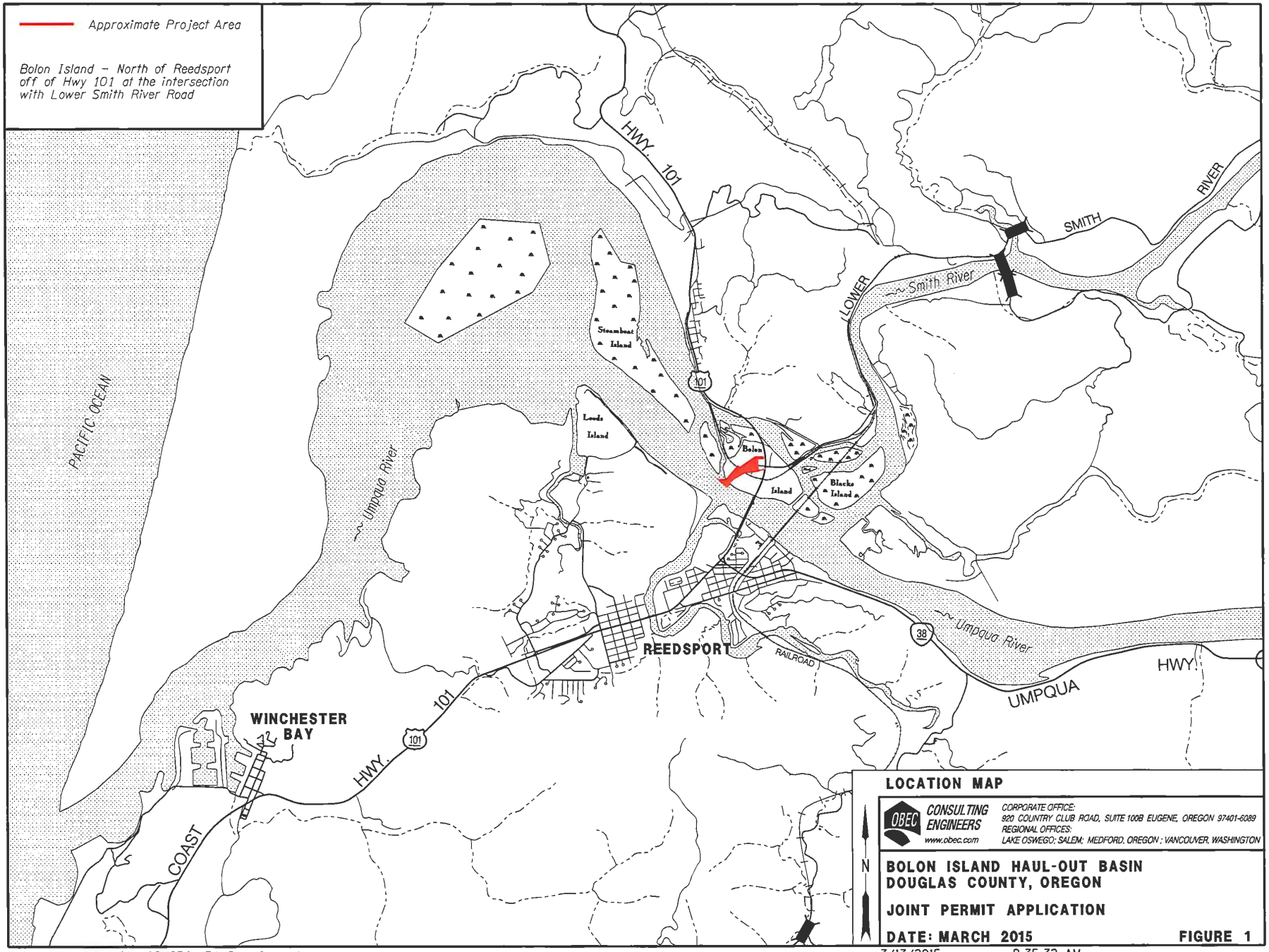

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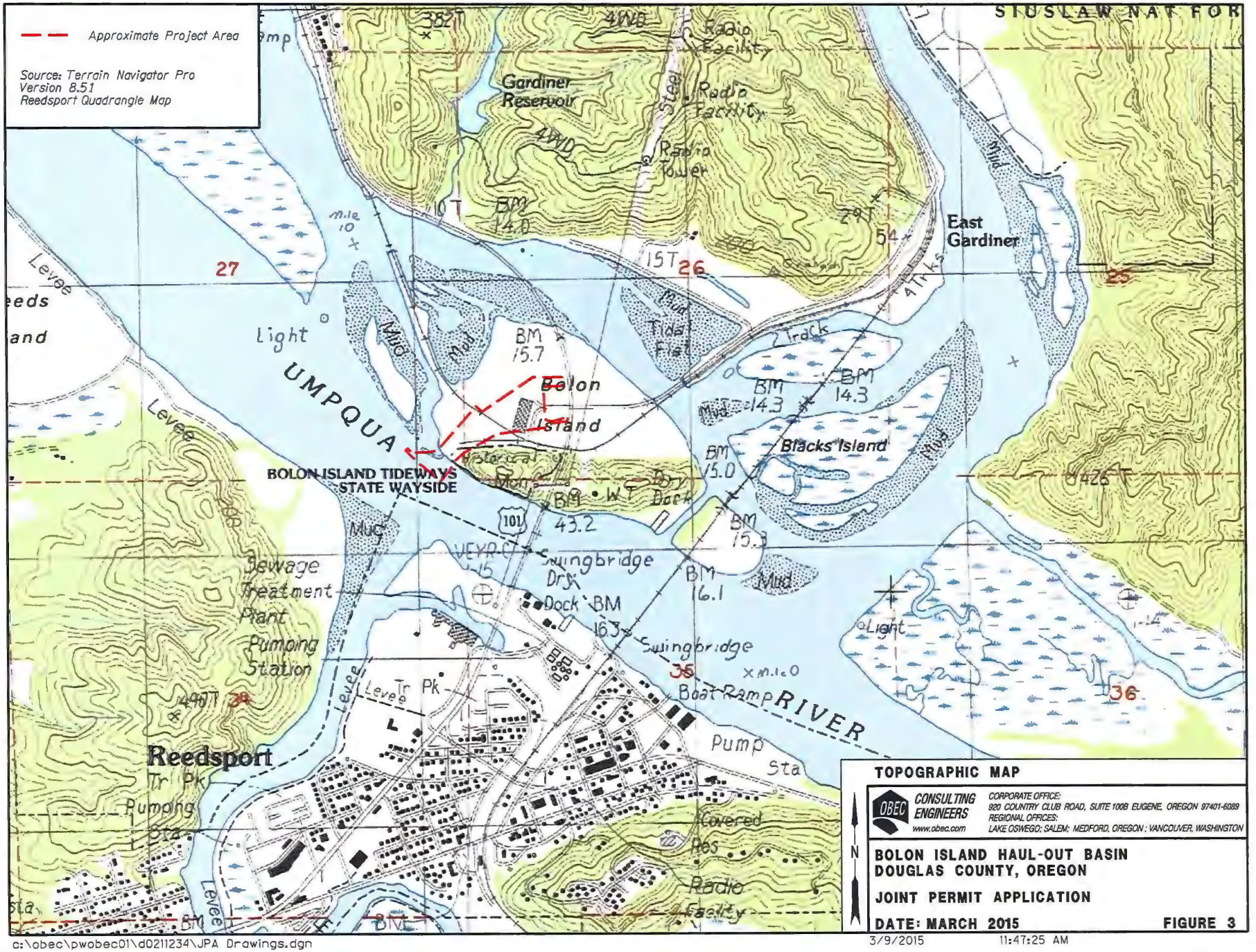
Approximate Project Area
Source: Terrain Navigator Pro
Version 8.51
Reedsport Quadrangle Map
SIUSLAW NAT FOR
Gardiner Reservoir
Radio Facility
Radio Tower
East Gardiner
Bolon Island
Blacks Island
BOLON ISLAND TIDEWAYS STATE WAYSIDE
UMPQUA
RIVER
Swingbridge
Sewage Treatment Plant
Pumping Station
Reedsport
Boat Ramp
Pump Sta
Covered Res
Radio Facility
Tidal Flat
Mud
Levee
Light
Track
Dock
Tr Pk
TOPOGRAPHIC MAP
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REGIONAL OFFICES:
LAKE OSWEGO; SALEM; MEDFORD, OREGON; VANCOUVER, WASHINGTON
BOLON ISLAND HAUL-OUT BASIN
DOUGLAS COUNTY, OREGON
JOINT PERMIT APPLICATION
DATE: MARCH 2015
FIGURE 3
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AERIAL OVERVIEW

