S. as described below and shown on the enclosed drawings dated July 2016.

The Corps will review the work in accordance with Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Ecology will review the work pursuant to Section 401 of the CWA, with applicable provisions of State water pollution control laws.

APPLICANT: U.S. Navy, Naval Base Kitsap
Attention: Captain T.A. Zwolfer
120 South Dewey Street, Building 443
Bremerton, Washington 88314-5020
Telephone: (360) 627-4000

AGENT: Naval Facilities Engineering Command Northwest
Attention: Mr. Robert Senner
1101 Tautog Circle
Silverdale, Washington 98315-1101
Telephone: (360) 396-0029

LOCATION: In the Hood Canal at Naval Base Kitsap Bangor, near Silverdale, Kitsap County, Washington.

WORK: The U.S. Navy proposes to install structures and place fill to construct a security barrier system called the Land Water Interface (LWI). The LWI would completely enclose the Waterfront Restricted Area (WRA) by constructing and operating barrier structures connecting the existing on-water Port Security Barrier (PSB) system to the existing on-land Waterfront Security Enclave (WSE).

PURPOSE: The purpose of the LWI project is to protect Navy vessels and facilities.

ADDITIONAL INFORMATION: The proposed project would include work in two locations (north LWI and south LWI). The north and south LWI locations would include similar project elements, including extension of the

landside fence system, construction of an abutment with associated toe armoring and access stairs, construction of observation posts, and relocation and extension of the PSB. The new PSB sections would be attached to the abutments, as would the landside fence system, thus completing enclosure of the WRA.

Port Security Barrier Modifications
The existing PSB system is made up of several PSB units connected together. Each PSB unit is 50 feet long and supports an 8-foot-high fence on a metal frame. Each PSB unit is supported on three pontoons. Each pontoon is 42 inches in diameter; the center pontoon is 18 feet long and each end pontoon is six feet long. A 42-inch-high metal grating guard panel is suspended below the fence, into the water to the bottom of the pontoons. The existing PSB system would be moved and extended to attach at each concrete abutment. At the north LWI, 1,200 feet of the existing PSB would be moved and 100 feet added to extend the PSB system to the abutment. At the south LWI, 1200 feet of existing PSB would be moved and 200 feet added to extend the PSB system to the abutment. Some of the nearshore sections of the PSB would ground out during low tide cycles. Therefore, inert rubber feet (12 inches by 24-inches) would be installed on the pontoons to reduce the surface area that would contact the beach during low tide.

Four existing buoys in the north and three buoys in the south would be relocated. Each buoy is currently secured by a mooring system using three anchors spaced at approximately 120 degrees apart. One anchor is a 10-ton anchor, while the other two are each 2-ton anchors. Two of the four relocated buoys would be reduced from three anchors to two anchors (one 2-ton and one 10-ton). One buoy on the south would be reduced from three anchors to two anchors (one 2-ton and one 10-ton). Also, one new buoy would be installed in the south with two anchors (one 2-ton and one 10-ton).

Abutments and Access Stairs
The north abutment would be supported by fifteen 36-inch drill shaft piles, and would be 40 feet high and 72 feet long, positioned along a natural bluff. This abutment would extend from the beach area at approximately +13 feet mean lower low water (MLLW) to the top of the bluff slope. The south abutment would be supported by sixteen 36-inch drilled shafts and would be 20 feet high by 72 feet long. This abutment would extend from approximately +11 feet MLLW to the top of the bluff slope. The south LWI abutment would replace a section of the existing creosote timber seawall. The north and south abutments would each include a cast-in-place concrete stairway to provide access from the top of the bluff to the LWI deck and the base of the bluff. Marine riparian vegetation would be permanently removed from the tops of both bluffs to facilitate construction of the abutments.

A temporary access ramp would be excavated down from the bluff using heavy excavation equipment. The temporary access ramp would be used to access and excavate a work bench into the bluff. The work bench would allow excavators to reach the beach area for excavation and fill activities without the need to physically drive the excavation equipment on the beach. Along with the temporary access ramp, temporary sheetpile cofferdams would be constructed using a vibratory hammer in the dry during low tide cycles to create dry areas to install piles for the abutment and stairs. The lengths of the proposed coffer dams are 140 feet for the north abutment, 160 feet for the north stairs, 190 feet for the south abutment, and 160 feet long for the south stairs.

The abutment and stair work would be conducted at low tide in the dry. Beach contours would be returned to pre-construction conditions following construction, except for the areas occupied by the new structures. All bluff slopes disturbed by construction of the abutment would be stabilized using riprap. Native material at the base of the abutments would be excavated, and riprap would be placed in a 10-foot-wide by 6-foot-deep trench running the length of each abutment in order to provide protection to the abutments from wave action. The riprap would be placed to match the existing grade at the base of each abutment to elevations just below MLLW, ending just above +10 feet MLLW at the north LWI and just below +9 feet MLLW at the south LWI. The riprap would be covered with the excavated beach material.

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Observation Posts
Observation posts would be constructed on the beach adjacent to the abutment for both the north and south LWI. A temporary pile-supported trestle would be constructed to allow equipment to access the location without operating on the beach. Each temporary trestle would be supported by ten 24-inch steel piles. The observation posts would be constructed of cast-in-place concrete and would each be supported by sixteen 24-inch steel piles. A total of up to 11 cubic yards of concrete will be poured into the steel piles. Each observation post would include a cast-in-place concrete stairway to access the bluff.

The existing observation post on Marginal Wharf would also be replaced. The existing observation post would be removed via truck (not demolished on Marginal Wharf). The replacement observation post would be constructed off-site, trucked to Marginal Wharf, and set in place with a crane. Electrical utilities would then be connected to the new structure.

Landside Fence System
The existing landside fence system consists of a double fence, a vehicle barrier, patrol road, lighting, and security sensors. The fence would be extended through uplands to reach the abutments. The north fence would be extended 30 feet and the south fence would be extended 15 feet.

Schedule
Upland construction would take approximately 540 days. All in-water work would take place in one in-water work session, July 15 to January 15 of the year of in-water construction. Materials and equipment for in-water work would be brought in by barge.

MITIGATION: The U.S. Navy proposes to purchase credits for all direct, indirect, temporary and cumulative impacts from the Hood Canal Coordinating Council In-Lieu Fee Program.

DREDGED MATERIAL MANAGEMENT PROGRAM (DMMP): The DMMP, a multi-agency program for the evaluation of dredged material in Washington State, is reviewing the proposed project. Prior to completing their review, the proposed dredged material may be tested according to the procedures specified by the DMMP. This may include both chemical and biological testing of sediments. If sediment is tested, the data would be made available at the Corps, Seattle District, Dredged Material Management Office.

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. Navy, as the lead agency for ESA consultation, consulted with the NMFS and the USFWS as required under Section 7 of the ESA.

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 U.S. Navy, as the lead agency for a determination regarding EFH, consulted with the NMFS.

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

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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 – CORPS: 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 Corps 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.

The described discharge will be evaluated for compliance with guidelines promulgated by the Environmental Protection Agency under authority of Section 404(b)(1) of the CWA. These guidelines require an alternatives analysis for any proposed discharge of dredged or fill material into waters of the United States.

SOURCE OF FILL MATERIAL: The applicant has not yet identified the source of the fill material. Should a permit be issued, the Corps will evaluate the fill material source prior to the start of construction.

EVALUATION – ECOLOGY: Ecology is soliciting comments from the public; Federal, Native American Nations or tribal governments, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Ecology will be considering all comments to determine whether to certify or deny certification for the proposed project.

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. 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 whether conventional mail or e-mail must reach this office, no later than the expiration date of this public notice to ensure consideration.

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.

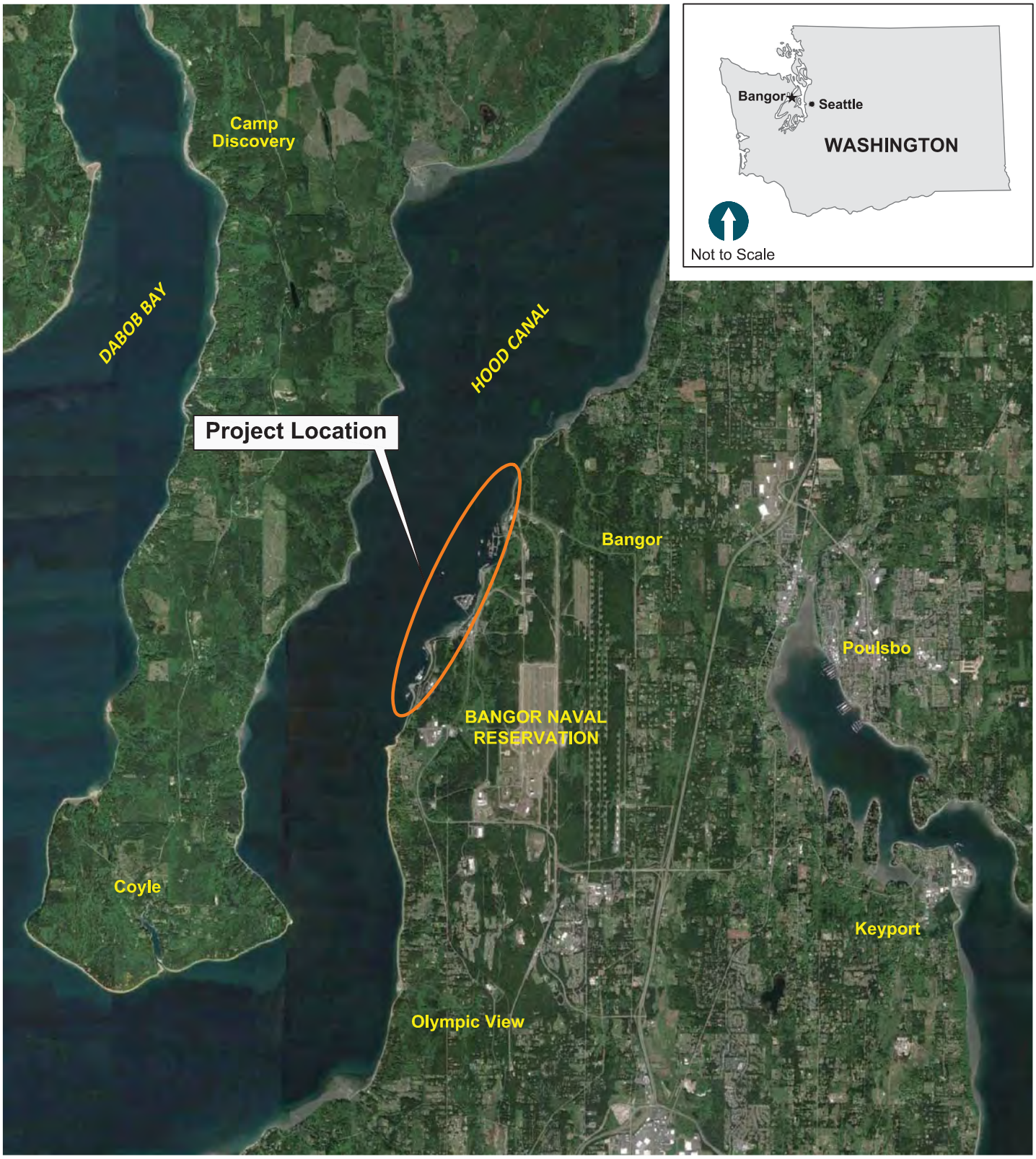
NWS-2013-243, U.S. Navy (Bangor) Land Water Interface

CORPS COMMENTS: All e-mail comments should be sent to brian.d.hooper@usace.army.mil. Conventional mail comments should be sent to: U.S. Army Corps of Engineers, Regulatory Branch, Attention: Mr. Brian Hooper, P.O. Box 3755, Seattle, Washington 98124-3755. 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.

ECOLOGY COMMENTS: Any person desiring to present views on the project pertaining to a request for water quality certification under Section 401 of the CWA may do so by submitting written comments to the following address: Washington State Department of Ecology, Attention: Federal Permit Coordinator, P.O. Box 47600, Olympia, Washington 98504-7600, or e-mail to ecyrefedpermits@ecy.wa.gov.

