2010
WASHINGTON STATE
Joint Aquatic Resources Permit Application (JARPA) Form[1]

USE BLACK OR BLUE INK TO ENTER ANSWERS IN WHITE SPACES BELOW.

US Army Corps of Engineers
Seattle District

SX-12-00002

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MAR 09 2012
KITTITAS COUNTY
CDS

Part 1–Project Identification

1. Project Name (A name for your project that you create. Examples: Smith's Dock or Seabrook Lane Development) [help][2]
Huntzinger Road Boat Launch Recreation Area and Public Access Fishing Pier

Part 2–Applicant

The person or organization responsible for the project. [help]

2a. Name (Last, First, Middle) and Organization (if applicable)			
Little, Brandon; Public Utility District No. 2 of Grant County, Washington (Grant PUD)			
2b. Mailing Address (Street or PO Box)			
15655 Wanapum Village Lane, S.W.			
2c. City, State, Zip			
Beverly, WA 99321			
2d. Phone (1)	**2e.** Phone (2)	**2f.** Fax	**2g.** E-mail
(509) 754-5088	( )	( )	Blittle@gcpud.org

Part 3–Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b. of this application.) [help]

3a. Name (Last, First, Middle) and Organization (if applicable)
Pock, J. Darrell, Project Specialist III; Grant PUD
3b. Mailing Address (Street or PO Box)
P.O. Box 878

[1] Additional forms may be required for the following permits:

- If your project may qualify for Department of the Army authorization through a Regional General Permit (RGP), contact the U.S. Army Corps of Engineers for application information (206) 764-3495.
- If your project might affect species listed under the Endangered Species Act, you will need to fill out a Specific Project Information Form (SPIF) or prepare a Biological Evaluation. Forms can be found at http://www.nws.usace.army.mil/PublicMenu/Menu.cfm?sitename=REG&pagename=mainpage_ESA
- If you are applying for an Aquatic Resources Use Authorization you will need to fill out and submit an Application for Authorization to Use State-Owned Aquatic Lands form to DNR, which can be found at http://www.dnr.wa.gov/Publications/aqr_use_auth_app.doc
- Not all cities and counties accept the JARPA for their local Shoreline permits. If you think you will need a Shoreline permit, contact the appropriate city or county government to make sure they will accept the JARPA.

[2] To access an online JARPA form with [help] screens, go to http://www.epermitting.wa.gov/site/alias__resourcecenter/jarpa_jarpa_form/9984/jarpa_form.aspx .
For other help, contact the Governor's Office of Regulatory Assistance at 1-800-917-0043 or help@ora.wa.gov.

3c. City, State, Zip			
Ephrata, WA 98823			
3d. Phone (1)	**3e.** Phone (2)	**3f.** Fax	**3g.** E-mail
(509) 754-5098		(509) 793-1548	jpock@gcpud.org

Part 4–Property Owner(s)

Contact information for people or organizations owning the property(ies) where the project will occur. [help]

☐ Same as applicant. (Skip to Part 5.)

☐ Repair or maintenance activities on existing rights-of-way or easements. (Skip to Part 5.)

☒ There are multiple property owners. Complete the section below and fill out JARPA Attachment A for each additional property owner.

4a. Name (Last, First, Middle) and Organization (if applicable)			
Huntzinger Boat Launch only U.S. Bureau of Reclamation, C/O: Brian Farmer			
4b. Mailing Address (Street or PO Box)			
Box 815			
4c. City, State, Zip			
Ephrata, WA 98823			
4d. Phone (1)	**4e.** Phone (2)	**4f.** Fax	**4g.** E-mail
( )	( )	( )	

Part 5–Project Location(s)

Identifying information about the property or properties where the project will occur. [help]

☐ There are multiple project locations (e.g., linear projects). Complete the section below and use JARPA Attachment B for each additional project location.

5a. Indicate the type of ownership of the property. (Check all that apply.) [help]
☐ State Owned Aquatic Land (If yes or maybe, contact the Department of Natural Resources (DNR) at (360) 902-1100) ☒ Federal (U.S. Bureau of Reclamation) ☒ Other publicly owned (state, county, city, special districts like schools, ports, etc.) (Grant PUD) ☐ Tribal ☐ Private
5b. Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5p.) [help]
No Site address
5c. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]
Vantage, Washington 98950
5d. County [help]
Huntzinger Boat Launch and Mitigation Site Kittitas County

Huntzinger Fishing Pier and Mitigation Site
Kittitas and Grant counties

5e. Provide the section, township, and range for the project location. [help]

¼ Section	Section	Township	Range
Huntzinger Boat Launch			
Center	20	16 North	23 East
Mitigation Site			
Center	20	16 North	23 East
Huntzinger Fishing Pier			
Northwest ¼	20	16 North	23 East
Mitigation Site			
Center	33	17 North	23 East

5f. Provide the latitude and longitude of the project location. [help]

- Example: 47.03922 N lat. / -122.89142 W long. (NAD 83)

Huntzinger Boat Launch
46.8646 N Lat. / 119.9684 W Long.

Mitigation Site - Huntzinger Boat Launch
46.8634 N Lat. / 119.9691 W Long.

Huntzinger Fishing Pier
46.8688 N Lat. / 119.9786 W Long.

Mitigation Site - Huntzinger Fishing Pier
46.9204 N Lat. / 119.9534 W Long.

5g. List the tax parcel number(s) for the project location. [help]

- The local county assessor's office can provide this information.