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BOLON ISLAND HAUL-OUT BASIN
DOUGLAS COUNTY, OREGON

JOINT PERMIT APPLICATION

DATE: MARCH 2015 **FIGURE 4**

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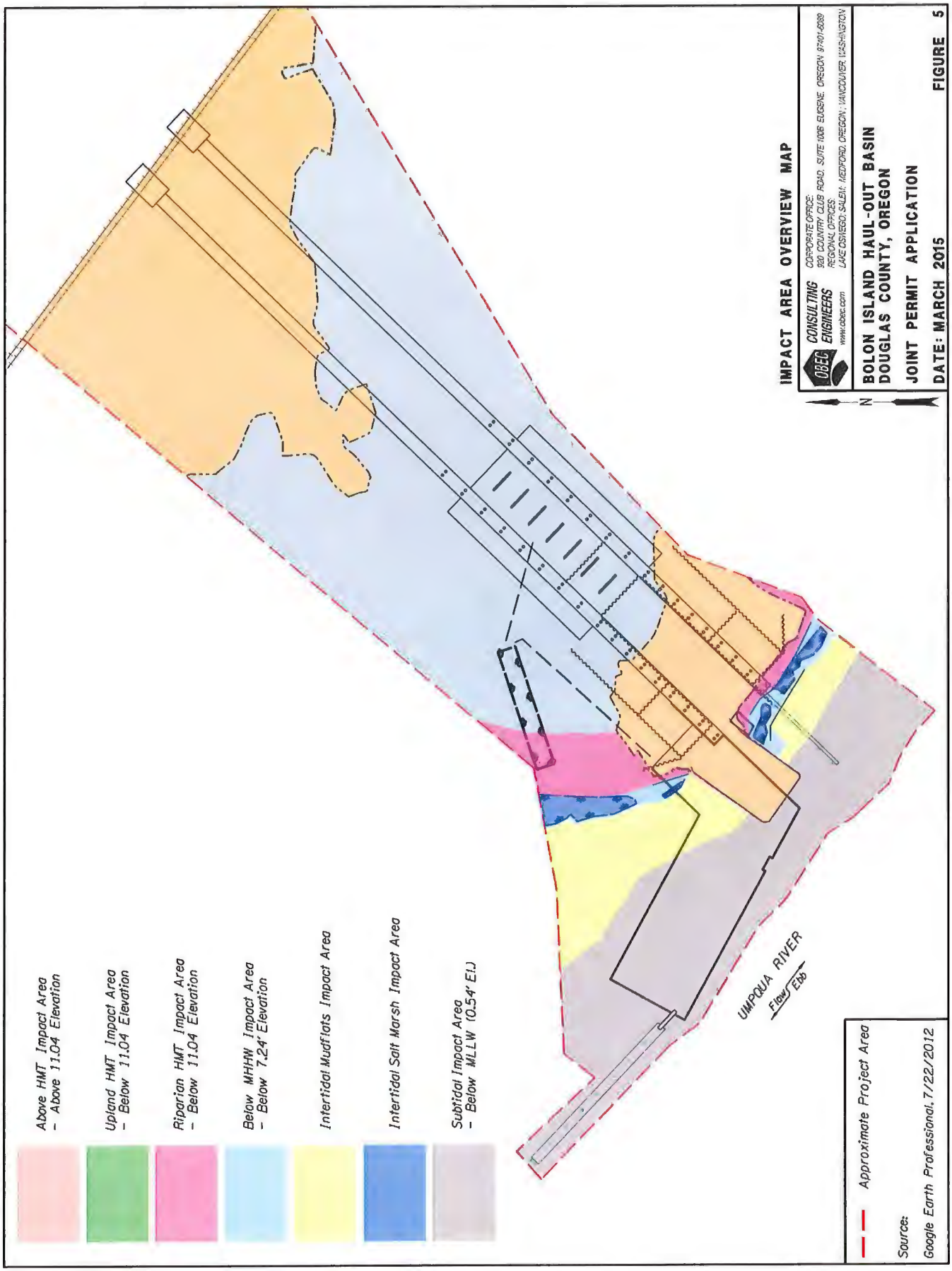
IMPACT AREA OVERVIEW MAP
CONSULTING ENGINEERS
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REGIONAL OFFICES:
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BOLON ISLAND HAUL-OUT BASIN
DOUGLAS COUNTY, OREGON
JOINT PERMIT APPLICATION
DATE: MARCH 2015
FIGURE 5
UMPQUA RIVER
Flow
Approximate Project Area
Source:
Google Earth Professional, 7/22/2012
Above HMT Impact Area
- Above 11.04 Elevation
Upland HMT Impact Area
- Below 11.04 Elevation
Riparian HMT Impact Area
- Below 11.04 Elevation
Below MHHW Impact Area
- Below 7.24' Elevation
Intertidal Mudflats Impact Area
Intertidal Salt Marsh Impact Area
Subtidal Impact Area
- Below MLLW (0.54' El.)

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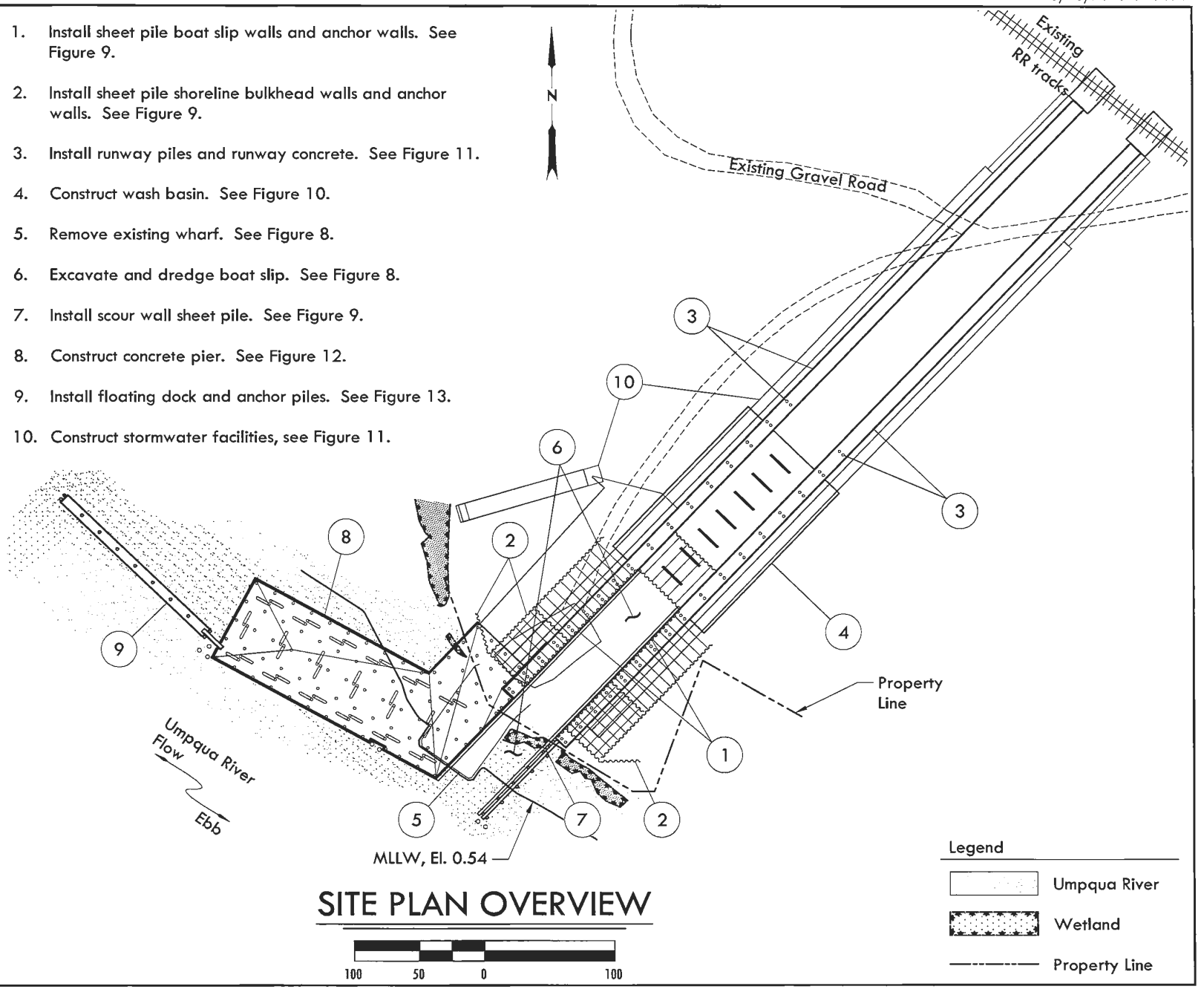
1. Install sheet pile boat slip walls and anchor walls. See Figure 9.
2. Install sheet pile shoreline bulkhead walls and anchor walls. See Figure 9.
3. Install runway piles and runway concrete. See Figure 11.
4. Construct wash basin. See Figure 10.
5. Remove existing wharf. See Figure 8.
6. Excavate and dredge boat slip. See Figure 8.
7. Install scour wall sheet pile. See Figure 9.
8. Construct concrete pier. See Figure 12.
9. Install floating dock and anchor piles. See Figure 13.
10. Construct stormwater facilities, see Figure 11.



SITE PLAN OVERVIEW

PROJECT: 0820-0001
DATE: MARCH 2015

BOLON ISLAND HAUL-OUT BASIN
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SITE PLAN OVERVIEW

6
FIGURE 6 OF 20

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DATE: MARCH 2015

BOLON ISLAND HAUL-OUT BASIN

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IMPACT SUMMARY TABLE

7

FIGURE 7 OF 20

BOLON ISLAND HAUL-OUT PROJECT TEMPORARY IMPACT SUMMARY TABLE

Action	Riparian HMT			Upland HMT		
	SF*	Removal CY	Fill CY	SF*	Removal CY	Fill CY
Boat Slip Construction	N/A	--	--	2,178	774	774
Shoreline Bulkhead Construction	175	65	65	N/A	--	--
Stormwater Facility Construction	N/A	--	--	600	65	65
TOTAL	**175**	**65**	**65**	**2,778**	**839**	**839**

*Impact areasa are already accounted for in the permanent impact summary table.