To ensure proper consideration of all comments, responders must include the following name and reference number in the text of their comments: Land Water Interface; NWS-2013-243

Encl: Figures (20)



AERIAL SOURCE: Google Earth Pro, 04-2015

0 1.5
Scale in Miles

VICINITY MAP

PURPOSE: TO ENHANCED SECURITY WITHIN THE WRA AND COMPLY WITH SECURITY REQUIREMENTS

DATUM: MLLW 0.0'
North LWI: 47.75746N lat./-122.72059W long
South LWI: 47.73824N lat./-122.73263W long

SITE LOCATION ADDRESS:
1103 HUNLEY ROAD
SILVERDALE, WA 98315

NAME: P-983 WRA LAND-WATER INTERFACE PROJECT

Army Corps of Engineers
Reference Number: NWS-2013-243

ADJACENT PROPERTY OWNERS:
1 - WASHINGTON DEPARTMENT OF NATURAL RESOURCES

PROPOSED: PHYSICAL BARRIER SECURITY IMPROVEMENTS

IN: NAVAL BASE KITSAP BANGOR
NEAR/AT: SILVERDALE
COUNTY OF: KITSAP
STATE: WASHINGTON

DATE: JULY 2016

ANCHOR QEA
720 Olive Way, Suite 1900
Seattle, WA 98101
206-287-9130

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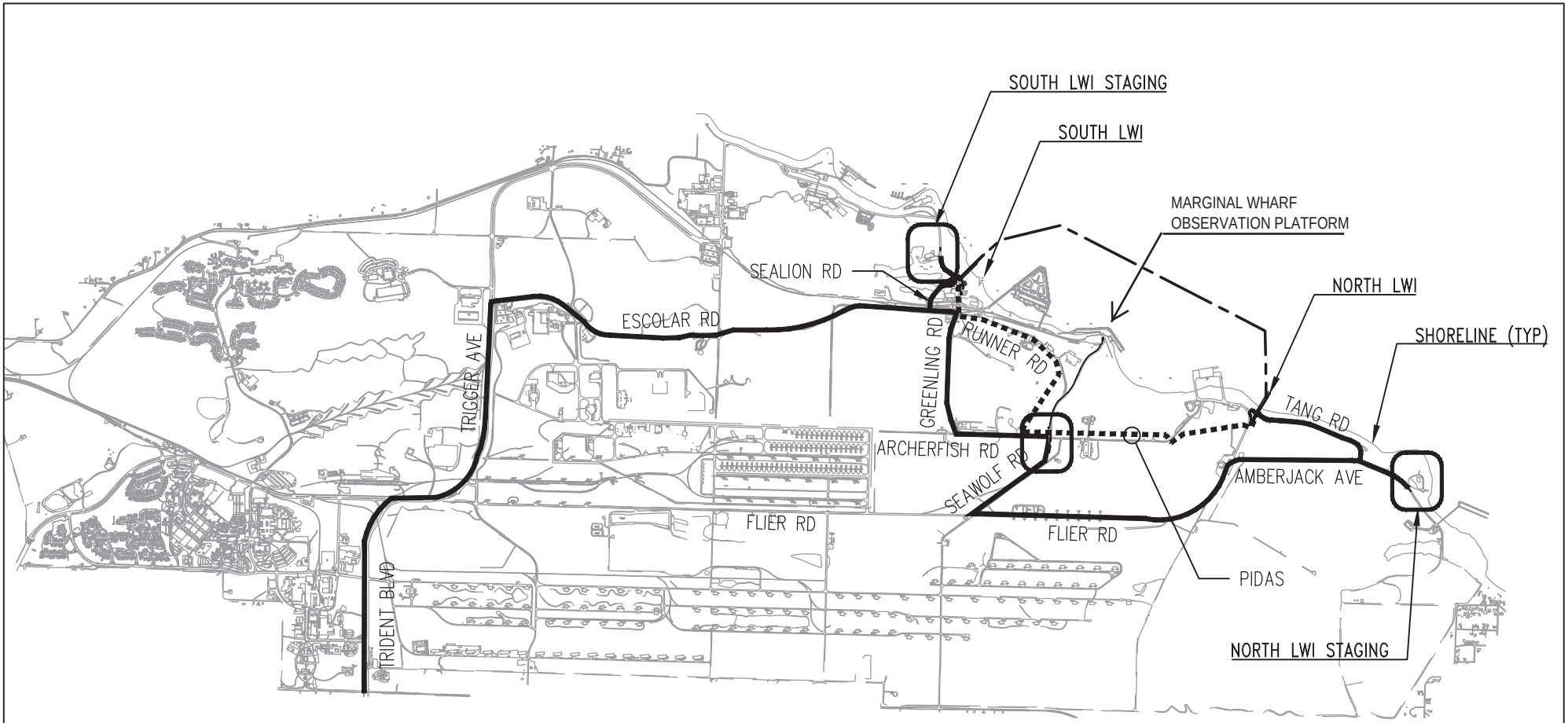

0 3,500
Scale in Feet

SOURCE: Drawing prepared from CAD file provided by KPFF titled "General Construction Laydown" dated 04-2016.

SITE PLAN

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206-287-9130

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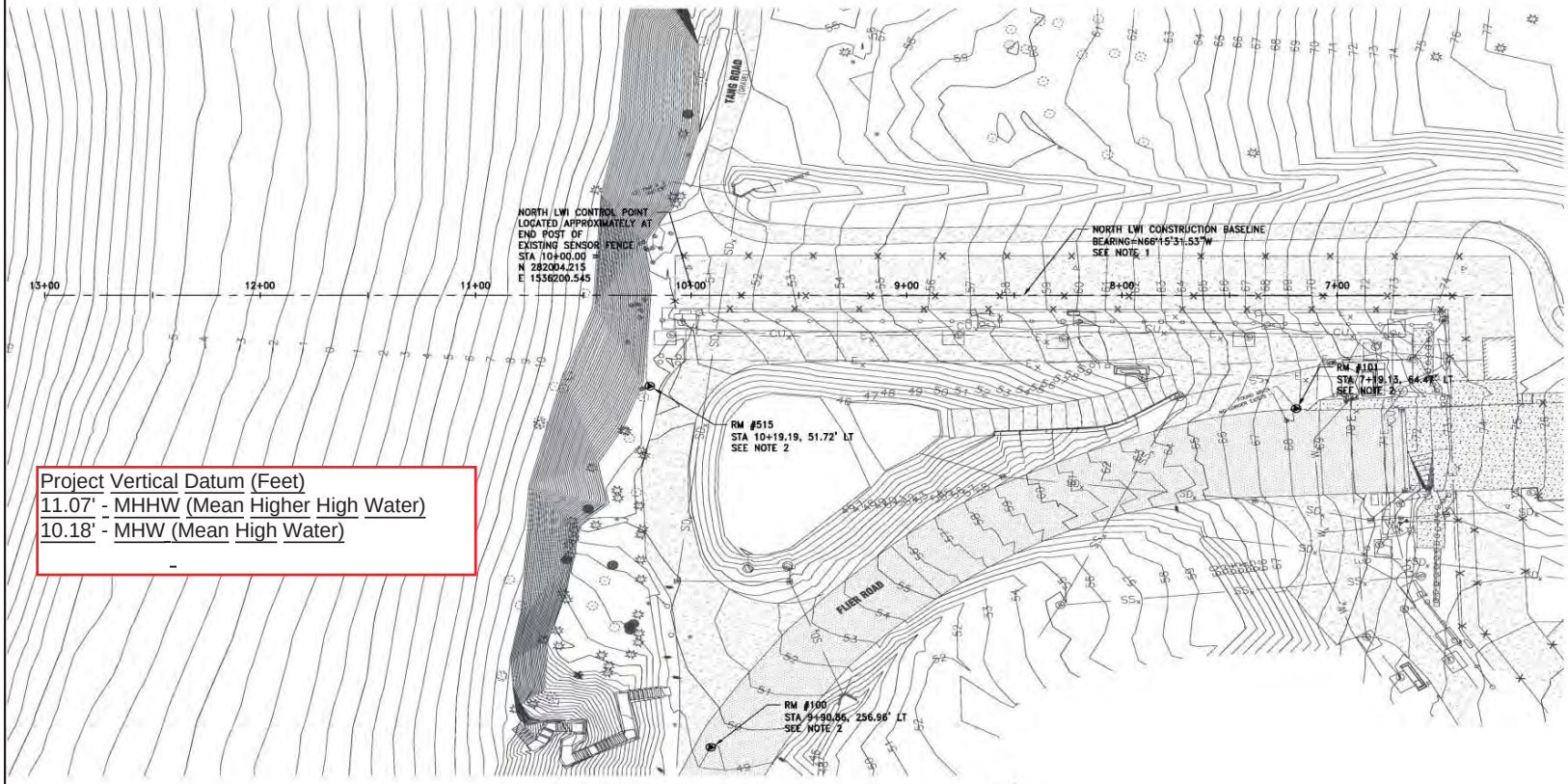

North LWI Existing Conditions

SCALE: 1"=30'

PURPOSE: TO ENHANCE SECURITY WITHIN THE WRA AND COMPY WITH SECURITY REQUIREMENTS

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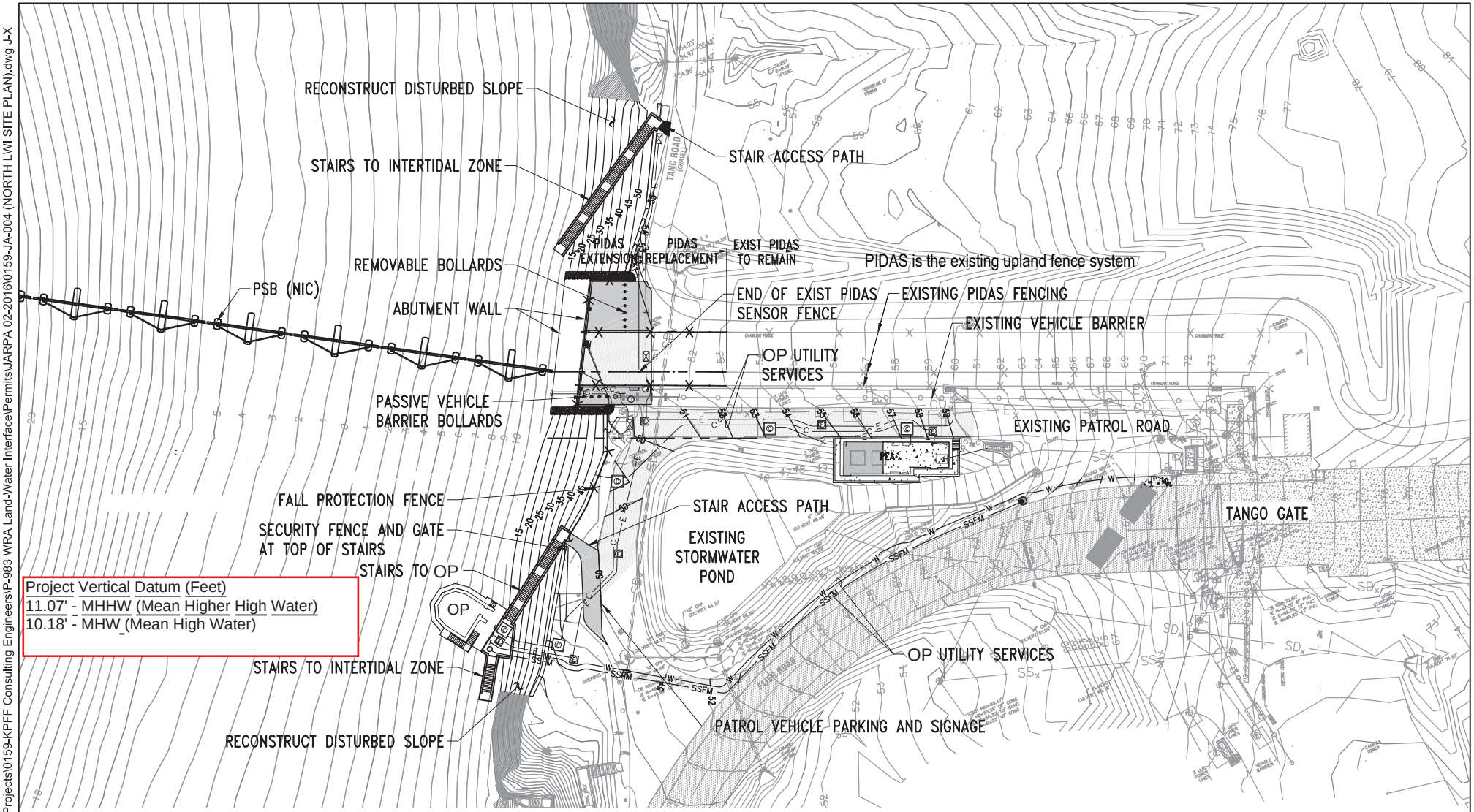

SOURCE: Drawing prepared from CAD file provided by KPFF titled "North LWI General Site Plan" dated 04-2016.