Huntzinger Boat Launch
Map #: 16-23-20000-0001, Parcel #: 734833

Mitigation Site - Huntzinger Boat Launch
Map #: 16-23-20000-0001, Parcel #: 734833

Huntzinger Fishing Pier
Map #: 16-23-20000-0002, Parcel #: 724833

Mitigation Site - Huntzinger Fishing Pier
Parcel #: 150360000

5h. Contact information for all adjoining property owners. (If you need more space, use JARPA Attachment C.) [help]

Name	Mailing Address	Tax Parcel # (if known)

Grant PUD	P.O. Box 878 Ephrata WA 98823	724833
U.S. Bureau of Reclamation	Box 815 Ephrata, WA 98823	734833

5i. List all wetlands on or adjacent to the project location. [help]

Wetland 1: 0.24 acre (Palustrine, Emergent (PEM), Wetland 1: Lake Fringe

5j. List all waterbodies (other than wetlands) on or adjacent to the project location. [help]

These projects are on the Columbia River (Priest Rapids Reservoir, Kittitas County) and (Wanapum Reservoir, Kittitas County) upstream and downstream of Wanapum Dam.

Mitigation sites are located in Kittitas and Grant counties along the Columbia River.

5k. Is any part of the project area within a 100-year flood plain? [help]

☒ Yes ☐ No ☐ Don't know

All four sites are within the 100-year flood plain.

5l. Briefly describe the vegetation and habitat conditions on the property. [help]

Huntzinger Boat Launch

The majority of the project area is un-vegetated, as it is comprised primarily of unimproved gravel parking areas, gravel access roads, and rock shoreline. This site on the right bank of Wanapum Dam was used extensively as a surplus materials laydown area i.e. excavated materials left over from original dam construction in the late 1950's and early 1960's. All soils at this site are from that laydown of surplus materials. Vegetation surrounding the action area is dominated by species typical of the sagebrush-steppe vegetation community of eastern Washington. Vegetation within the action area and surrounding hill slopes is dominated by rubber rabbitbrush (*Ericameria nauseosa*), antelope bitterbrush (*Purshia tridentata*) and cheatgrass (*Bromus tectorum*). Other species observed within and near the action area include: big sagebrush (*Artemisia tridentata*), common mullein (*Verbascum thapsus*), tall tumblemustard (*Sisymbrium altissimum*), and tarweed fiddleneck (*Amsinckia lycopsoides*). Narrowleaf willow (*Salix exugua*) was observed sporadically distributed along the riparian zone and in wetland areas within the action area.

Mitigation Area - Huntzinger Boat Launch

The vegetation in this emergent wetland includes creeping bentgrass (*Agrostis stolonigera*), slenderbeak sedge (*Carex athrostachya*), western panicgrass (*Dichanthelium acuminatum*), poverty rush (*Juncus tenuis*), Purple loosestrife (*Lythrun salicariea*), reed canarygrass, (*Phalaris arundinacea*), narrowleaf plantain (*Plantago lanceolata*) and narrowleaf willow (*Salix exigua*). This wetland is identified in the attached Huntzinger Road Boat Launch and Fishing Access Project Wetland and Waters of the U.S./State Delineation Report as a palustrine, emergent (PEM) wetland. The wetland is rated as a Category III wetland, wetlands that are generally disturbed environs that lack diversity and provide a moderate level of water quality, hydrology, and habitat functions.

Huntzinger Fishing Pier

The majority of the project area is un-vegetated, as it is comprised primarily of the asphalt access road on the top of Wanapum Dam, concrete bulkheads, and a cleared area south of the bulkheads. The area is also bordered on the west by Huntzinger Road. Vegetation surrounding the action area is dominated by species typical of the sagebrush-steppe vegetation community of eastern Washington. Vegetation within the action area and surrounding hill slopes is dominated by rubber rabbitbrush (*Ericameria nauseosa*), antelope bitterbrush (*Purshia tridentata*) and cheatgrass (*Bromus tectorum*).

Mitigation Area – - Huntzinger Fishing Pier

The South Sand Hollow mitigation area (approximately 3,500 square feet) is a vegetated wetland. Existing

vegetation includes reed canary grass, Himalayan blackberry, and purple loosestrife, which are non-native and invasive species.

5m. Describe how the property is currently used. [help]

Huntzinger Boat Launch

The property is currently used as an unimproved boat launch for launching of recreational and sport fishing vessels into the Columbia River. Overnight camping is not permitted at this site. Recreational users of this facility launch on the river shoreline by driving over the cobble surface. Additionally, a concrete bulkhead is present at the site. This facility is occasionally used by various agencies (WDNR, Grant PUD, others) for loading and unloading of materials and equipment on to and off barges.

Mitigation Area - Huntzinger Boat Launch

The proposed mitigation site (approximately 7,725 square feet) is a category III wetland. The area receives occasional vehicle traffic and several informal roads exist in the area.

Huntzinger Fishing Pier

Concrete bulk heads, fencing, guardrails, and asphalt and gravel access roads currently occupy the Huntzinger Public Fishing Access site.

Mitigation Area – Huntzinger Fishing Pier

The South Sand Hollow mitigation site (approximately 3,500 square feet) is a wetland. The remainder of the South Sand Hollow site is an informal recreation and camping area with public beach access.

5n. Describe how the adjacent properties are currently used. [help]

Huntzinger Boat Launch

Wanapum Dam is located approximately 0.5 miles northeast of the project site. This is the only adjacent use, other adjacent properties are currently undeveloped and experience little or no use.

Mitigation Area - Huntzinger Boat Launch

At the mitigation site, property to the north is the existing recreation area, to the south and west are unused lands. The Columbia River (Priest Rapid Reservoir) is located to the east.

Huntzinger Fishing Pier

Wanapum Dam is located directly to the east and south of the site, Huntzinger Road is located west of the site, and the Columbia River is located north of the site. The dam is the only adjacent use, other adjacent properties are currently undeveloped and experience little or no use.

Mitigation Area - Huntzinger Fishing Pier

The South Sand Hollow mitigation site is used for day use and camping, properties to the north, east, and south are vacant unused lands. The Columbia River (Wanapum Reservoir) is located to the west.