BOLON ISLAND HAUL-OUT PROJECT PERMANENT IMPACT SUMMARY TABLE

Action	Below MHHW Impacts			Sub-tidal Impacts			Intertidal Sand/Mudflat Impacts			Intertidal Salt Marsh Impacts (Wetlands)			Riparian HMT Impacts			Upland HMT Impacts		
	SF	Removal CY	Fill CY	SF	Removal CY	Fill CY	SF	Removal CY	Fill CY	SF	Removal CY	Fill CY	SF	Removal CY	Fill CY	SF	Removal CY	Fill CY
Boat Slip Construction	18	--	1	N/A	--	--	N/A	--	--	N/A	--	--	15	--	1	4,272	32	49
Shoreline Bulkhead Construction	N/A	--	--	N/A	--	--	N/A	--	--	N/A	--	--	211	--	3	N/A	--	--
Concrete Runway Construction	N/A	--	--	N/A	--	--	N/A	--	--	N/A	--	--	7	--	16	27,254	--	2,692
Wash Basin Construction	N/A	--	--	N/A	--	--	N/A	--	--	N/A	--	--	N/A	--	--	14,585	2,700	756
Existing Wharf Removal	29	3	--	N/A	--	--	85	4	--	N/A	--	--	N/A	--	--	N/A	--	--
Existing Riprap Removal	300	26	--	N/A	--	--	N/A	--	--	N/A	--	--	150	14	--	N/A	--	--
Proposed Dredging	5,782[2]	3,509	--	2,992	1,010	--	1,940	929	--	481	150	--	894	341	--	N/A	--	--
Concrete Pier Construction	2,922[3]	--	185	11,157[1]	--	772	1,614[1]	--	113	35[1]	--	--	123[1]	--	--	N/A	--	--
Floating Dock Construction	N/A	--	--	618[1]	--	101	N/A	--	--	N/A	--	--	N/A	--	--	N/A	--	--
Catwalk Construction	6	--	19	13	--	38	13	--	38	N/A	--	--	N/A	--	--	N/A	--	--
Stormwater Facility Construction	N/A	--	--	N/A	--	--	N/A	--	--	N/A	--	--	800	26	10	1,300	30	13
TOTAL	**9,059**	**3,538**	**205**	**14,780**	**1,010**	**911**	**3,652**	**933**	**151**	**516**	**150**	**--**	**2,200**	**381**	**30**	**47,411**	**2,762**	**3,510**

[1] Impact area calculation includes over-water/over-land impact areas. [2] A total of 1,200 square feet of these impacts will occur within the footprint of the existing wharf once it is removed. [3] Impact area calculation includes over-water impact areas, and a total of 2,300 square feet of these impacts will occur within the footprint of the existing wharf once it is removed.

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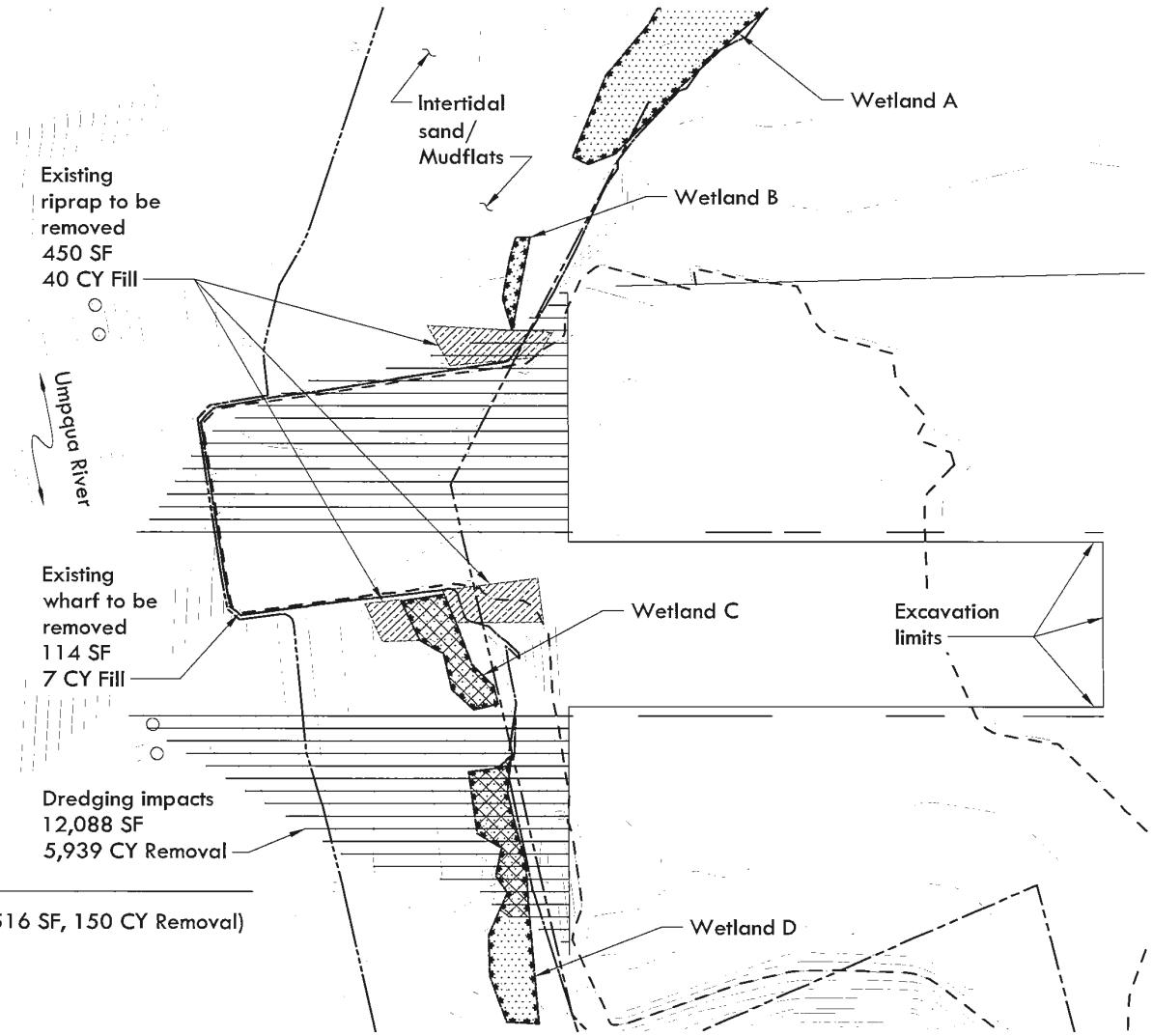

Legend

- Wetland Impacts (516 SF, 150 CY Removal)
- Wetland
- MLLW, El. 0.54
- MHHW, El. 7.24
- HMT, El. 11.04
- Property Line

PLAN (A) EXISTING WHARF REMOVAL & DREDGING

1"=40'-0" XX

PROJECT: 0820-0001

DATE: MARCH 2015

BOLON ISLAND HAUL-OUT BASIN

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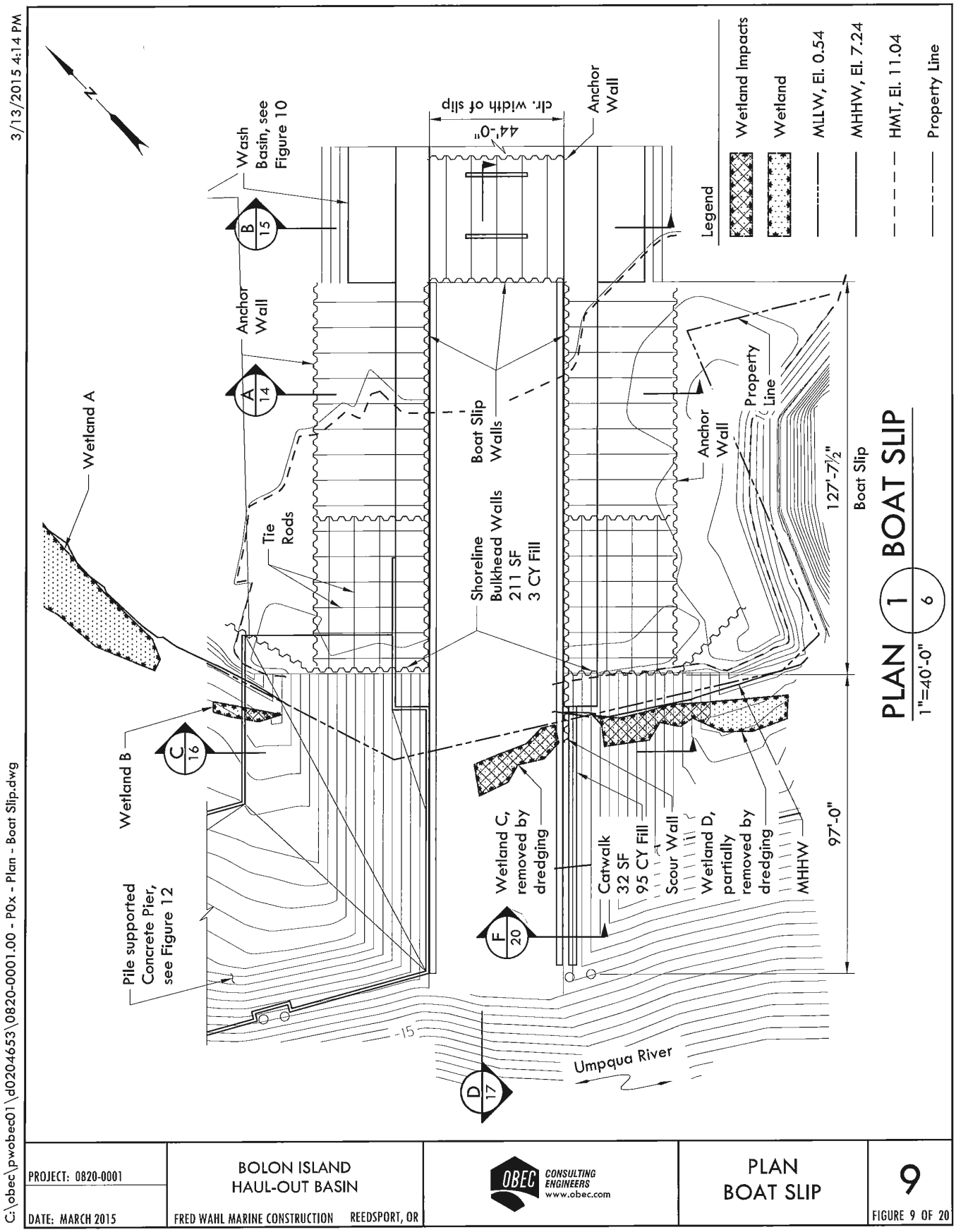
PLAN WHARF REMOVAL