North LWI Construction Plan View (Proposed)

0 80
Scale in Feet

PURPOSE: TO ENHANCED SECURITY WITHIN THE WRA AND COMPLY WITH SECURITY REQUIREMENTS

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STATE: WASHINGTON

DATE: JULY 2016

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720 Olive Way, Suite 1900
Seattle, WA 98101
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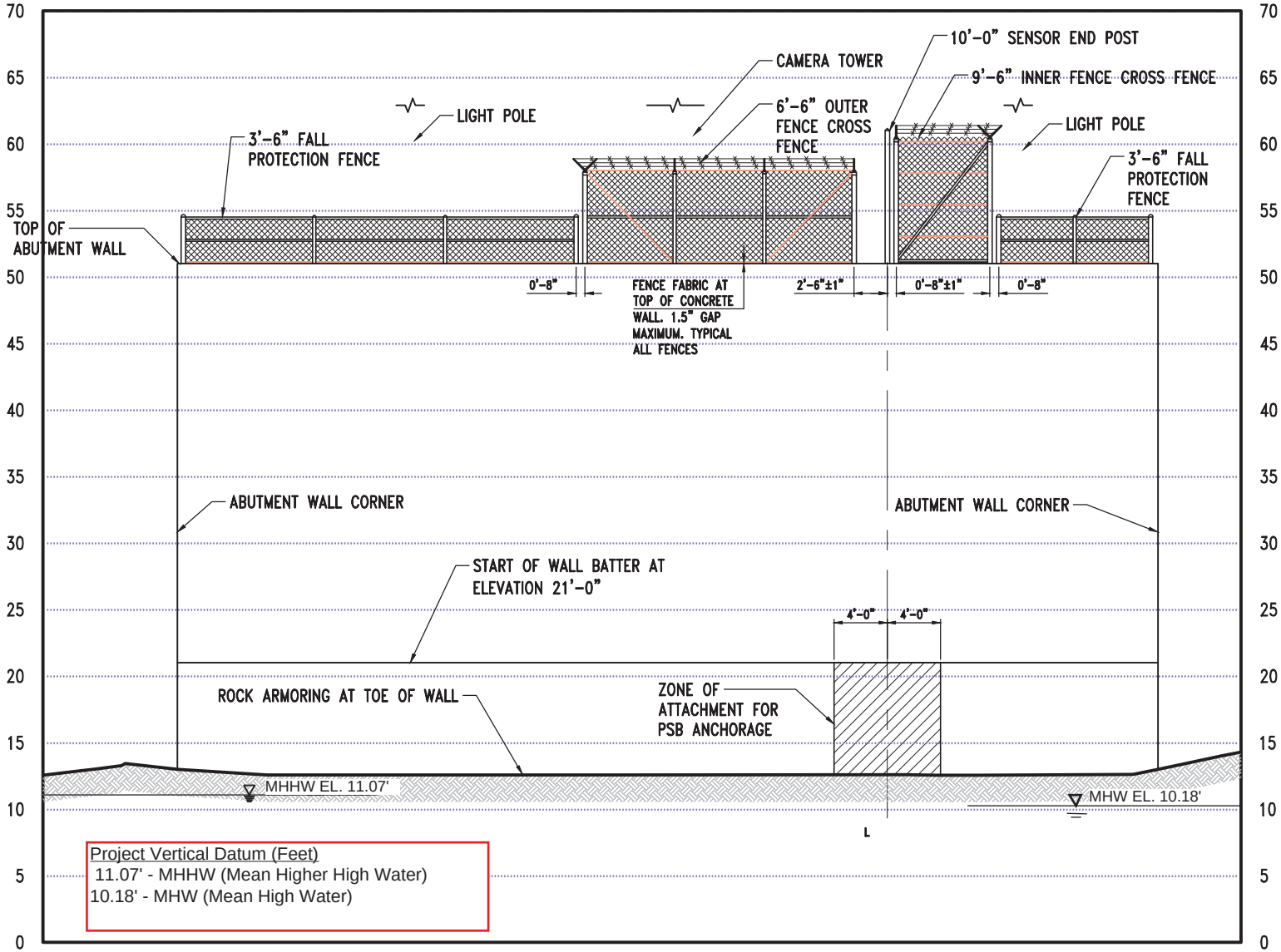

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Scale in Feet

SOURCE: Drawing prepared from CAD file provided by KPFF titled "North LWI Wall Elevations" dated 04-2016.

NORTH LWI WALL - VIEW FROM BEACH FACING EAST

PURPOSE: TO ENHANCED SECURITY WITHIN THE WRA AND COMPLY WITH SECURITY REQUIREMENTS

DATUM: MLLW 0.0'
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206-287-9130

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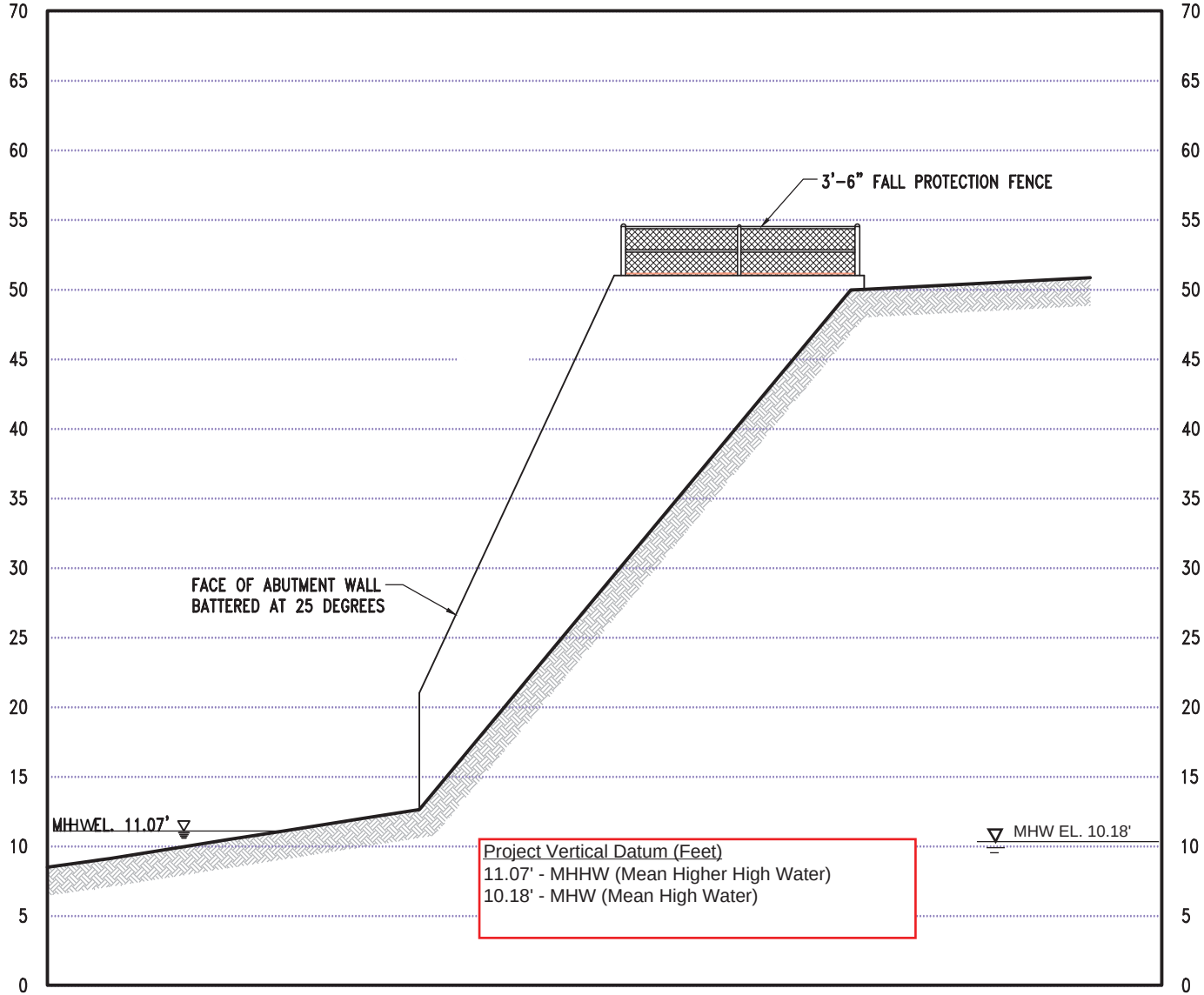

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Scale in Feet

SOURCE: Drawing prepared from CAD file provided by KPFF titled "North LWI Wall Elevations" dated 04-2016.

NORTH LWI WALL - SIDE VIEW FACING NORTH

PURPOSE: TO ENHANCED SECURITY WITHIN THE WRA AND COMPLY WITH SECURITY REQUIREMENTS

DATUM: MLLW 0.0'
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NEAR/AT: SILVERDALE
COUNTY OF: KITSAP
STATE: WASHINGTON

DATE: APRIL 2016

ANCHOR QEA
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Seattle, WA 98101
206-287-9130

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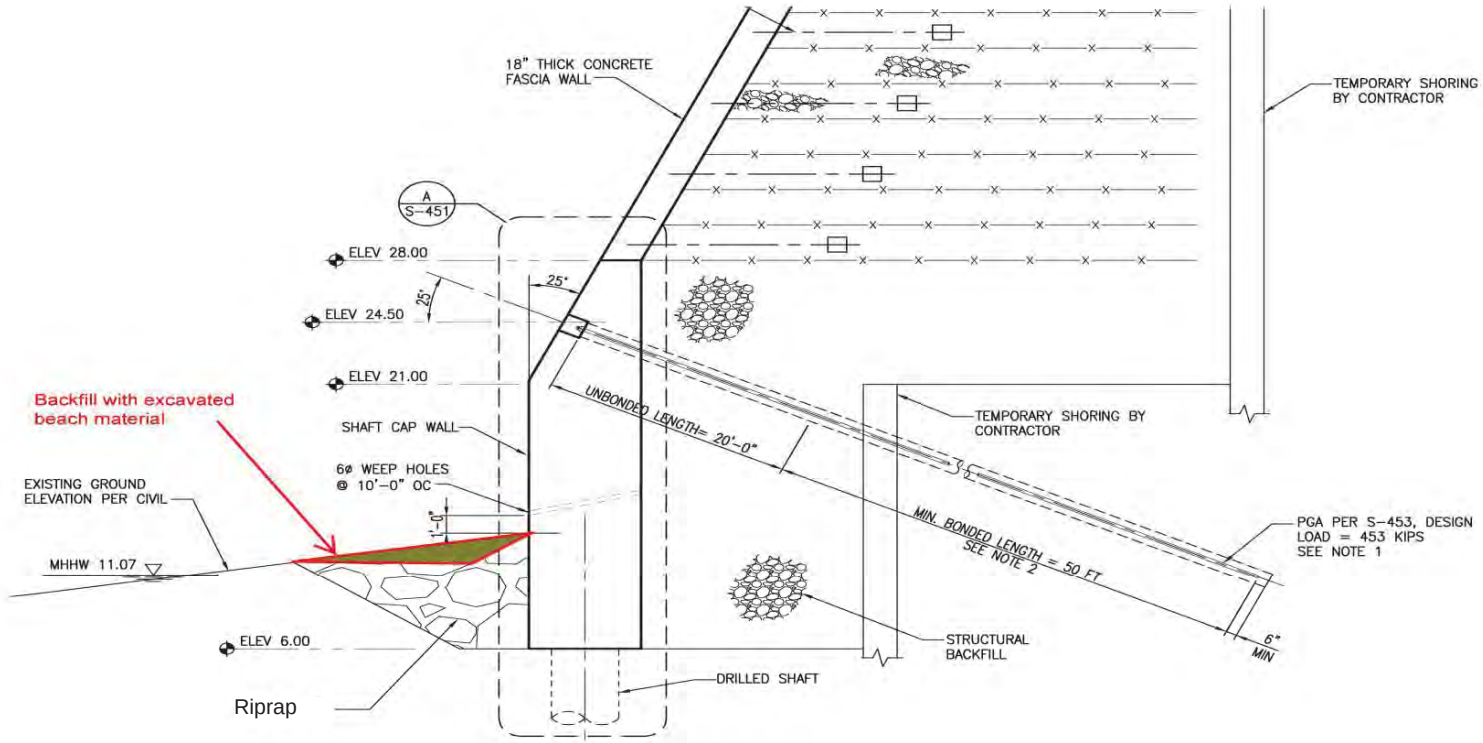

NORTH LWI WALL - SIDE VIEW FACING NORTH

Project Vertical Datum (Feet)
11.07' - MHHW (Mean Higher High Water)
10.18' - MHW (Mean High Water)

Fill below MHHW = 3 CY (includes area at north stairs)

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COUNTY OF: KITSAP
STATE: WASHINGTON