5o. Describe the structures (above and below ground) on the property, including their purpose(s). [help]

Huntzinger Boat Launch

There is a concrete bulkhead used for loading and unloading barges. A warning sign with above ground concrete anchors is on the property; this sign is to warn recreators about the potential hazards in the river. An abandoned U.S.G.S. water sampling station is located downstream of the site near the river. A chain-link fence runs along the north boundary of the property.

Mitigation Area - Huntzinger Boat Launch

There are no structures or improvements at the mitigation site.

Huntzinger Fishing Pier

Wanapum Dam is located directly to the east and south of the site, Huntzinger Road is located west of the site, and the Columbia River is located north of the site. The dam is the only adjacent use; other adjacent properties are currently undeveloped and experience little or no use.

Mitigation Area - Huntzinger Fishing Pier
The South Sand Hollow mitigation site is used for day use and camping, properties to the north, east, and south are vacant unused lands. The Columbia River (Wanapum Reservoir) is located to the west.

5p. Provide driving directions from the closest highway to the project location, and attach a map. [help]

Huntzinger Boat Launch

From I-90 near Vantage Washington, take the Wanapum Road/Huntzinger Road exit south bound. The gravel access road to the property is 5.3 miles south on Huntzinger Road from I-90. The gravel access road is 830 feet south of the access road that is on the top of Wanapum Dam. Turn east on to the gravel access road; this road follows along a chain link fence for approximately 2100 feet to the existing recreation area.

Mitigation Area - Huntzinger Boat Launch
Directions to the mitigation site are the same; it is located about 200 feet south of the existing recreation area.

Huntzinger Fishing Pier

From I-90 near Vantage Washington, take the Wanapum Road/Huntzinger Road exit south bound. The asphalt access road to the property is 5.1 miles south on Huntzinger Road from I-90.

Mitigation Area - Huntzinger Fishing Pier
For the South Sand Hollow site, head south on SR 26 from I-90. Turn onto SR 243 and continue south approximately 2,000 feet. The access point to South Sand Hollow is located on the west side of SR 243.

Part 6–Project Description

6a. Summarize the overall project. You can provide more detail in 6d. [help]

Huntzinger Boat Launch

The proposal at the Huntzinger Road Recreation Area is to install a new boat launch ramp, launch float, conduct upland earthwork excavation and embankment work as needed to construct a gravel parking lot and access paths, provide native landscaping in the parking island areas, re-gravel the access road, construct new parking stalls (including one ADA van-accessible stall), construct stormwater facilities, construct sidewalk from the parking stalls to the boat launch, install interpretive panels, and install a vault toilet. See Appendix B of this application.

Mitigation Area - Huntzinger Boat Launch
The proposed mitigation site will be used to mitigation for the over-water impacts at the Huntzinger Road Recreation Area (namely the launch and float). This will involve planting native vegetation, primarily willows and black cottonwood in the cobbly riparian area. An excavator mounted stinger will be used to create the required pilot holes for the plantings as the base of the plants will need to reach the seasonally low water table for survival success. The excavator will access the riparian areas by traveling over existing cleared cobbles areas. Upon completion of planting, any disturbed upland areas will be re-seeded with native grasses. The proposed riparian plants will enhance the functions and values of the wetland and riparian areas.

Huntzinger Fishing Pier

The proposal at the Huntzinger Public Access Fishing Pier is to formalize parking with added paint strips, install a new steel fishing pier and ADA accessible access path. Improvements include new parking stalls (including one ADA van-accessible stall), construct sidewalk from the parking stalls to the fishing pier, install interpretive panels, and install a vault toilet and a bench. A County Shoreline Variance will be required for the vault toilet because it is proposed less than 100 feet from OHWM. The proposed location for the vault toilet is on the fill of the dam in a location with no existing vegetation or habitat.

Mitigation Area - Huntzinger Fishing Pier
The South Sand Hollow mitigation site will also be used to mitigation for the over-water impacts at the Wanapum Dam Upper Boat Launch (namely the launch float). This will involve removing non-native and invasive species

from approximately 3,500 square feet of an existing wetland; the species to be removed include reed canary grass, Himalayan blackberry, and purpose loosestrife. Native vegetation will then be planted by hand (no equipment to be used for planting) which will enhance the functions and values of the wetland. This mitigation work will occur concurrently with planned mitigation for the Wanapum Dam Upper Boat Launch mitigation. This work was previously approved by the federal, state and local regulatory agencies.

6b. Indicate the project category. (Check all that apply) [help]

Huntzinger Boat Launch

☐ Commercial ☐ Residential ☐ Institutional ☐ Transportation ☒ Recreational
☐ Maintenance ☒ Environmental Enhancement

Huntzinger Fishing Pier

☐ Commercial ☐ Residential ☐ Institutional ☐ Transportation ☒ Recreational
☐ Maintenance ☒ Environmental Enhancement

6c. Indicate the major elements of your project. (Check all that apply) [help]

Huntzinger Boat Launch

☐ Aquaculture	☐ Culvert	☒ Float	☐ Road
☐ Bank Stabilization	☐ Dam / Weir	☐ Geotechnical Survey	☐ Scientific Measurement Device
☐ Boat House	☐ Dike / Levee / Jetty	☐ Land Clearing	☐ Stairs
☒ Boat Launch	☐ Ditch	☐ Marina / Moorage	☐ Stormwater facility
☐ Boat Lift	☐ Dock / Pier	☐ Mining	☐ Swimming Pool
☐ Bridge	☐ Dredging	☐ Outfall Structure	☐ Utility Line
☐ Bulkhead	☐ Fence	☐ Piling	
☐ Buoy	☐ Ferry Terminal	☐ Retaining Wall (upland)	
☐ Channel Modification	☐ Fishway		

☒ Other: Wetland Mitigation

Huntzinger Fishing Pier

☐ Aquaculture	☐ Culvert	☐ Float	☐ Road
☐ Bank Stabilization	☐ Dam / Weir	☐ Geotechnical Survey	☐ Scientific Measurement Device
☐ Boat House	☐ Dike / Levee / Jetty	☐ Land Clearing	☐ Stairs
☐ Boat Launch	☐ Ditch	☐ Marina / Moorage	☐ Stormwater facility
☐ Boat Lift	☒ Dock / Pier	☐ Mining	☐ Swimming Pool
☐ Bridge	☐ Dredging	☐ Outfall Structure	☐ Utility Line
☐ Bulkhead	☐ Fence	☐ Piling	
☐ Buoy	☐ Ferry Terminal	☐ Retaining Wall (upland)	
☐ Channel Modification	☐ Fishway		

☒ Other: Wetland Mitigation

6d. Describe how you plan to construct each project element checked in 6c. Include specific construction methods and equipment to be used. [help]

- Identify where each element will occur in relation to the nearest waterbody.