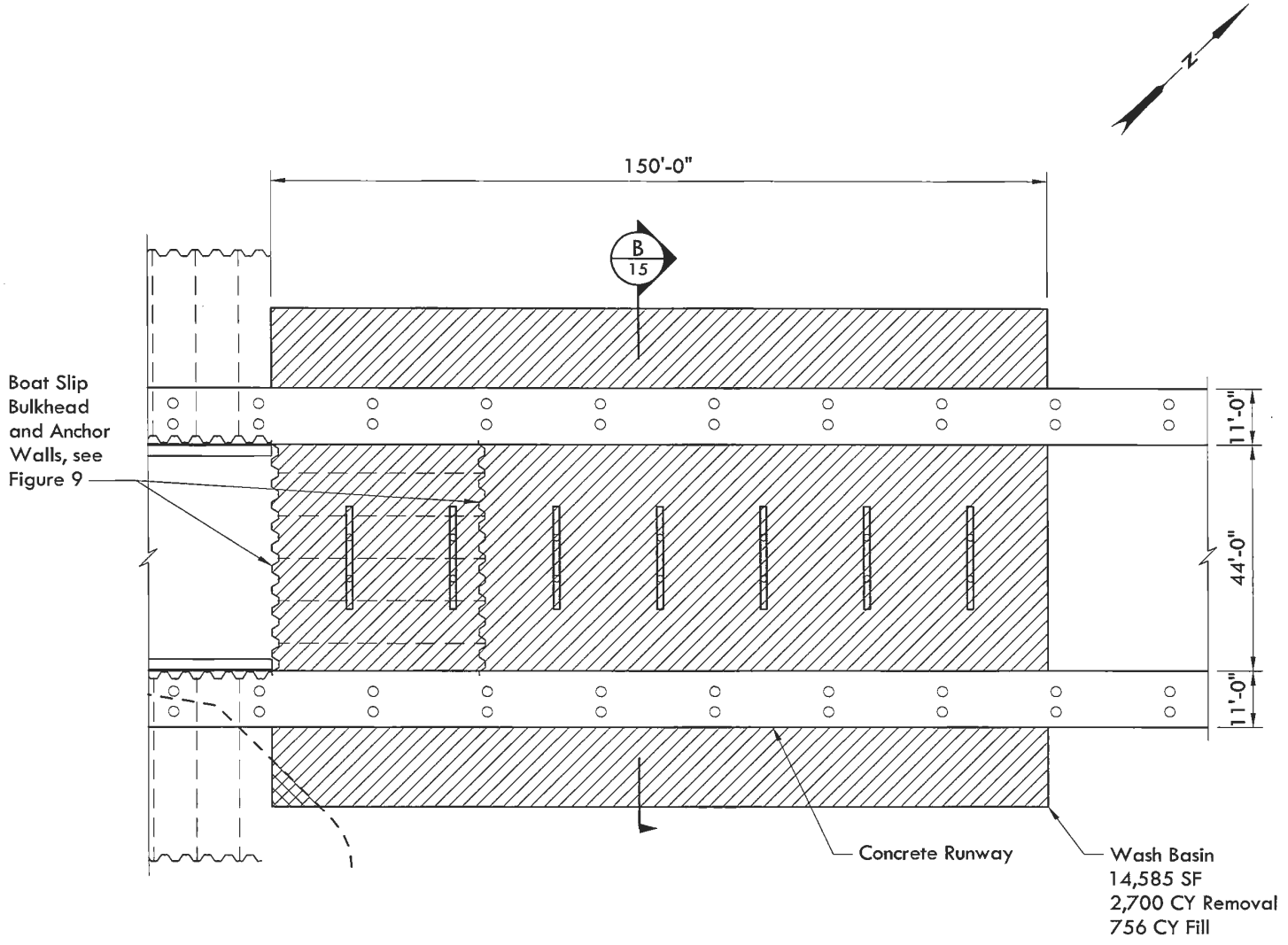
8

FIGURE 8 OF 20



PROJECT: 0820-0001 DATE: MARCH 2015	BOLON ISLAND HAUL-OUT BASIN FRED WAHL MARINE CONSTRUCTION REEDSPORT, OR	OBEC CONSULTING ENGINEERS www.obec.com	PLAN BOAT SLIP	9 FIGURE 9 OF 20

C:\obec\pwobec01\d0204653\0820-0001.00 - P0x - Plan - Wash Basin.dwg 3/13/2015 4:15 PM



PLAN 2 WASH BASIN
1"=30'-0" 6

Legend
- Upland HMT Fill Area
- HMT, El. 11.04
- Above HMT fill area

PROJECT: 0820-0001
DATE: MARCH 2015

BOLON ISLAND
HAUL-OUT BASIN
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PLAN
WASH BASIN

10
FIGURE 10 OF 20

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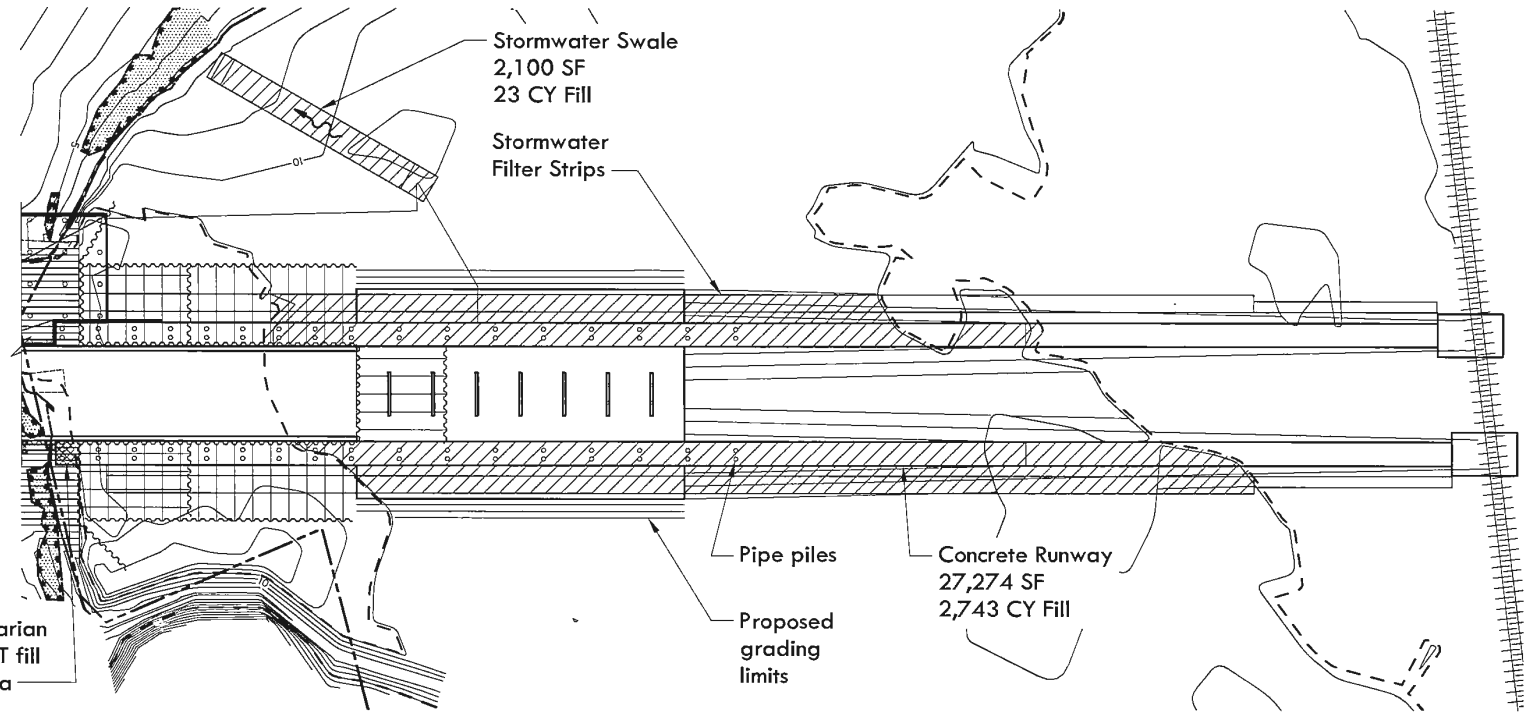