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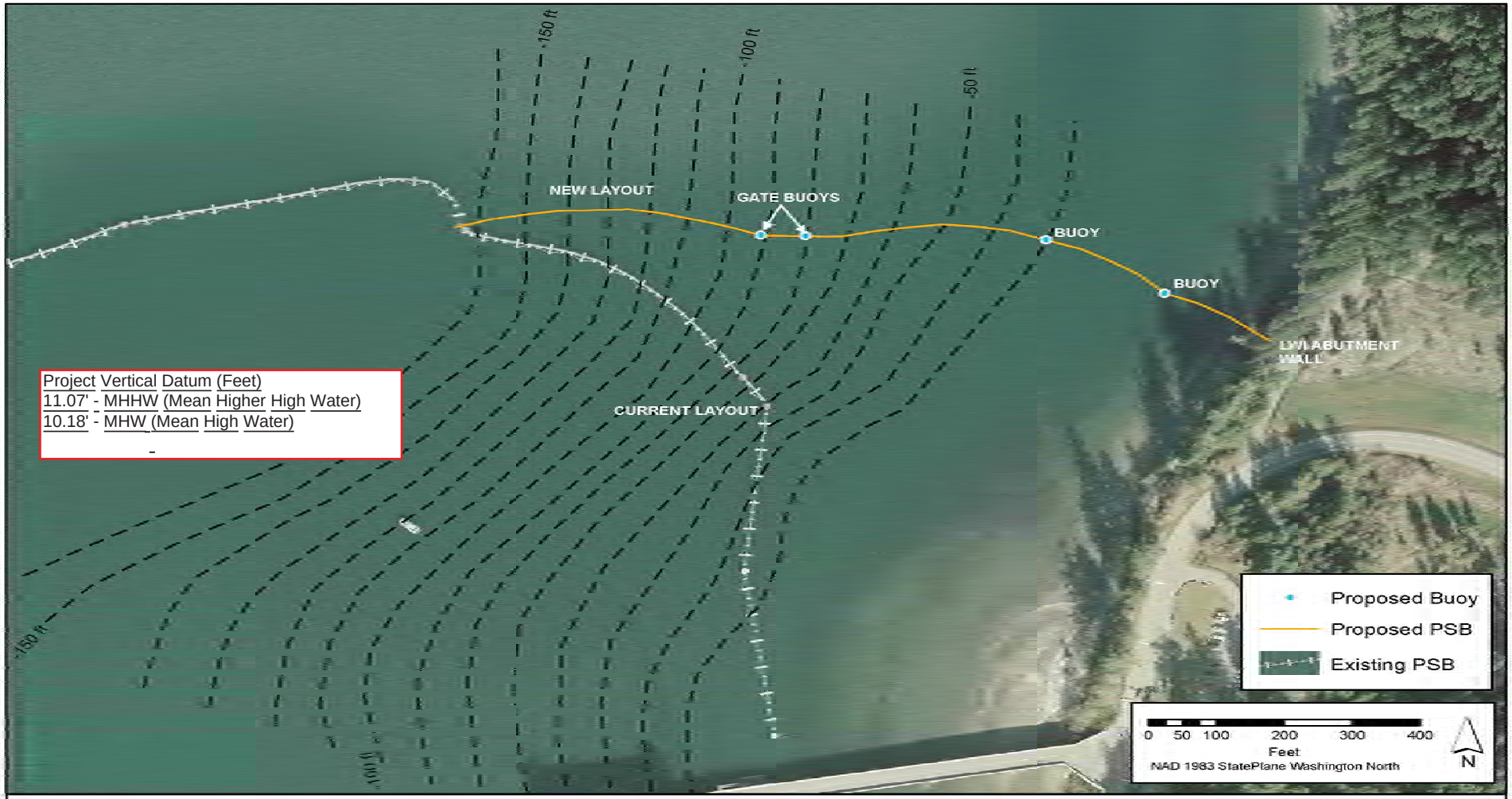
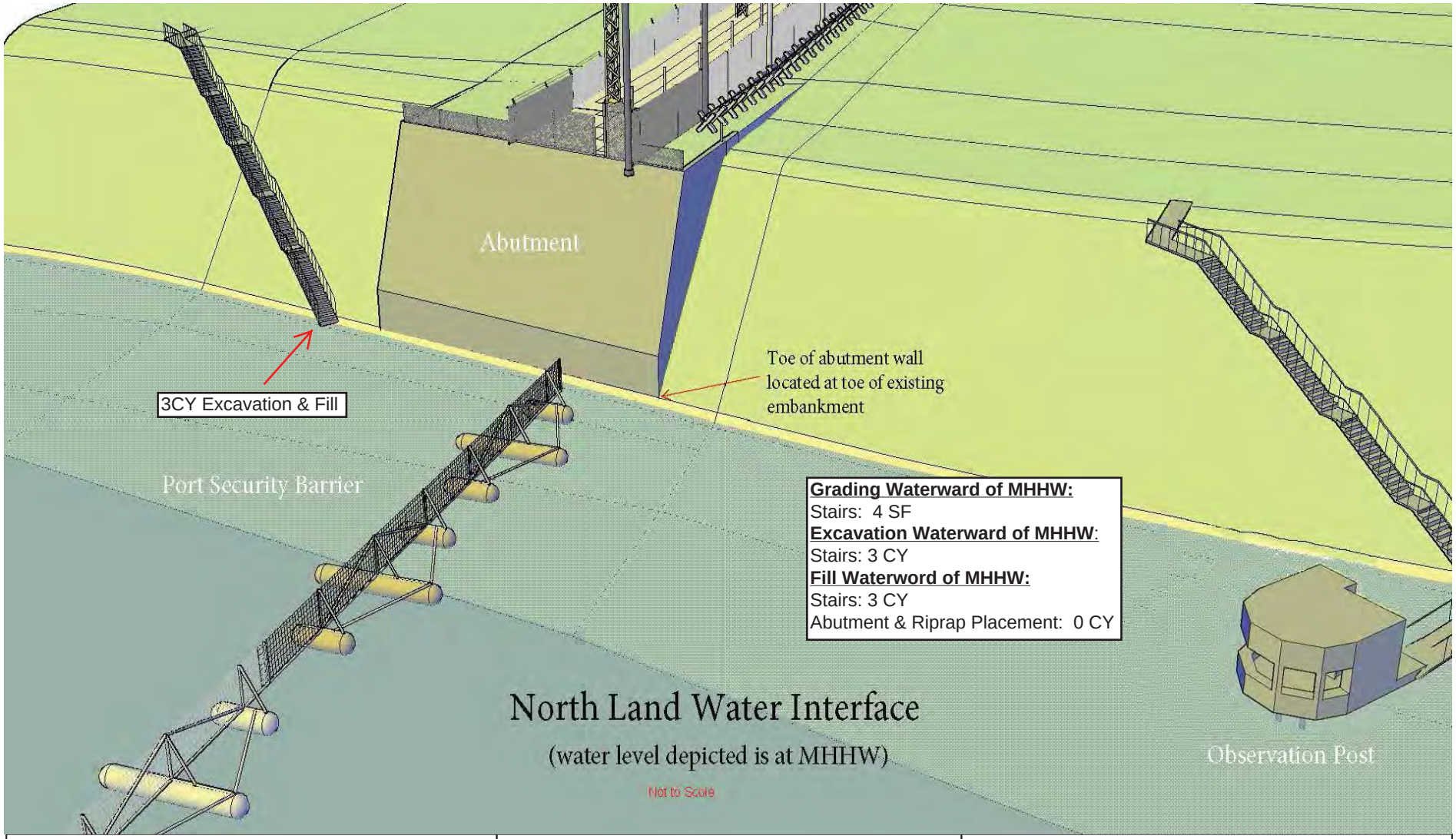


North LWI Port Security Barrier Plan View

PURPOSE: TO ENHANCE SECURITY WITHIN THE WRA AND COMPY WITH SECURITY REQUIREMENTS DATUM: MLLW 0.0' North LWI: 47.75746M lat/-122.72059W long South LWI: 47.73824N/-122.73263W long **SITE LOCATION ADDRESS:** **1103 HUNLEY ROAD** **SILVERDALE, WA 98315**	**NAME: P-983 LAND-WATER INTERFACE PROJECT** Army Corps of Engineers Reference Number: NWS-2013-243 **ADJACENT PROPERTY OWNERS:** **1- WASHINGTON DEPARTMENT OF NATURAL RESOURCES**	**PROPOSED PHYSICAL BARRIER SECURITY IMPROVEMENTS** **IN: NAVAL BASE KITSAP BANGOR** **NEAREST: SILVERDALE** **COUNTY OF: KITSAP** **STATE: WASHINGTON** **DATE: JULY 2016** **SHEET: 8 OF 20**



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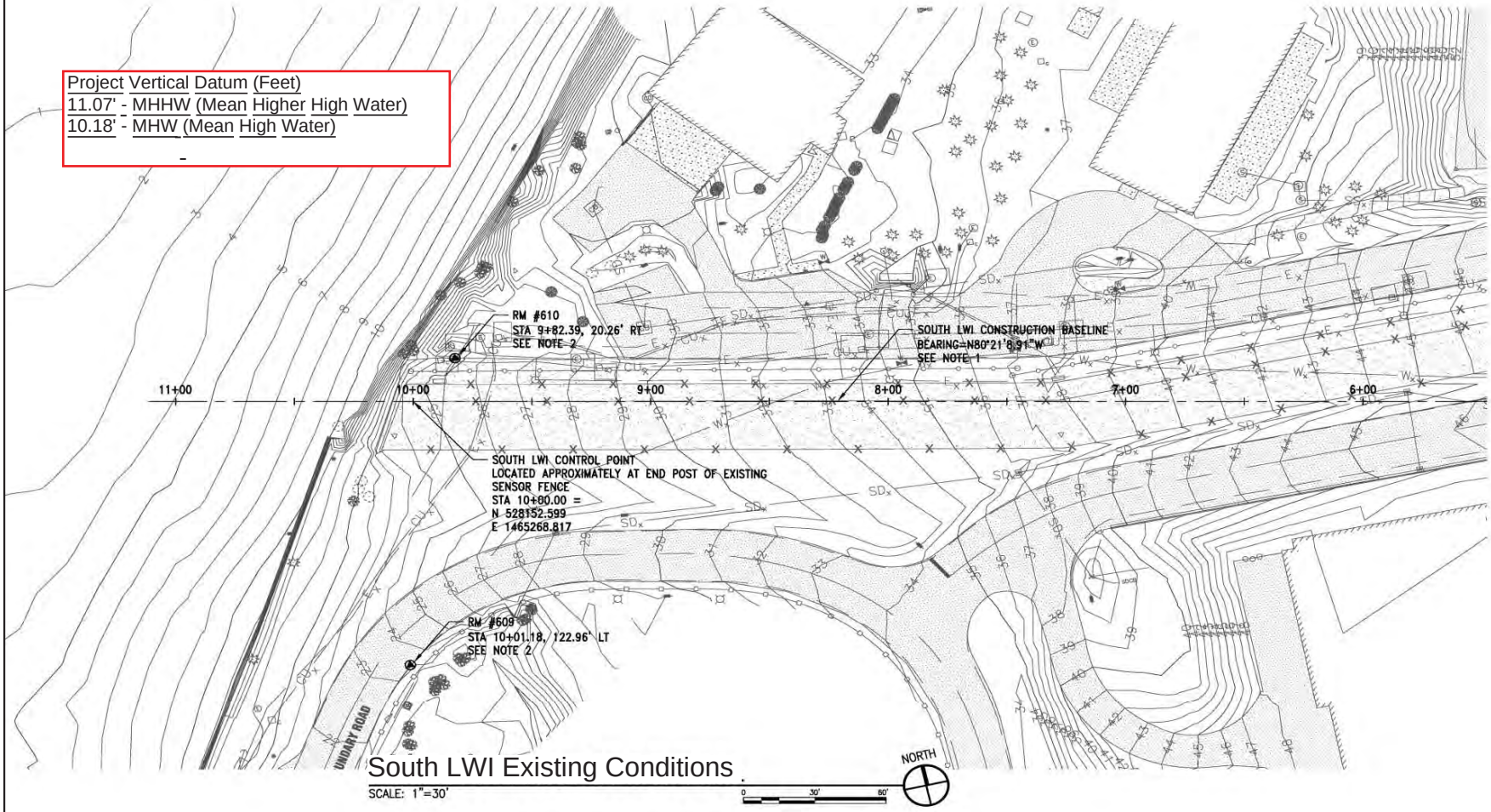