- Indicate which activities are within the 100-year flood plain.

Huntzinger Boat Launch

Boat Launch Ramp: Construction of the boat launch ramp will involve reshaping and minor fill below OHWM to create a level base for the installation of an aggregate base. Grading will include 80 CY of cut below OHWM and placing this 80 CY of material under the proposed ramp slab below OHWM. Additionally, 57 CY of crushed rock will be placed below OHWM for the ramp base. Additionally, 40 CY of 8" minus quarry spall are proposed to be placed below OHWM for erosion protection. Steel rails will be set in the aggregate. On top of the aggregate base and steel rails, multiple 28' wide precast concrete ramp planks will be placed to create the ramp surface. Pre-cast concrete panels will be placed with a hydraulic excavator from the shore or from a barge. These concrete planks will serve as the launch ramp surface and as the base for the launch float at various water elevations. The launch will be one 20 foot wide lane. This work will occur within and adjacent to the river, and within the 100-year floodplain.

Float: Construction of the new float will occur below the OHWM of the Columbia River as well as over-water. The launch float will be designed and constructed in accordance with Regional General Permit issued by the U.S. Army Corps of Engineers. The float will be installed over the concrete planks and will be secured to six new in-water piles. The new launch float will be 8 feet wide by 144 feet long and will be comprised of six individual float sections. Float materials contacting the water will be white in color and permanently encapsulated. The surface of each float section will be grated with no less than 50% open area, and functional grating will cover no less than 50% of the float. The grating will allow natural light to pass through the float structure, thereby deterring aquatic predators. A new concrete abutment ramp will be installed above the OHWM at the front of the launch float for ADA accessibility.

Land Clearing: The proposed project will improve and formalize the access road and the recreation parking areas. Because much of this site is already cleared, the proposed improvements result in additional upland clearing of about 2,000 sq-feet. Proposed upland grading will result in the excavation of approximately 1,700 CY of upland material and approximately 2265 CY of compacted fill (580 CY of material import is anticipated). The land clearing will occur upland from the Columbia River, some of the earthwork will be above the 100-year floodplain and some will be below the 100-year floodplain.

Piling: Six 12-inch diameter piles will be installed along the northeast side of the ramp using vibratory hammer construction methods to secure the new launch float. All resulting turbidity and drilling spoils will be contained within the isolated work area by a floating turbidity barrier. Installation of the pilings will occur below the OHWM of the Columbia River.

Road: Only a gravel access road is proposed. Gravel surfacing will occur above the 100-year floodplain and some will be below the 100-year floodplain.

Stormwater Facility: One new bioinfiltration swale and a new cut-off ditch will be created within the parking lot area (upland) to treat stormwater runoff from the new improvements. Native upland grasses will be planted in the swales to provide filtering; after treatment, the water will infiltrate. The cut-off ditch will intercept runoff from the access road and allow it to infiltrate. The stormwater facilities will be located upland of the OHWM of the Columbia River. The swale will be located above the 100-year floodplain.

Mitigation Planting: The existing lake fringe Wetland area (Wetland #2) south of the formalized recreation area will be planted with mitigation plantings. This wetland will be enhanced via the planting of native vegetation in the sparsely vegetated areas. Mechanical equipment will be used to assist with the installation of native plantings. Proposed tree species are black cottonwood and water birch; proposed shrubs are coyote willow and pacific willow; proposed grasses are bluebunch wheatgrass, indian ricegrass, needle and thread grass, sand dropseed, sandberg bluegrass and thickspike wheatgrasss.

Huntzinger Fishing Pier

Fishing Pier: The new fixed fishing pier will be approximately 8 feet wide by 70 feet long, and will be supported by two in-water, steel pile bents and one concrete shoreline abutment (see Appendix B). The proposed pile bents will be supported on two or three 12-inch diameter steel piles which will be installed using vibratory hammer or drilled shaft construction method. Work associated with the pile bents, including attachment of the

pre-formed steel pile caps, will be performed from a floating barge. All in-water drilling activity will be contained within a 24-inch diameter steel casing which will be installed using a vibratory hammer. The bottom of the casings will be covered with geotextile fabric or similar screening material before they are lowered into the river channel to avoid trapping fish inside the casing. The sediment within the casing will be removed and a shaft will then be drilled from the bottom of the casing down to the appropriate pile depth. The pilings will then be inserted into the drilled shafts and the remaining voids will be filled. The casing will then be removed. Resulting drill spoils will be removed from the steel casing using a pump system and will be contained on the barge prior to proper disposal. Underwater sound levels associated with vibratory hammer use are not expected to increase noise beyond ambient sound levels given that the observed measurements for these activities are below the thresholds accepted by interagency agreements (PND 2011).

Installation of the pile bents will result in the removal of approximately 12 cubic yards of sediment, and the placement of approximately 20 cubic yards of permanent fill below the OHWM.

Following installation of the pile bents, a grated steel superstructure will be set onto the pile caps using a crane operating from the shoreline. Steel/fiberglass decking will then be applied to the superstructure to form the surface of the fishing pier. The surface of the pier will be grated with no less than 50 percent open area, and functional grating will cover no less than 50 percent of the float per NMFS design criteria (NMFS 2008). The grating will allow natural light to pass through the float structure; therefore deterring use by juvenile salmonid predators (e.g., bass, walleye). A new concrete access ramp will be installed above the OHWM at the front of the fishing pier for ADA accessibility (see Appendix B plan sheets). This work will occur within and adjacent to the river, and within the 100-year floodplain.