PLAN 3/6 CONCRETE RUNWAY & STORMWATER

1"=80'-0"

Legend

- Upland HMT Fill Area
- Riparian HMT Fill Area
- HMT, El. 11.04

PROJECT: 0820-0001

DATE: MARCH 2015

BOLON ISLAND
HAUL-OUT BASIN

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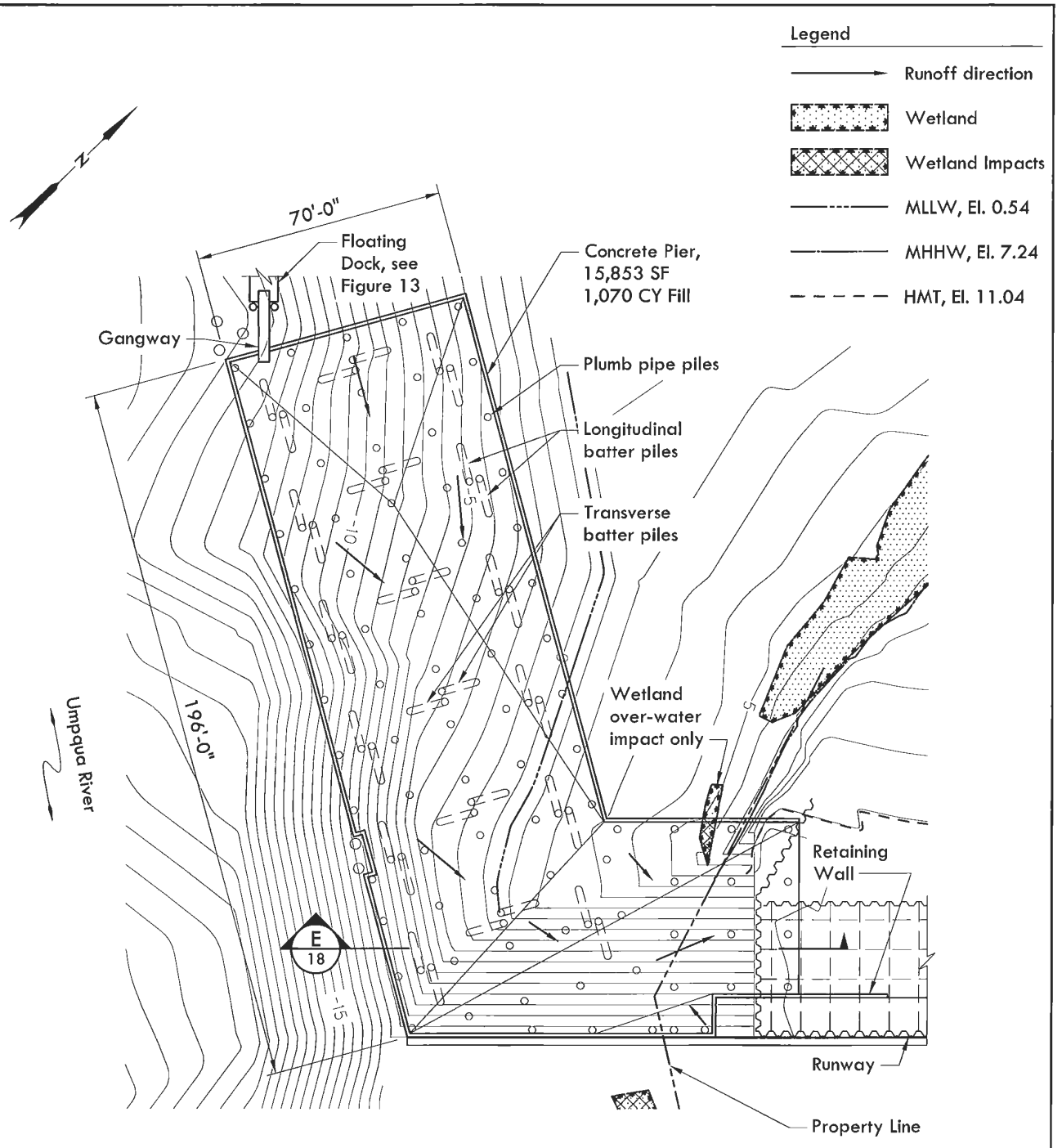
PLAN - CONCRETE RUNWAY & STORMWATER

11

FIGURE 11 OF 20



PLAN 4/6 CONCRETE PIER

1"=40'-0"

PROJECT: 0820-0001	BOLON ISLAND HAUL-OUT BASIN	OBEC CONSULTING ENGINEERS www.obec.com	PLAN CONCRETE PIER	12
DATE: MARCH 2015	FRED WAHL MARINE CONSTRUCTION REEDSPORT, OR			FIGURE 12 OF 20

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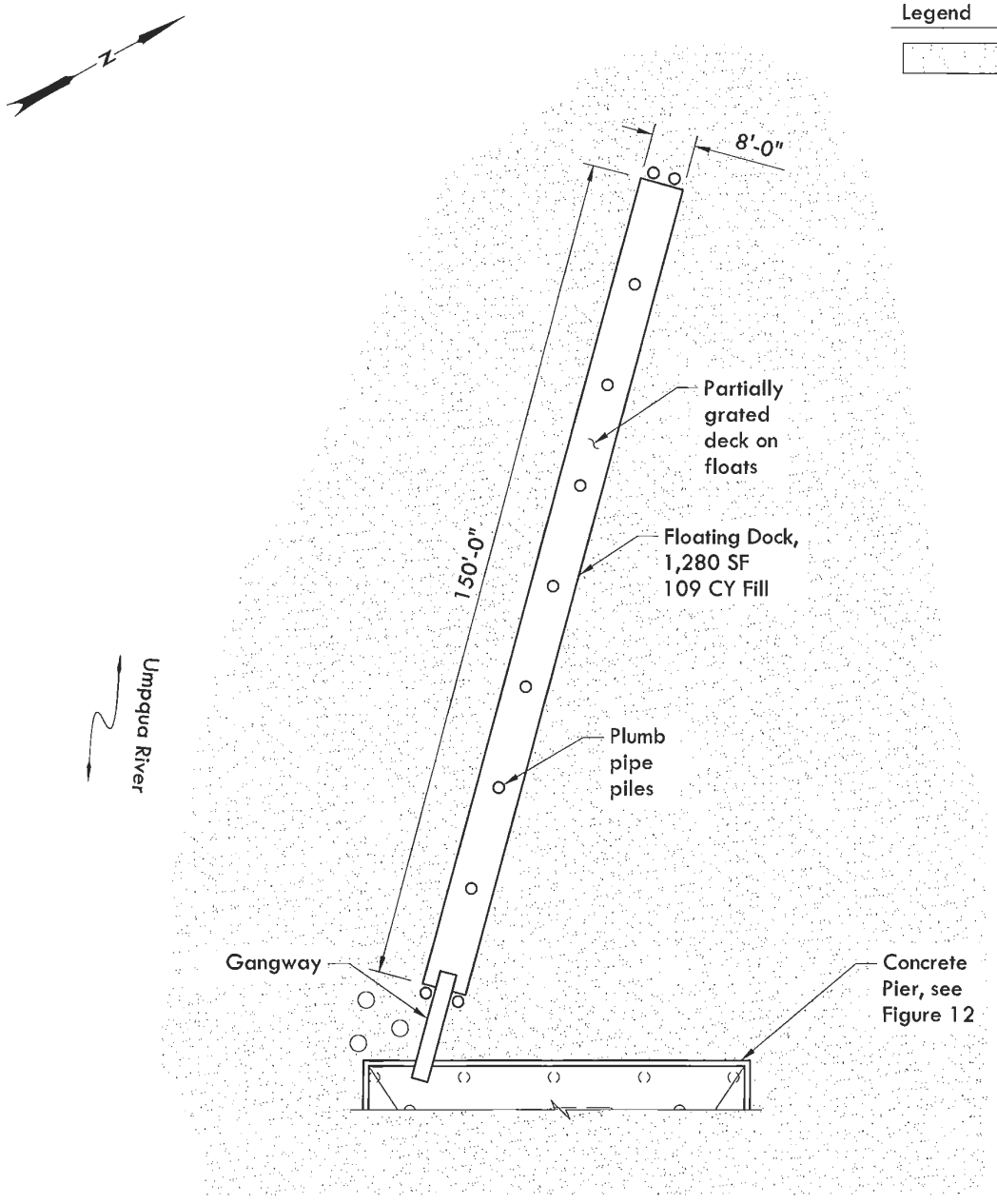

PLAN 5/6 FLOATING DOCK

1"=30'-0"

Note:

Floating dock impacts all below MLLW elevation (subtidal).