South LWI Existing Conditions

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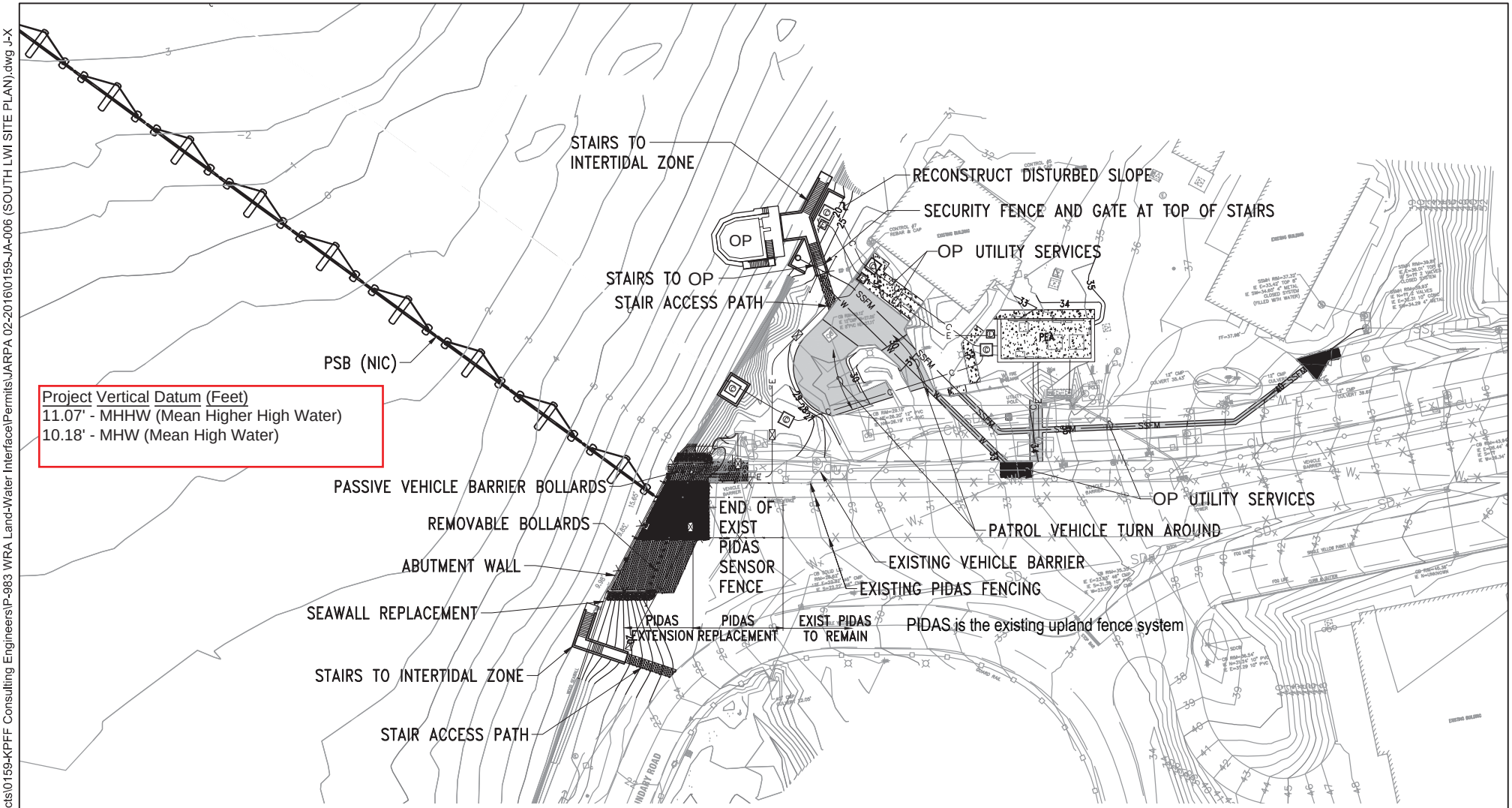
STATE: WASHINGTON

DATE: JULY 2016



South LWI Construction Plan View (Proposed)

0 80
Scale in Feet

SOURCE: Drawing prepared from CAD file provided by KPFF titled "South LWI General Site Plan" dated 04-2016.

PURPOSE: TO ENHANCED SECURITY WITHIN THE WRA AND COMPLY WITH SECURITY REQUIREMENTS

DATUM: MLLW 0.0'
North LWI: 47.75746N lat./-122.72059W long
South LWI: 47.73824N lat./-122.73263W long

SITE LOCATION ADDRESS:
1103 HUNLEY ROAD
SILVERDALE, WA 98315

NAME: P-983 WRA LAND-WATER INTERFACE PROJECT

Army Corps of Engineers
Reference Number: NWS-2013-243

ADJACENT PROPERTY OWNERS:
1 - WASHINGTON DEPARTMENT OF NATURAL RESOURCES

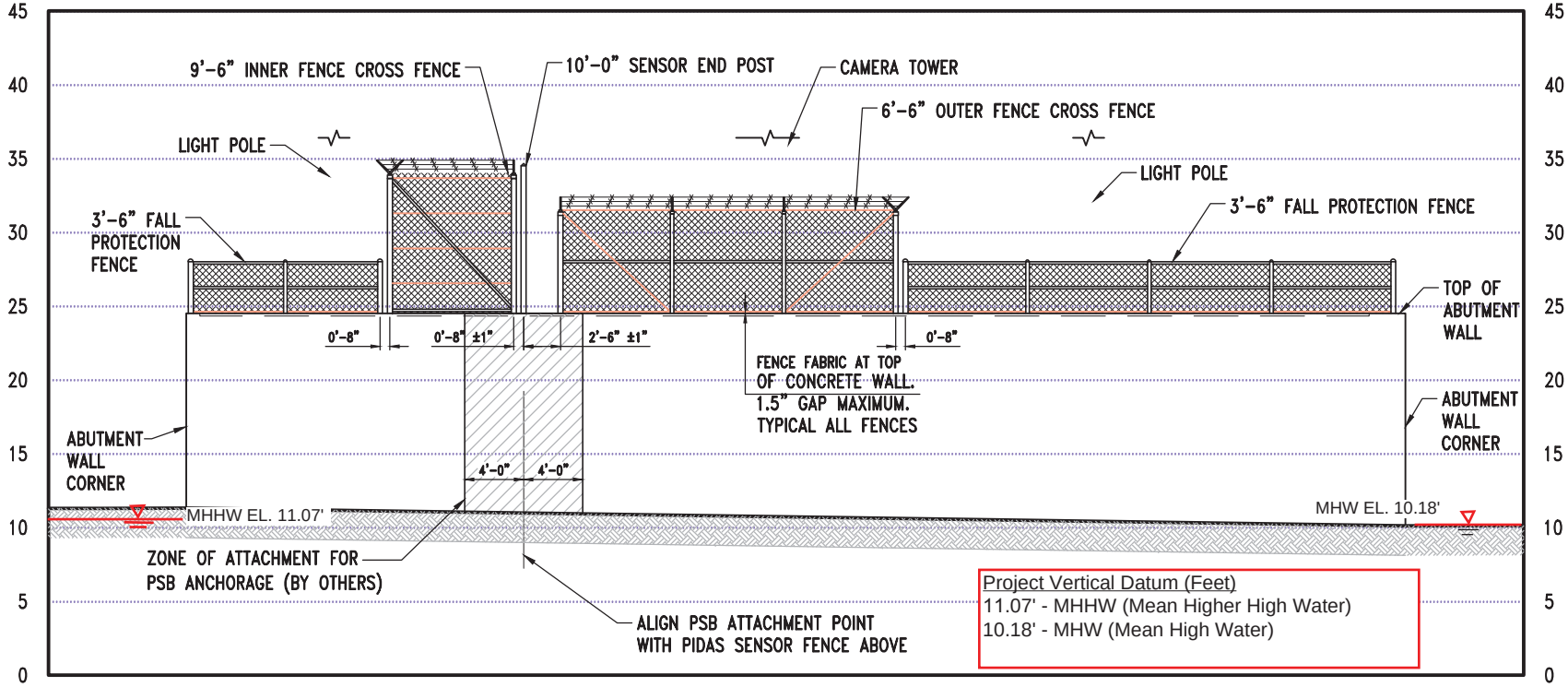
PROPOSED: PHYSICAL BARRIER SECURITY IMPROVEMENTS

IN: NAVAL BASE KITSAP BANGOR
NEAR/AT: SILVERDALE
COUNTY OF: KITSAP
STATE: WASHINGTON

DATE: JULY 2016

ANCHOR QEA
720 Olive Way, Suite 1900
Seattle, WA 98101
206-287-9130

Apr 11, 2016 10:45am chewett T:\CAD\Projects\0159-KPFF Consulting Engineers\P-983 WRA Land-Water Interface\Permits\JARPA 02-2016\0159-JA-006 (SOUTH LWI SITE PLAN).dwg J-X



SOURCE: Drawing prepared from CAD file provided by KPFF titled "South LWI Wall Elevations" dated 04-2016.

SOUTH LWI - VIEW FROM BEACH FACING EAST

0 12
Scale in Feet

PURPOSE: TO ENHANCED SECURITY WITHIN THE WRA AND COMPLY WITH SECURITY REQUIREMENTS

DATUM: MLLW 0.0'
North LWI: 47.75746N lat./-122.72059W long
South LWI: 47.73824N lat./-122.73263W long

SITE LOCATION ADDRESS:
1103 HUNLEY ROAD
SILVERDALE, WA 98315

NAME: P-983 WRA LAND-WATER INTERFACE PROJECT

Army Corps of Engineers
Reference Number: NWS-2013-243

ADJACENT PROPERTY OWNERS:
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PROPOSED: PHYSICAL BARRIER SECURITY IMPROVEMENTS

IN: NAVAL BASE KITSAP BANGOR
NEAR/AT: SILVERDALE
COUNTY OF: KITSAP
STATE: WASHINGTON

DATE: JULY 2016

ANCHOR QEA
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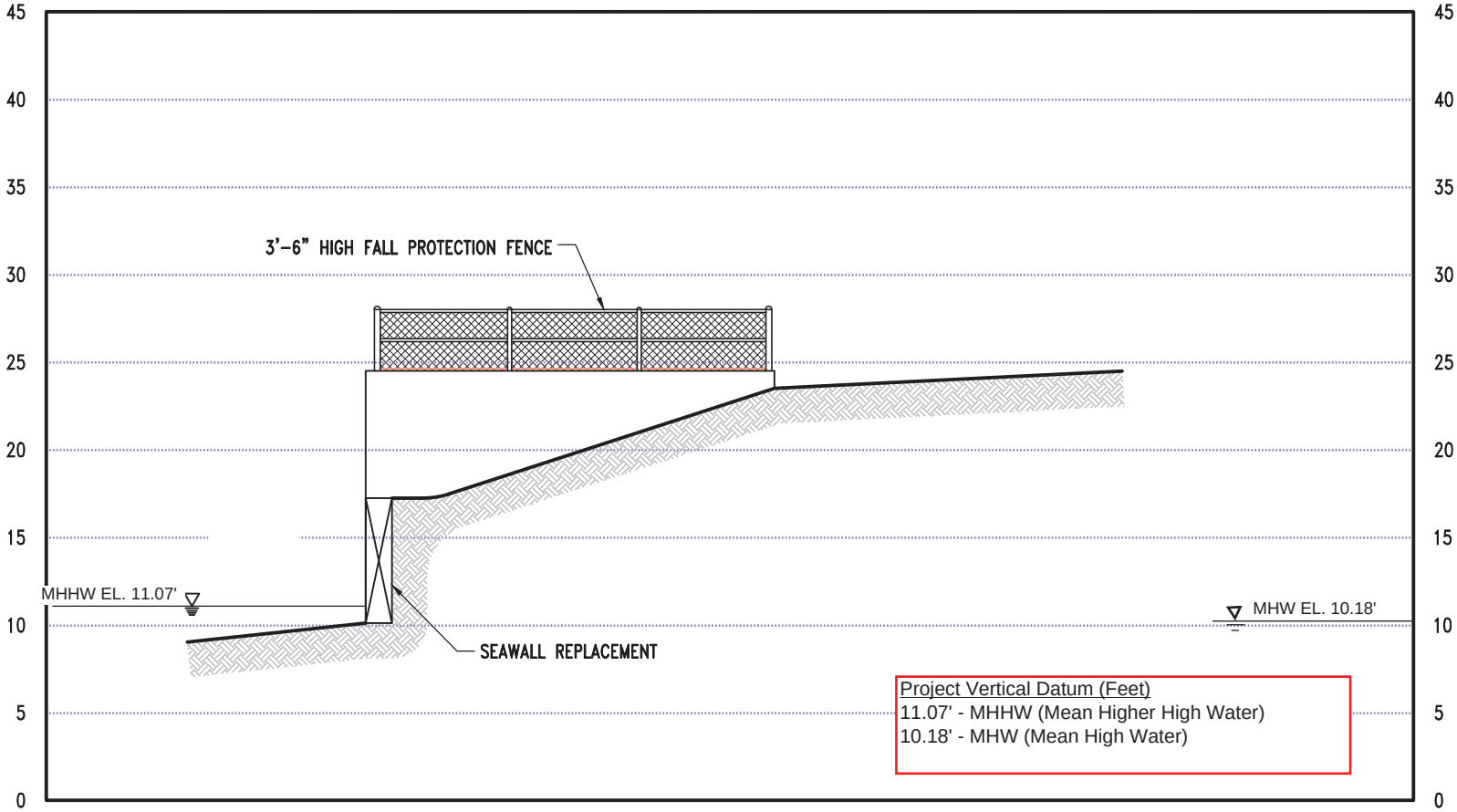
Seattle, WA 98101
206-287-9130

T:\CAD\Projects\0159-KPFF Consulting Engineers\P-983 WRA Land-Water Interface\Permits\JARPA 02-2016\0159-JA-005 (SOUTH LWI).dwg WEST
Apr 11, 2016 10:45am chewett



0 10
Scale in Feet

SOURCE: Drawing prepared from CAD file provided by KPFF titled "South LWI Wall Elevations" dated 04-2016.