Mitigation Planting: The existing wetland at the South Sand Hollow mitigation site will be enhanced via removal of non-native and invasive species (including reed canary grass, Himalayan blackberry, and purple loosestrife) and the replanting of native vegetation in its place. After planting, the mitigation area will be fenced to protect it from human intrusion. While mechanical equipment such as weed whackers will be used to remove the non-native and invasive species, the new native vegetation will be hand planted and no grading will occur. Proposed tree species are river alder and water birch; proposed shrubs are coyote willow and pacific willow; proposed sedges and rushes are creeping spikerush, lakeshore sedge, and hardstem bulrush. The South Sand Hollow Site was proposed for providing a portion of the mitigation required for the Wanapum Dam Upper Boat Launch improvements and all of the mitigation required for the Huntzinger Public Access Fishing Pier. Total area of the South Sand Hollow Mitigation area is within 3,500 square feet. The mitigation area is located within the OHWM of the Columbia River.

Other Mitigation: In addition to the riparian plantings, Grant PUD proposes to remove six existing concrete bulkheads (totaling approximately 400 square feet) that are currently present at the fishing pier site at OHWM.

6e. What are the start and end dates for project construction? (month/year) [help]

- If the project will be constructed in phases or stages, use JARPA Attachment D to list the start and end dates of each phase or stage.

Start date: October 2013 End date: February 2014 ☐ See JARPA Attachment D

6f. Describe the purpose of the project and why you want or need to perform it. [help]

Huntzinger Boat Launch

The project is being proposed to comply with Grant PUD's Federal Energy Relicensing Commission (FERC) license dated April 17, 2008. The new federal license requires that Grant PUD provide safe public access to recreation areas. Grant PUD has determined that in order to provide safe access to this recreation area, the proposed improvements are necessary to provide a formalized public launch ramp and public boat launch, formal parking area, and access drive. Additionally, the proposed stormwater facilities are included in order to comply with Kittitas County's and the Department of Ecology's Eastern Washington Stormwater manual for stormwater control requirements for the new impervious surfaces.

Mitigation Area - Huntzinger Boat Launch

The mitigation at the site is necessary due to the new over-water and below OHWM impacts from the launch

float and launch ramp improvements proposed at the Huntzinger Recreation Area.

Huntzinger Fishing Pier

The project is being proposed to comply with Grant PUD's Federal Energy Relicensing Commission (FERC) license dated April 17, 2008. The new federal license requires that Grant PUD provide safe public access to recreation areas. Grant PUD has determined that in order to provide safe access to this recreation area, the proposed improvements are necessary to the roadway access, parking area and barge landing.

Mitigation Area - Huntzinger Fishing Pier

The mitigation at South Sand Hollow is necessary due to the new over-water impacts from the new fishing pier at the Huntzinger Public Access Fishing Pier.

6g. Fair market value of the project, including materials, labor, machine rentals, etc. [help]

Huntzinger Boat Launch

$665,000.00

Huntzinger Fishing Pier

$300,000 - $350,000

6h. Will any portion of the project receive federal funding? [help]

- **If yes**, list each agency providing funds.

☐ Yes ☒ No ☐ Don't know

Part 7–Wetlands: Impacts and Mitigation

☒ Check here if there are wetlands or wetland buffers on or adjacent to the project area. (If there are none, skip to Part 8.) [help]

7a. Describe how the project has been designed to avoid and minimize adverse impacts to wetlands. [help]

☐ Not applicable

The project has been specifically designed to avoid the existing Wetland #1; this is the wetland just south of the proposed launch ramp. Permanent site improvements were moved to avoid the wetland buffer. No fill or grading is proposed within this wetland, however a small amount of fill is proposed in the wetland buffer on the north side of the wetland.

The adjacent wetland area (Wetland #2) to the south (picture below) will be enhanced with additional upland and riparian plantings. Mechanical equipment will be used to install the mitigation plantings through the cobble substrate. The equipment will access the planting areas via the existing cleared gravel road.

7b. Will the project impact wetlands? [help]

☐ Yes ☒ No ☐ Don't know

7c. Will the project impact wetland buffers? [help]

☒ Yes ☐ No ☐ Don't know

7d. Has a wetland delineation report been prepared? [help]

- **If yes**, submit the report, including data sheets, with the JARPA package.

☒ Yes ☐ No

7e. Have the wetlands been rated using the Western Washington or Eastern Washington Wetland Rating System? [help]

- **If yes**, submit the wetland rating forms and figures with the JARPA package.

☒ Yes ☐ No ☐ Don't know

See Appendix C

7f. Have you prepared a mitigation plan to compensate for any adverse impacts to wetlands? [help]

- **If yes**, submit the plan with the JARPA package and answer 7g.
- **If No, or Not applicable,** explain below why a mitigation plan should not be required.

☐ Yes ☒ No ☐ Not applicable

The wetland buffer of Wetland #1 is proposed to have 58 CY of fill placed within it. Mitigation has not been proposed for this wetland fill; Kittitas County does not require mitigation for fill within a Type III wetland buffer. The proposed mitigation plantings on–site are meant to mitigate for the over-water impacts of the proposed improvements at the Huntzinger Recreation Area, namely for the launch float and launch ramp. The mitigation plan (see pages 24-28 of Appendix B) included with this application is specifically for those over-water and below OHWM impacts; no mitigation is proposed for the plantings in the Wetland #2 at the site, as that work is permissible under the U.S. Army Corps of Engineers Nationwide Permit 27 and will enhance the wetland with native vegetation. Proposed tree species are river alder and black cottonwood; proposed shrubs are coyote willow and pacific willow.