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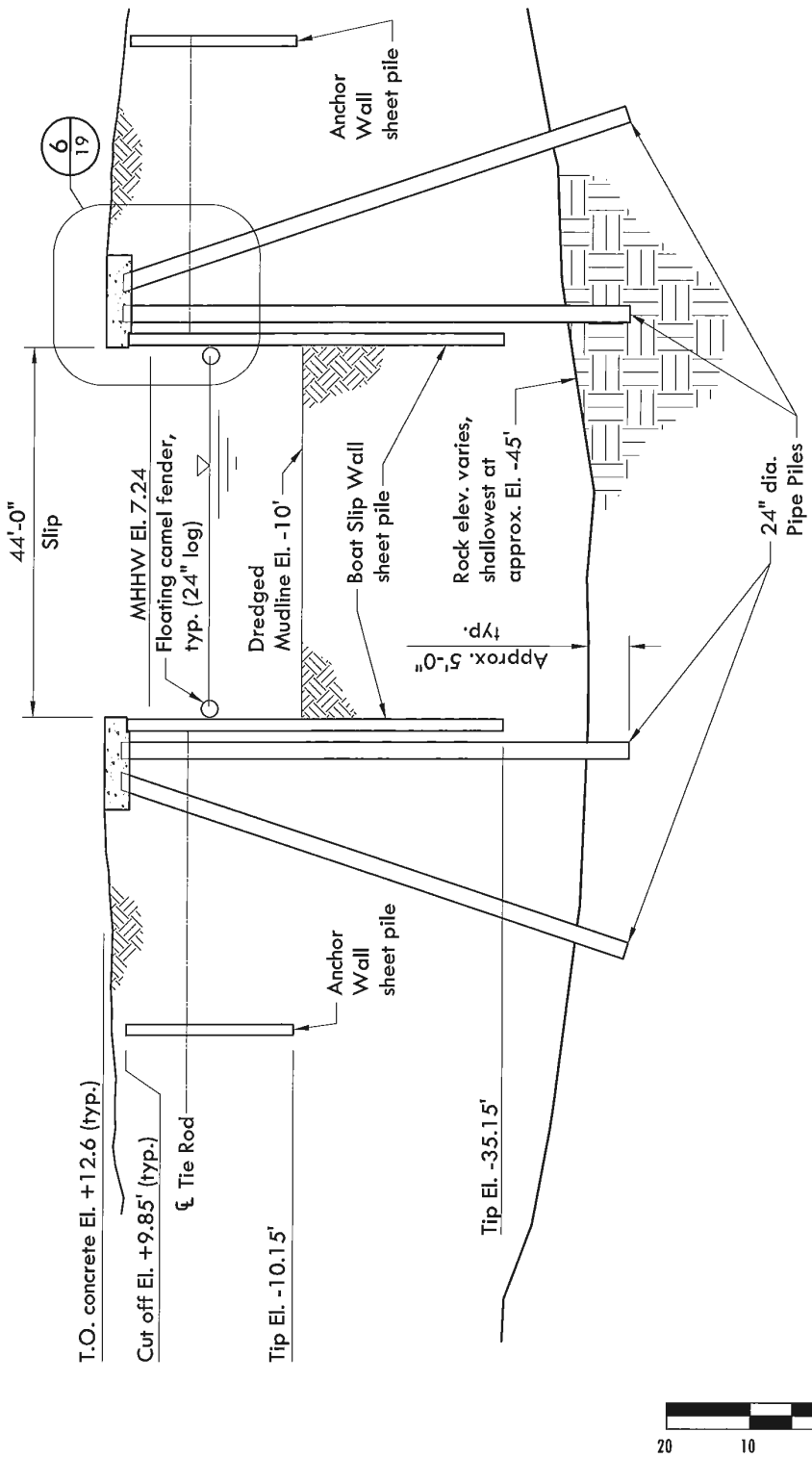
PROJECT: 0820-0001 DATE: MARCH 2015	BOLON ISLAND HAUL-OUT BASIN FRED WAHL MARINE CONSTRUCTION REEDSPORT, OR	OBEC CONSULTING ENGINEERS www.obec.com	PLAN FLOATING DOCK	13 FIGURE 13 OF 20



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PROJECT: 0820-0001	BOLON ISLAND HAUL-OUT BASIN	OBEC CONSULTING ENGINEERS www.obec.com	SECTION BOAT SLIP	14
DATE: MARCH 2015	FRED WAHL MARINE CONSTRUCTION REEDSPORT, OR			FIGURE 14 OF 20

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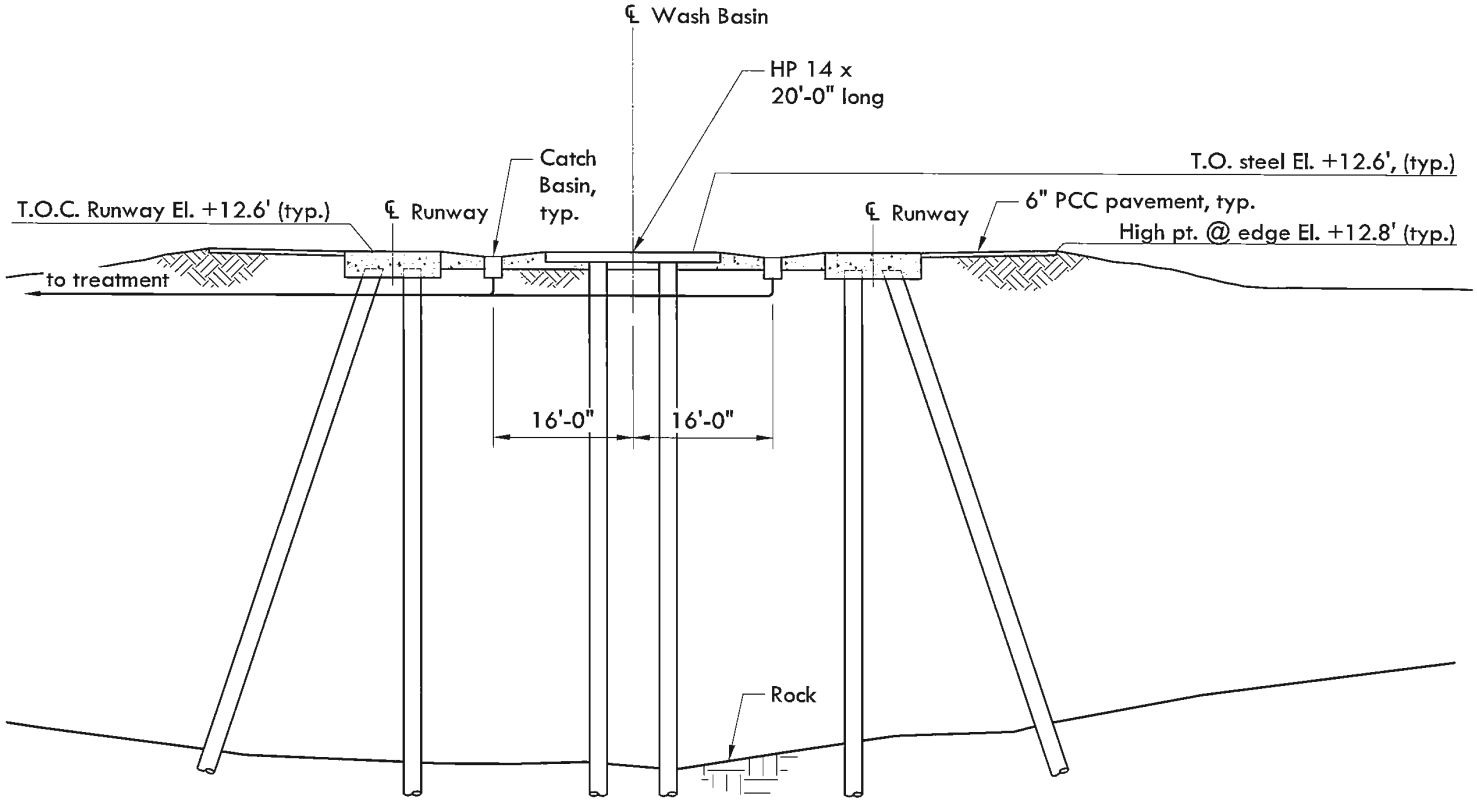

SECTION B WASH BASIN
1"=20'-0" 9

PROJECT: 0820-0001
DATE: MARCH 2015

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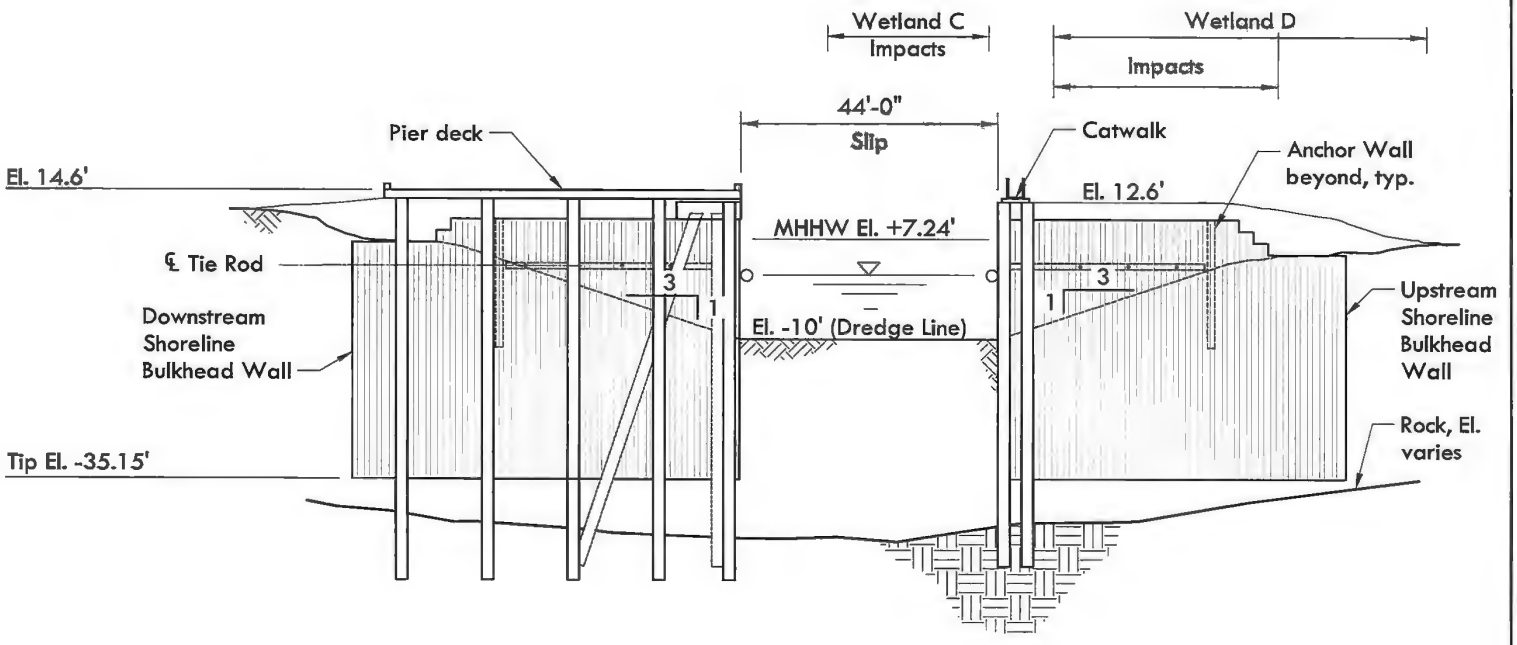
SECTION
WASH BASIN