SOUTH LWI - SIDE VIEW FACING NORTH

PURPOSE: TO ENHANCED SECURITY WITHIN THE WRA AND COMPLY WITH SECURITY REQUIREMENTS

DATUM: MLLW 0.0'
North LWI: 47.75746N lat./-122.72059W long
South LWI: 47.73824N lat./-122.73263W long

SITE LOCATION ADDRESS:
1103 HUNLEY ROAD
SILVERDALE, WA 98315

NAME: P-983 WRA LAND-WATER INTERFACE PROJECT

Army Corps of Engineers
Reference Number: NWS-2013-243

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PROPOSED: PHYSICAL BARRIER SECURITY IMPROVEMENTS

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NEAR/AT: SILVERDALE
COUNTY OF: KITSAP
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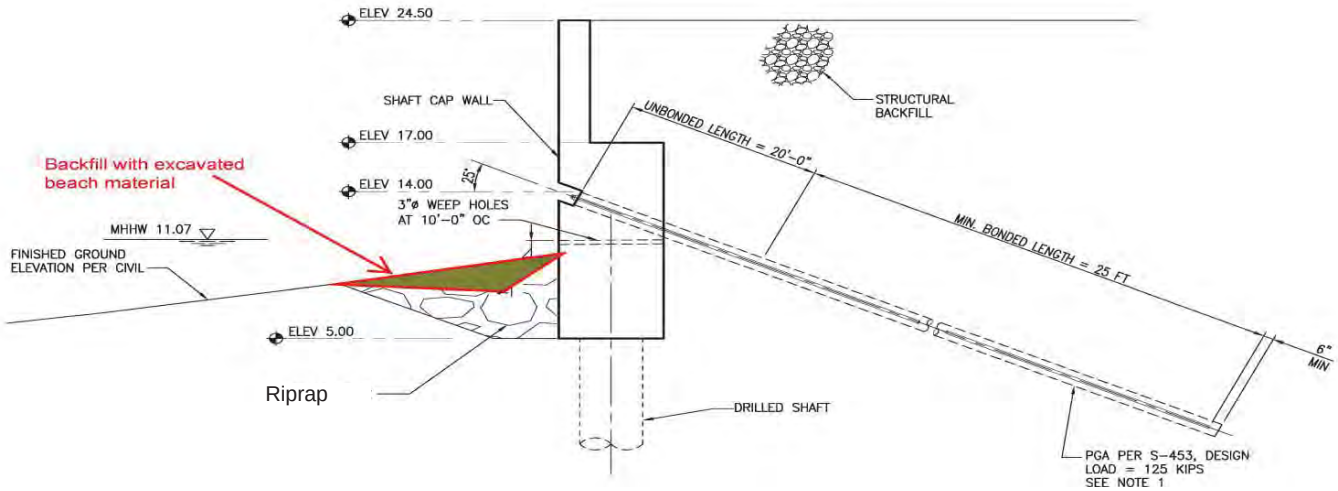
DATE: JULY 2016

ANCHOR QEA
720 Olive Way, Suite 1900
Seattle, WA 98101
206-287-9130

Apr 11, 2016 10:45am chewett T:\CAD\Projects\0159-KPFF Consulting Engineers\P-983 WRA Land-Water Interface\Permits\JARPA 02-2016\0159-JA-005 (SOUTH LWI).dwg SOUTH



SOUTH LWI WALL - SIDE VIEW FACING NORTH

Project Vertical Datum (Feet)
11.07' - MHHW (Mean Higher High Water)
10.18' - MHW (Mean High Water)

Fill below MHHW = 1,629 CY (includes area at abutment and stairs)

PURPOSE: TO ENHANCE SECURITY WITHIN THE WRA AND COMPY WITH SECURITY REQUIREMENTS

DATUM: MLLW 0.0'
North LWI: 47.75746M lat/-122.72059W long
South LWI: 47.73824N/-122.73263W long

SITE LOCATION ADDRESS:
1103 HUNLEY ROAD
SILVERDALE, WA 98315

NAME: P-983 LAND-WATER INTERFACE PROJECT

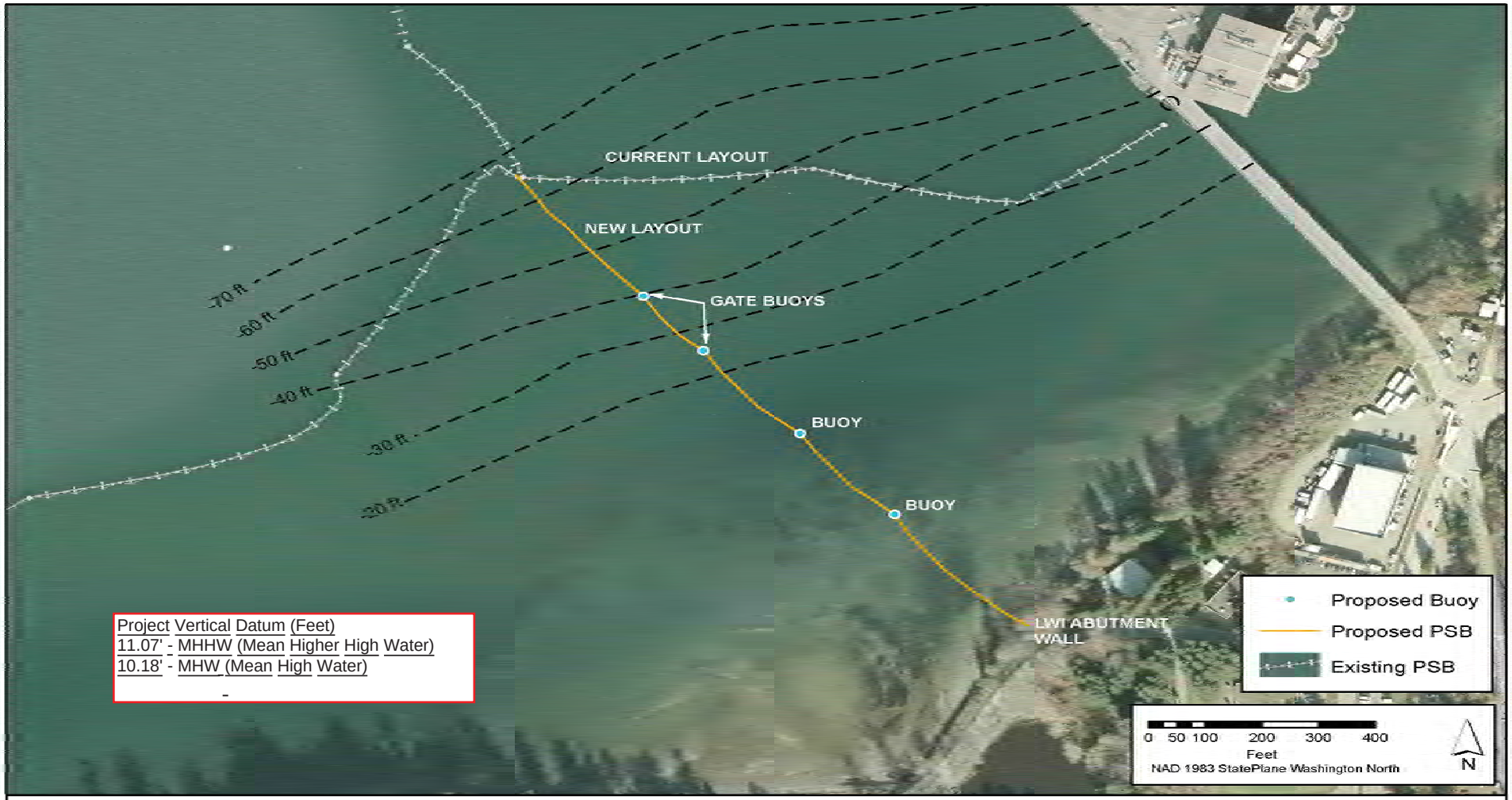
Army Corps of Engineers
Reference Number: NWS-2013-243

ADJACENT PROPERTY OWNERS:
1- WASHINGTON DEPARTMENT OF NATURAL RESOURCES

PROPOSED PHYSICAL BARRIER SECURITY IMPROVEMENTS

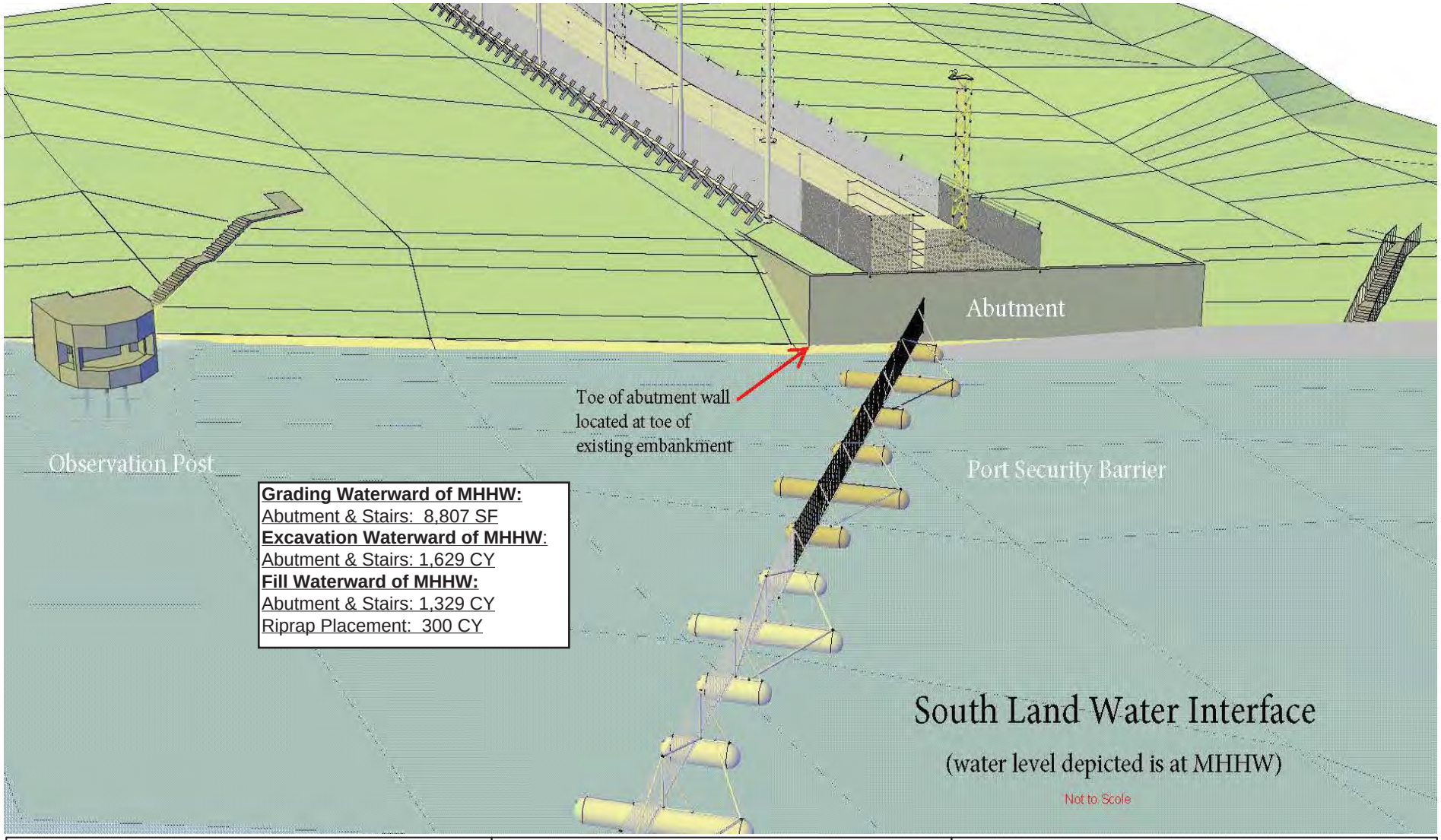
IN: NAVAL BASE KITSAP BANGOR
NEAREST: SILVERDALE
COUNTY OF: KITSAP
STATE: WASHINGTON