7g. Summarize what the mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [help]

The mitigation plan is meant to mitigate for new over-water and below OHWM impacts at the Huntzinger Recreation Area (namely the new launch float and launch ramp). The mitigation is to occur at the site. Mitigation will therefore be accomplished by enhancing the existing wetland area just south of the recreation improvements. Native vegetation will be planted in both riparian and upland area to improve the habitat condition of the wetland. The proposed mitigation is expected to result in a long-term beneficial effect to habitat conditions along the mid-Columbia River and will not adversely affect listed fish species, critical habitat, or Essential Fish Habitat.

Mitigation at South Sand Hollow (Huntzinger Fishing Pier) consists of hand removal of reed canary grass, Himalayan blackberry, and purple loosestrife, and replanting by hand of native wetland species to reestablish a native wetland complex. No work with occur in or over water.

7h. Use the table below to list the type and rating of each wetland impacted; the extent and duration of the impact; and the type and amount of mitigation proposed. Or if you are submitting a mitigation plan with a similar table, you can state (below) where we can find this information in the plan. [help]

Activity (fill, drain, excavate, flood, etc.)	Wetland Name[1]	Wetland type and rating category[2]	Impact area (sq. ft. or Acres)	Duration of impact[3]	Proposed mitigation type[4]	Wetland mitigation area (sq. ft. or acres)
N/A	N/A	N/A	N/A	N/A	N/A	N/A

[1] If no official name for the wetland exists, create a unique name (such as "Wetland 1"). The name should be consistent with other project documents, such as a wetland delineation report.
[2] Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.
[3] Indicate the days, months or years the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.
[4] Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)

Page number(s) for similar information in the mitigation plan, if available: _____

7i. For all filling activities identified in 7h., describe the source and nature of the fill material, the amount in cubic yards that will be used, and how and where it will be placed into the wetland. [help]

Fill source is on-site earth that is regraded and placed in the wetland buffer. It will be placed with an excavator operating from outside the buffer. Estimated fill in the buffer is 58 CY. No fill will be placed in the wetland.

7j. For all excavating activities identified in 7h., describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [help]

Excavation will not occur within wetlands. New vegetation at the mitigation site will be planted by mechanical equipment and with hand tools and will not result in grading activities.

Part 8–Waterbodies (other than wetlands): Impacts and Mitigation

In Part 8, "waterbodies" refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [help]

☒ Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.)

8a. Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment. [help]

☐ Not applicable

Appropriate in-water protection measures will be provided. In order to minimize impacts to water quality and listed fish species, the in-water construction area at the Huntzinger Boat Launch Recreation area will be isolated using a floating turbidity barrier (see pages 14 and 15). Other erosion control and sediment control measures, such as sediment fencing and straw wattles (if needed), will be in place to minimize the potential for project-related impacts to water quality. In addition, all in-water work will take place between November 15 and February 28th, a period when all listed fish are less likely to be present.

A Stormwater Pollution Prevention Plan (SWPPP) Appendix D and a Spill Prevention Control and Countermeasure Plan (SPCC) Appendix E have been prepared for this project. These documents provide the Contractor with minimum best management practices (BMPs) that must be followed to provide water quality protection. Sediment runoff from upland areas will be controlled through the use of silt fence, cut of trenches, straw wattles, and other BMP's. No WQ monitoring will be conducted because there will be no stormwater discharges outside the area protected by the turbidity curtain (see page 17 of 28 in Appendix B). Daily visual inspections of the turbidity curtain will be conducted to ensure it is functioning properly, and if it is not or if it is not used, monitoring would then occur 300 feet downstream per WAC 173-201A-200(e)(i). See Appendix D.

The mitigation site is an existing category III wetland and will be planted with appropriate native vegetation. The mitigation site is normally above the water level of the Wanapum Reservoir (Columbia River).

8b. Will your project impact a waterbody or the area around a waterbody? [help]

☒ Yes ☐ No

8c. Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies? [help]

- **If yes**, submit the plan with the JARPA package and answer 8d.
- **If No, or Not applicable,** explain below why a mitigation plan should not be required.

☒ Yes ☐ No ☐ Not applicable

A Mitigation Plan is included in Appendix B of the application package. On-site mitigation is proposed at the boat launch site. An off-site mitigation plan is proposed for the fishing pier mitigation. Both overwater and below OHWM impacts (launch float, launch lane and fishing pier) will be mitigated for.

8d. Summarize what the mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.

- If you already completed 7g., you do not need to restate your answer here. [help]

Mitigation will be completed at the Huntzinger Boat Launch and South Sand Hollow mitigation areas to compensate for the new over-water structure (launch float, 718 sq-ft) and below OHWM impacts (launch ramp, 1,858 sq-ft) which represents approximately 2,576 square feet of impacted area. Mitigation activities will consist of planting approximately 7,728 square feet of native species appropriate within a wetland. It is anticipated that the proposed mitigation measures will result in a long-term beneficial effect to riparian habitat conditions along the mid-Columbia River.

8e. Summarize impact(s) to each waterbody in the table below. [help]

Activity (clear, dredge, fill, pile drive, etc.)	Waterbody name[1]	Impact location[2]	Duration of impact[3]	Amount of material to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
Install new concrete abutment slab	Columbia River	Adjacent	Permanent		0 (Above OHWM)
Install new concrete ramp slab	Columbia River	In	Permanent	57 CY of Crushed Rock Under Concrete slab 86 CY (Volume of pre-cast Concrete Panels) 40 CY of quarry spalls on sides of ramp	2,576 sq-ft below OHWM (of this area, 718 sq-ft has a launch float over it)
Install 12" diam.	Columbia	In	Permanent	4 CY Fill (piles)	5 sq-ft

new vibratory hammer steel pilings	River				
Install new float	Columbia River	In (over-water)	Permanent		718 sq-ft
Fill for walkway and parking areas	Columbia River	Adjacent	Permanent	0 (Above OHWM)	0 (Above OHWM)
Mitigation Planting	Columbia River	Adjacent	Permanent	0	7,725 sq-ft

[1] If no official name for the waterbody exists, create a unique name (such as "Stream 1") The name should be consistent with other documents provided.
[2] Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain.
[3] Indicate the days, months or years the waterbody will be measurably impacted by the work. Enter "permanent" if applicable.