15
FIGURE 15 OF 20



SECTION C BOAT SLIP AT PIER

1"=30'-0"

9

Legend

Water Surface

PROJECT: 0820-0001

DATE: MARCH 2015

BOLON ISLAND
HAUL-OUT BASIN

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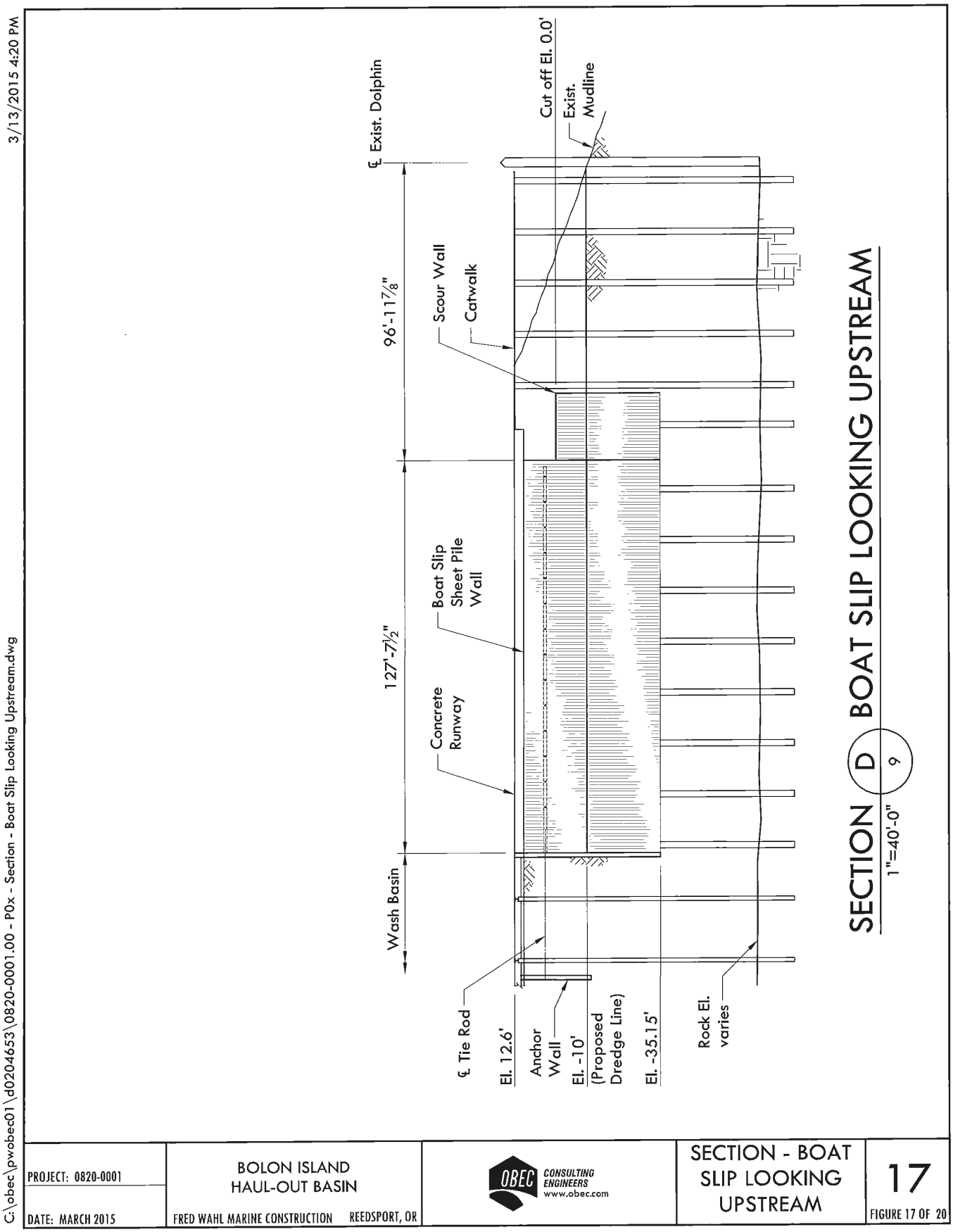
SECTION
BOAT SLIP AT PIER

16

FIGURE 16 OF 20


3/13/2015 4:20 PM
C:\obec\pwobec01\d0204653\0820-0001.00 - P0x - Section - Boat Slip Looking Upstream.dwg
℄ Exist. Dolphin
Cut off El. 0.0'
Exist. Mudline
96'-11 7/8"
Scour Wall
Catwalk
127'-7 1/2"
Boat Slip Sheet Pile Wall
Concrete Runway
Wash Basin
℄ Tie Rod
El. 12.6'
Anchor Wall
El. -10' (Proposed Dredge Line)
El. -35.15'
Rock El. varies
SECTION D 9
BOAT SLIP LOOKING UPSTREAM
1"=40'-0"
PROJECT: 0820-0001
DATE: MARCH 2015
BOLON ISLAND
HAUL-OUT BASIN
FRED WAHL MARINE CONSTRUCTION REEDSPORT, OR
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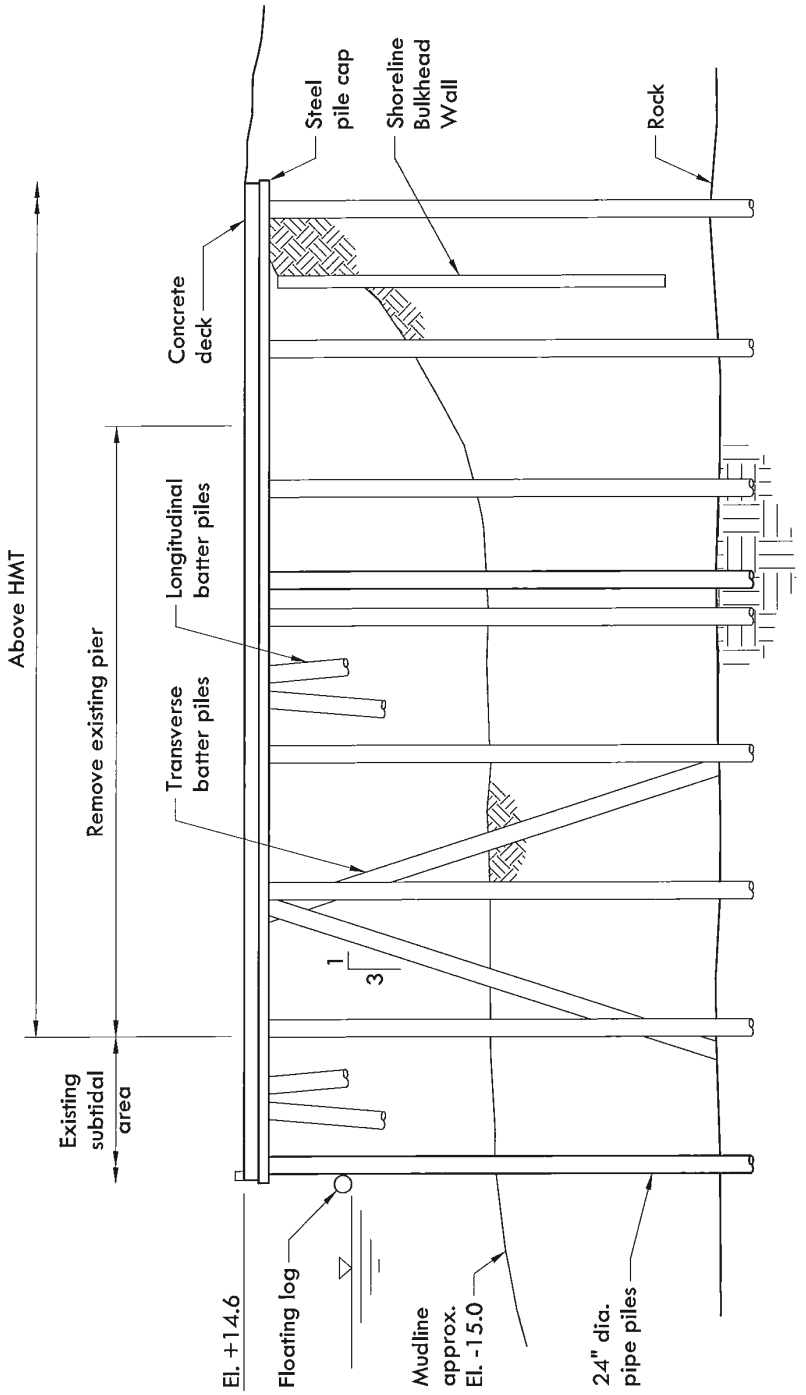
SECTION - BOAT SLIP LOOKING UPSTREAM
17
FIGURE 17 OF 20