DATE: JULY 2016



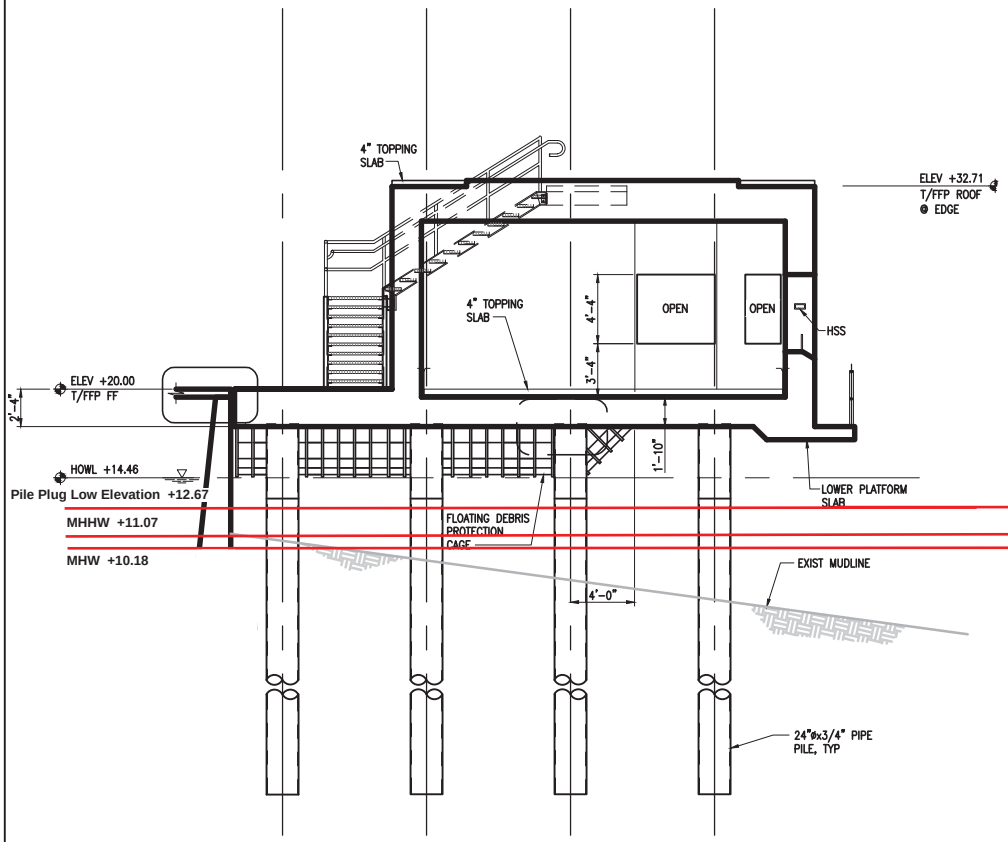
South LWI Port Security Barrier Plan View

PURPOSE: TO ENHANCE SECURITY WITHIN THE WRA AND COMPY WITH SECURITY REQUIREMENTS DATUM: MLLW 0.0' North LWI: 47.75746M lat/-122.72059W long South LWI: 47.73824N/-122.73263W long **SITE LOCATION ADDRESS:** **1103 HUNLEY ROAD** **SILVERDALE, WA 98315**	**NAME: P-983 LAND-WATER INTERFACE PROJECT** Army Corps of Engineers Reference Number: NWS-2013-243 **ADJACENT PROPERTY OWNERS:** **1- WASHINGTON DEPARTMENT OF NATURAL RESOURCES**	**PROPOSED PHYSICAL BARRIER SECURITY IMPROVEMENTS** **IN: NAVAL BASE KITSAP BANGOR** **NEAREST: SILVERDALE** **COUNTY OF: KITSAP** **STATE: WASHINGTON** **DATE: JULY 2016** **SHEET: 15 OF 20**

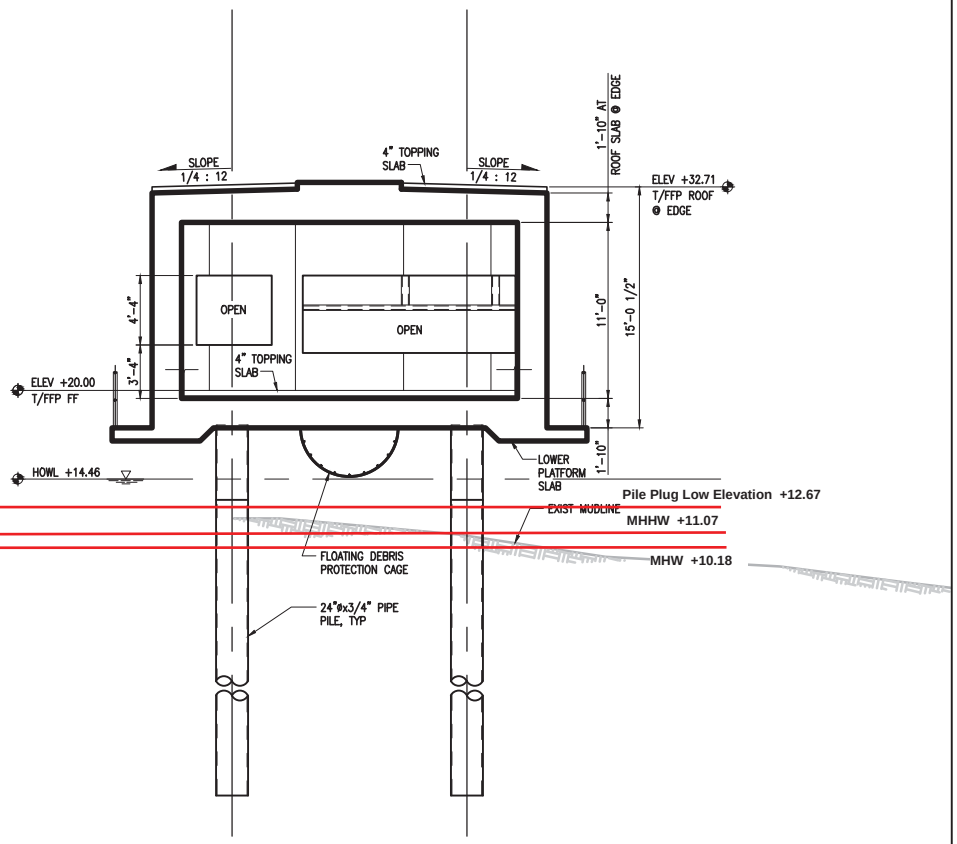


PURPOSE: TO ENHANCE SECURITY WITHIN THE WRA AND COMPY WITH SECURITY REQUIREMENTS DATUM: MLLW 0.0' North LWI: 47.75746M lat/-122.72059W long South LWI: 47.73824N/-122.73263W long **SITE LOCATION ADDRESS:** **1103 HUNLEY ROAD** **SILVERDALE, WA 98315**	**NAME: P-983 LAND-WATER INTERFACE PROJECT** Army Corps of Engineers Reference Number: NWS-2013-243 **ADJACENT PROPERTY OWNERS:** **1- WASHINGTON DEPARTMENT OF NATURAL RESOURCES**	**PROPOSED PHYSICAL BARRIER SECURITY IMPROVEMENTS** **IN: NAVAL BASE KITSAP BANGOR** **NEAREST: SILVERDALE** **COUNTY OF: KITSAP** **STATE: WASHINGTON** **DATE: JULY 2016** **SHEET: 16 OF 20**

Project Vertical Datum (Feet)
11.07' - MHHW (Mean Higher High Water)
10.18' - MHW (Mean High Water)



NORTH OBERVATION PLATFORM
(side view looking south)



NORTH OBERVATION PLATFORM
(side view looking east)

North Observation Platform Piles
8 total - 24" diameter x 3/4" steel pipe piles
All piles driven "in the dry"
No concrete plug below MHHW

0 12
Scale in Feet

SOURCE: Drawing prepared from CAD file provided by KPFF titled "North FFP Sections" dated 04-2016.

PURPOSE: TO ENHANCED SECURITY WITHIN THE WRA AND COMPLY WITH SECURITY REQUIREMENTS

DATUM: MLLW 0.0'
North LWI: 47.75746N lat./-122.72059W long
South LWI: 47.73824N lat./-122.73263W long

SITE LOCATION ADDRESS:
1103 HUNLEY ROAD
SILVERDALE, WA 98315

NAME: P-983 WRA LAND-WATER INTERFACE PROJECT

Army Corps of Engineers
Reference Number: NWS-2013-243

ADJACENT PROPERTY OWNERS:
1 - WASHINGTON DEPARTMENT OF NATURAL RESOURCES

PROPOSED: PHYSICAL BARRIER SECURITY IMPROVEMENTS

IN: NAVAL BASE KITSAP BANGOR
NEAR/AT: SILVERDALE
COUNTY OF: KITSAP
STATE: WASHINGTON

DATE: JULY 2016

ANCHOR QEA
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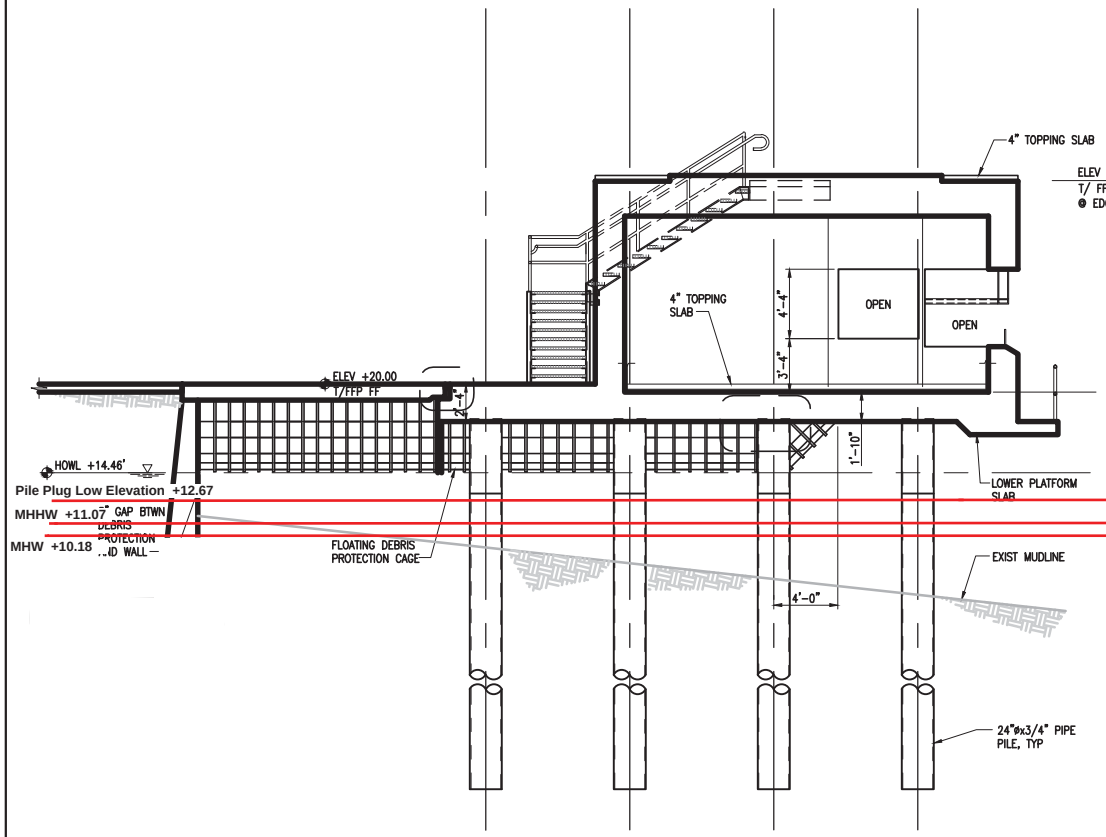
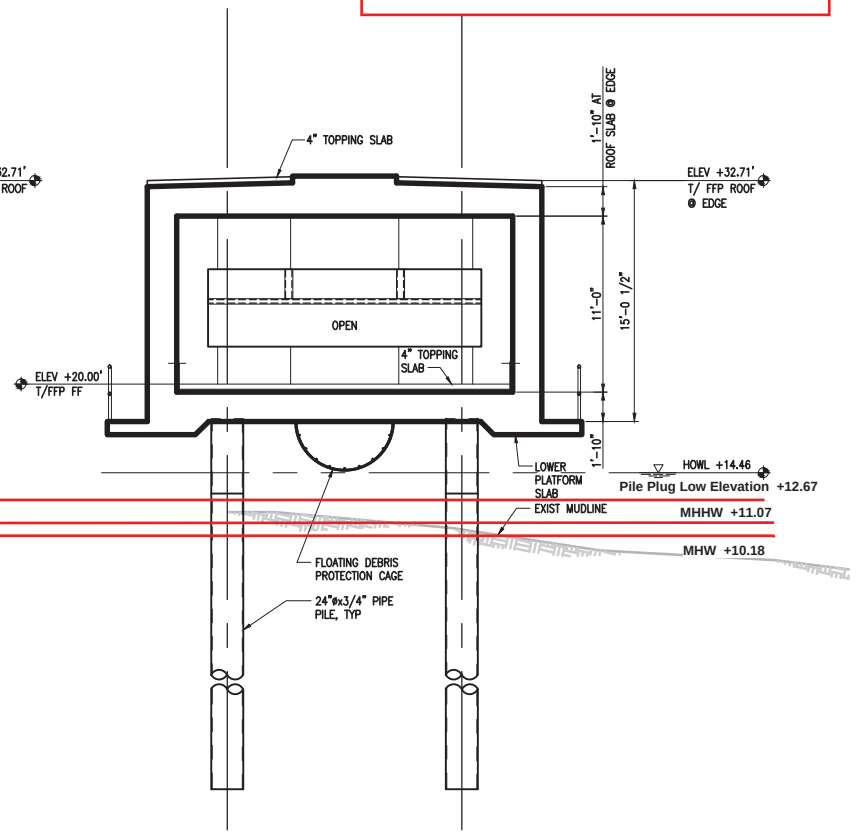
Apr 11, 2016 10:45am chewett T:\CAD\Projects\0159-KPFF Consulting Engineers\P-983 WRA Land-Water Interface\Permits\JARPA 02-2016\0159-JA-010 (NORTH FFP SECTIONS).dwg J-X