8f. For all activities identified in 8e., describe the source and nature of the fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody. [help]

Above OHWM grading operations associated with the launch ramp:
54 CY of crushed rock fill above OHWM for stop log and cast in-place concrete base.
81 CY of cast in-place or pre-cast concrete planks for ramp surface and float base at various water elevations.
20 CY of quarry spalls for erosion protection on the side of the ramp at various water elevations.

8g. For all excavating or dredging activities identified in 8e., describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [help]

Approximately 57 cubic yards of crushed rock fill will be placed below the OHWM at the Huntzinger Boat Launch Recreation Area to create the base for the ramp. Crushed rock will be from a local rock quarry. Approximately 86 CY of pre-cast concrete panels will be placed below OHWM as the base for the launch float and as the ramp surface at various water elevations. The material will be placed with an excavator from the shore or from a floating barge. Approximately 40 CY of quarry spalls will be placed below the OHWM on the sides of the ramp for erosion protection. Quarry spalls will be from a local rock quarry and placed with an excavator or from a floating barge.

Part 9–Additional Information

Any additional information you can provide helps the reviewer(s) understand your project. Complete as much of this section as you can. It is ok if you cannot answer a question.

9a. If you have already worked with any government agencies on this project, list them below. [help]

Agency Name	Contact Name	Phone	Most Recent Date of Contact
US Fish & Wildlife Service	Steve Lewis	( )	
National Marine Fisheries Service	Justin Yeager	( )	
Kittitas County Planning	Kirk Holmes	(509) 962-7506	9-19-2011

9b. Are any of the wetlands or waterbodies identified in Part 7 or Part 8 on the Washington Department of Ecology's 303(d) List? [help]

- **If yes,** list the parameter(s) below.
- If you don't know, use Washington Department of Ecology's Water Quality Assessment tools at: http://www.ecy.wa.gov/programs/wq/303d/.

☒ Yes ☐ No

Temperature / 4,4'-DDD / 4,4'-DDE / PCB

9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the project in? [help]

- Go to http://cfpub.epa.gov/surf/locate/index.cfm to help identify the HUC.

17020010 Upper Columbia-Entiat

9d. What Water Resource Inventory Area Number (WRIA #) is the project in? [help]

- Go to http://www.ecy.wa.gov/services/gis/maps/wria/wria.htm to find the WRIA #.

WRIA 40 – Alkaki – Squilchuck {Huntzinger Boat Launch and mitigation plus Fishing Pier}

WRIA 41 – Lower Crab Creek {Huntzinger Fishing Pier Mitigation}

9e. Will the in-water construction work comply with the State of Washington water quality standards for turbidity? [help]

- Go to http://www.ecy.wa.gov/programs/wq/swqs/criteria.html for the standards.

☒ Yes ☐ No ☐ Not applicable

9f. If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [help]

- If you don't know, contact the local planning department.
- For more information, go to: http://www.ecy.wa.gov/programs/sea/sma/laws_rules/173-26/211_designations.html.

☒ Rural ☐ Urban ☐ Natural ☐ Aquatic ☐ Conservancy ☐ Other _____

9g. What is the Washington Department of Natural Resources Water Type? [help]

- Go to http://www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesApplications/Pages/fp_watertyping.aspx for the Forest Practices Water Typing System.

☒ Shoreline ☒ Fish ☐ Non-Fish Perennial ☐ Non-Fish Seasonal

9h. Will this project be designed to meet the Washington Department of Ecology's most current stormwater manual? [help]

- **If no**, provide the name of the manual your project is designed to meet.

☒ Yes ☐ No

Name of manual: Stormwater Management Manual for Eastern Washington

9i. If you know what the property was used for in the past, describe below. [help]

Not known. The shoreline and adjacent areas of the Columbia River at this location are, as a rule, largely undeveloped.

9j. Has a cultural resource (archaeological) survey been performed on the project area? [help]

- **If yes**, attach it to your JARPA package.

☒ Yes ☐ No

No places on the national, state, or local preservation registers are known. A professional cultural resources survey was conducted in October 2011 by Archaeological and Historical Services of Eastern Washington University. No sites or historic properties were identified, as reported in the report dated January 2012, and Washington Department of Archaeology and Historic Preservation has concurred with the results in a letter dated February 7, 2012. These documents are available upon request.

9k. Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [help]

Spring Chinook Salmon of the Upper Columbia River ESU
Summer Steelhead of the Upper Columbia River DPS
Bull Trout of the Columbia River DPS

Please see Appendix A for the independent Biological Assessments completed for the Huntzinger Boat Launch

project and the Huntzinger Fishing Pier.
9l. Name each species or habitat on the Washington Department of Fish and Wildlife's Priority Habitats and Species List that might be affected by the proposed work. [help]
Spring Chinook Salmon of the Upper Columbia River ESU Summer Steelhead of the Upper Columbia River DPS Bull Trout of the Columbia River DPS

Part 10–SEPA Compliance and Permits

Use the resources and checklist below to identify the permits you are applying for.

- Online Project Questionnaire at http://apps.ecy.wa.gov/opas/.
- Governor's Office of Regulatory Assistance at (800) 917-0043 or help@ora.wa.gov.
- For a list of agency addresses to send your application, click on the "where to send your completed JARPA" at http://www.epermitting.wa.gov.

10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [help]

- For more information about SEPA, go to www.ecy.wa.gov/programs/sea/sepa/e-review.html.

☐ A copy of the SEPA determination or letter of exemption is included with this application.

☒ A SEPA determination is pending with Grant County PUD (lead agency). The expected decision date is March 7, 2012.