SECTION E 12 PIER
1"=20'-0"

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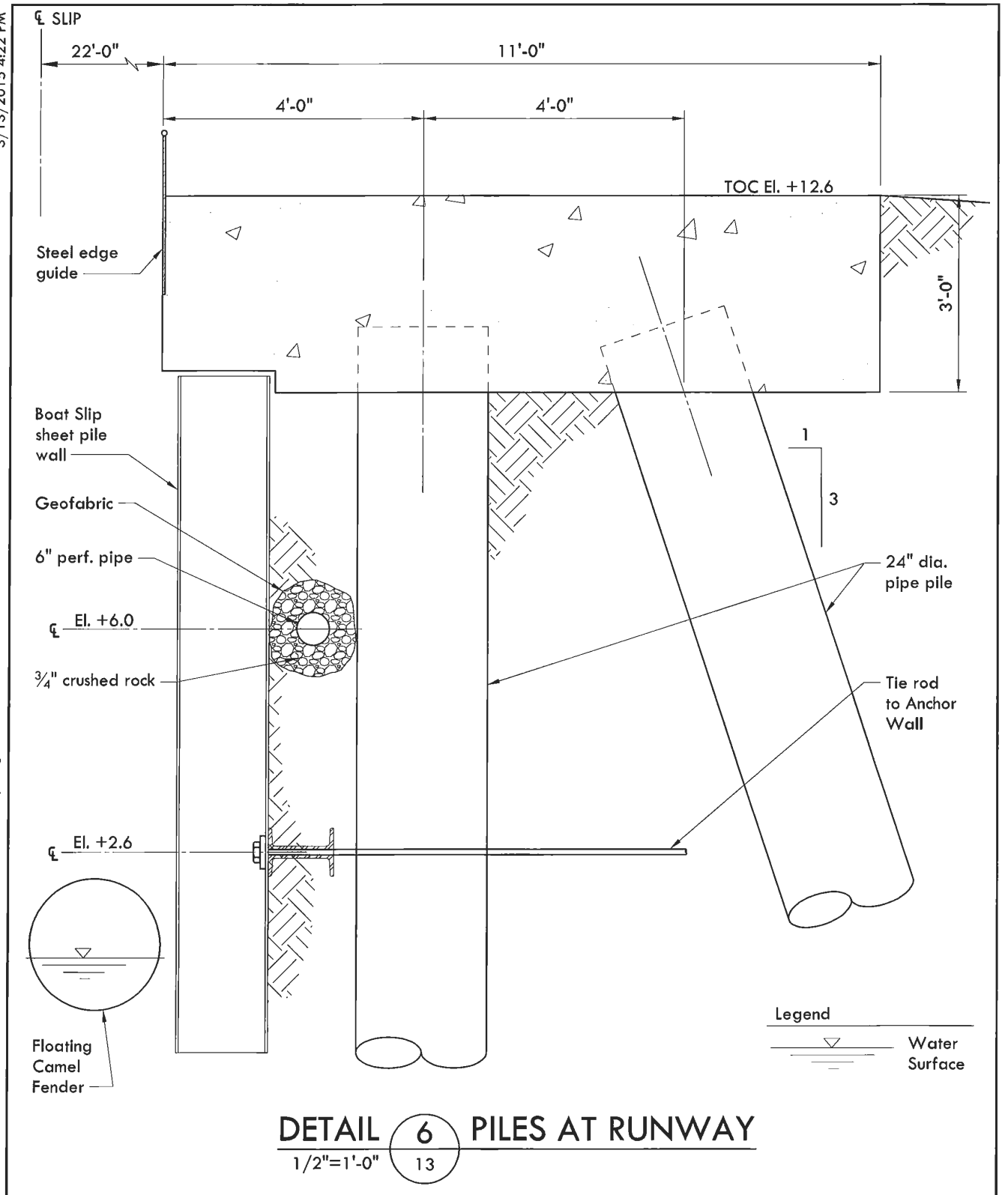
PROJECT: 0820-0001 DATE: MARCH 2015	BOLON ISLAND HAUL-OUT BASIN FRED WAHL MARINE CONSTRUCTION REEDSPORT, OR	OBEC CONSULTING ENGINEERS www.obec.com	SECTION PIER	18 FIGURE 18 OF 20

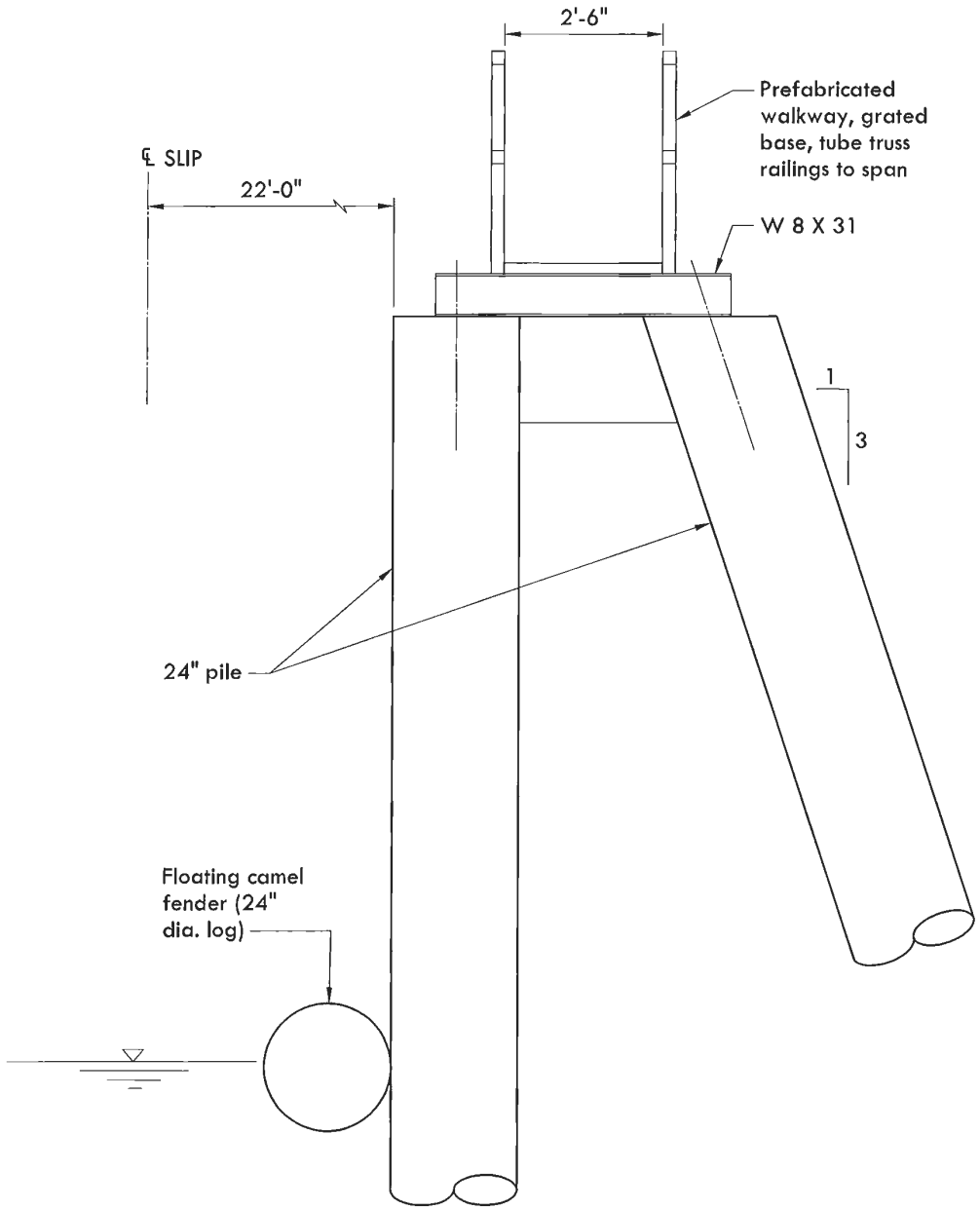


DETAIL 6 PILES AT RUNWAY
1/2"=1'-0" 13

PROJECT: 0820-0001 DATE: MARCH 2015	BOLON ISLAND HAUL-OUT BASIN FRED WAHL MARINE CONSTRUCTION REEDSPORT, OR	OBEC CONSULTING ENGINEERS www.obec.com	DETAIL PILES AT RUNWAY	19 FIGURE 19 OF 20

3/13/2015 4:22 PM

C:\obec\pwobec01\d0204653\0820-0001.00 - POx - Detail - Piles At Runway.dwg



SECTION F CATWALK
3/8"=1'-0" 9

Legend
Water Surface

PROJECT: 0820-0001 DATE: MARCH 2015	BOLON ISLAND HAUL-OUT BASIN FRED WAHL MARINE CONSTRUCTION REEDSPORT, OR	OBEC CONSULTING ENGINEERS www.obec.com	SECTION CATWALK	20 FIGURE 20 OF 20

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