Project Vertical Datum (Feet)
11.07' - MHHW (Mean Higher High Water)
10.18' - MHW (Mean High Water)



SOUTH OBERVATION PLATFORM
(side view looking south)



SOUTH OBERVATION PLATFORM
(side view looking east)

South Observation Platform Piles
8 total - 24" diameter x 3/4" steel pipe piles
All piles driven "in the dry"
No concrete plug below MHHW

0 12
Scale in Feet

SOURCE: Drawing prepared from CAD file provided by KPFF titled "South FFP Sections" dated 04-2016.

PURPOSE: TO ENHANCED SECURITY WITHIN THE WRA AND COMPLY WITH SECURITY REQUIREMENTS

DATUM: MLLW 0.0'
North LWI: 47.75746N lat./-122.72059W long
South LWI: 47.73824N lat./-122.73263W long

SITE LOCATION ADDRESS:
1103 HUNLEY ROAD
SILVERDALE, WA 98315

NAME: P-983 WRA LAND-WATER INTERFACE PROJECT

Army Corps of Engineers
Reference Number: NWS-2013-243

ADJACENT PROPERTY OWNERS:
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IN: NAVAL BASE KITSAP BANGOR
NEAR/AT: SILVERDALE
COUNTY OF: KITSAP
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DATE: JULY 2016

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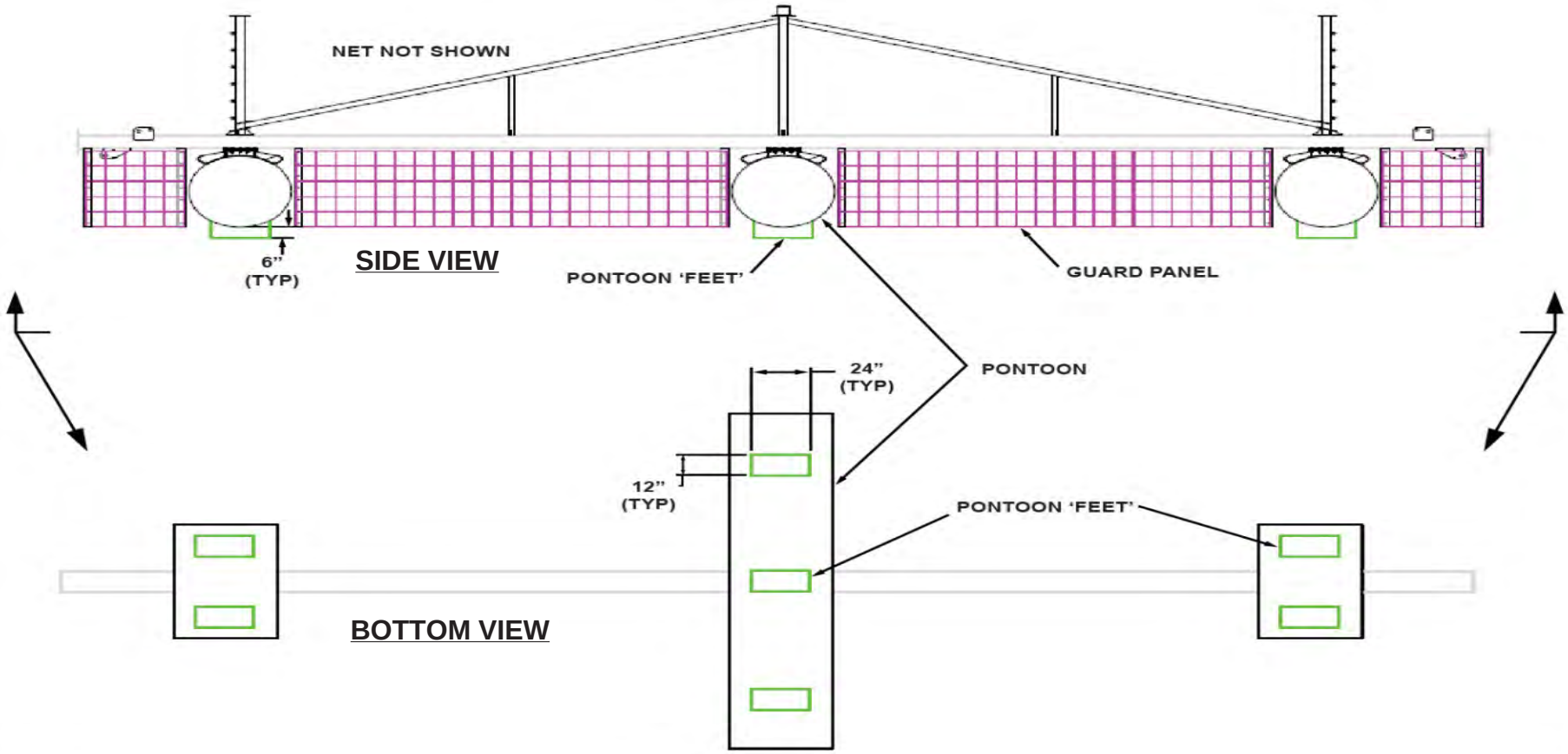
206-287-9130

Apr 11, 2016 10:45am chewett T:\CAD\Projects\0159-KPFF Consulting Engineers\P-983 WRA Land-Water Interface\Permits\JARPA 02-2016\0159-JA-011 (SOUTH FFP SECTIONS).dwg J-X



Port Security Barrier Unit

PURPOSE: TO ENHANCE SECURITY WITHIN THE WRA AND COMPY WITH SECURITY REQUIREMENTS

DATUM: MLLW 0.0'
North LWI: 47.75746M lat/-122.72059W long
South LWI: 47.73824N/-122.73263W long

SITE LOCATION ADDRESS:
1103 HUNLEY ROAD
SILVERDALE, WA 98315

NAME: P-983 LAND-WATER INTERFACE PROJECT

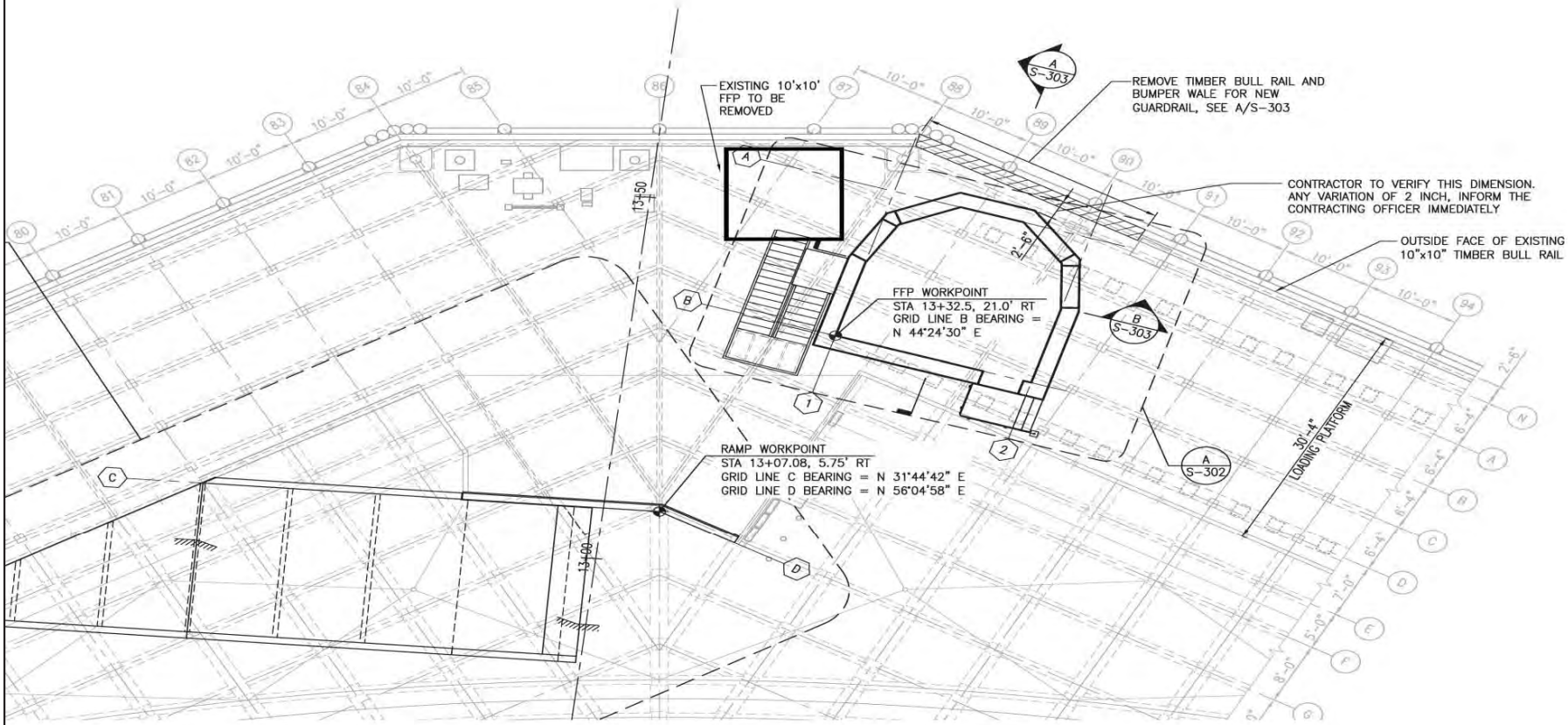
Army Corps of Engineers
Reference Number: NWS-2013-243

ADJACENT PROPERTY OWNERS:
1- WASHINGTON DEPARTMENT OF NATURAL RESOURCES

PROPOSED PHYSICAL BARRIER SECURITY IMPROVEMENTS

IN: NAVAL BASE KITSAP BANGOR
NEAREST: SILVERDALE
COUNTY OF: KITSAP
STATE: WASHINGTON

DATE: JULY 2016



Replacement of Existing Observation Platform on Marginal Wharf

PURPOSE: TO ENHANCE SECURITY WITHIN THE WRA AND COMPY WITH SECURITY REQUIREMENTS

DATUM: MLLW 0.0'
North LWI: 47.75746M lat/-122.72059W long
South LWI: 47.73824N/-122.73263W long

SITE LOCATION ADDRESS:
1103 HUNLEY ROAD
SILVERDALE, WA 98315

NAME: P-983 LAND-WATER INTERFACE PROJECT

Army Corps of Engineers
Reference Number: NWS-2013-243

ADJACENT PROPERTY OWNERS:
1- WASHINGTON DEPARTMENT OF NATURAL RESOURCES

PROPOSED PHYSICAL BARRIER SECURITY IMPROVEMENTS

IN: NAVAL BASE KITSAP BANGOR
NEAREST: SILVERDALE
COUNTY OF: KITSAP
STATE: WASHINGTON

DATE: JULY 2016