☐ I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.) [help]

☐ This project is exempt (choose type of exemption below).

☐ Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt? _____

☐ Other: _____

☐ SEPA is pre-empted by federal law.

10b. Indicate the permits you are applying for. (Check all that apply.) [help]

LOCAL GOVERNMENT

Local Government Shoreline permits:

☒ Substantial Development ☐ Conditional Use ☐ Variance

☐ Shoreline Exemption Type (explain): _____

Other city/county permits:

☐ Floodplain Development Permit ☐ Critical Areas Ordinance

STATE GOVERNMENT

Washington Department of Fish and Wildlife:

☒ Hydraulic Project Approval (HPA) ☐ Fish Habitat Enhancement Exemption

Washington Department of Ecology: ☒ Section 401 Water Quality Certification
Washington Department of Natural Resources: ☐ Aquatic Resources Use Authorization
FEDERAL GOVERNMENT
United States Department of the Army permits (U.S. Army Corps of Engineers): ☒ Section 404 (discharges into waters of the U.S.) ☒ Section 10 (work in navigable waters)
United States Coast Guard permits: ☐ General Bridge Act Permit ☐ Private Aids to Navigation (for non-bridge projects)

Part 11–Authorizing Signatures

Signatures are required before submitting the JARPA package. The JARPA package includes the JARPA form, project plans, photos, etc. [help]

11a. Applicant Signature (required) [help]

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application. _____ (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. _____ (initial)

Applicant Printed Name	Applicant Signature	Date

11b. Authorized Agent Signature [help]

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

Authorized Agent Printed Name	Authorized Agent Signature	Date
J. Darrell Pock, Project Specialist III	J. Darrell Pock	3/2/2012

11c. Property Owner Signature (if not applicant). [help]
Not required if project is on existing rights-of-way or easements.

I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

Property Owner Printed Name	Property Owner Signature	Date

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than $10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.
ORA publication number: ENV-019-09

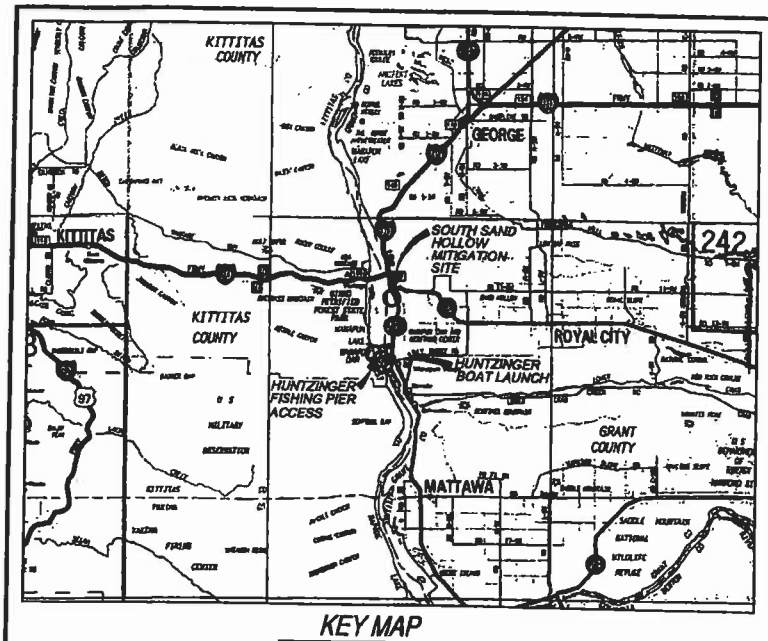
APPENDIX A

BIOLOGICAL ASSESSMENT

FOR THE HUNTZINGER BOAT LAUNCH AND FOR THE HUNTZINGER FISHING PIER

APPENDIX B

PLAN AND PROFILE VIEWS/DRAWINGS INCLUDING MITIGATION PLANS

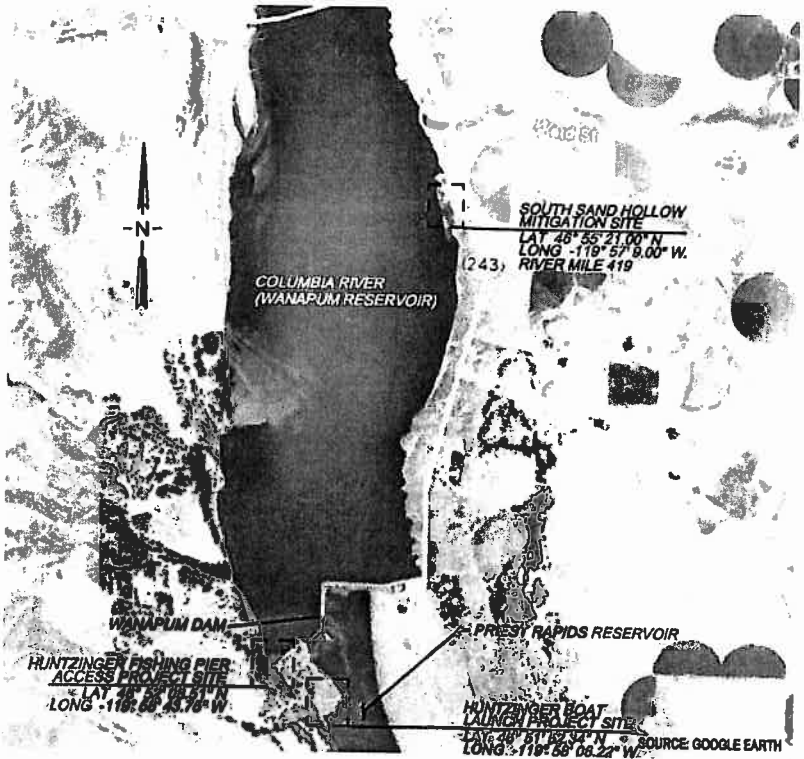


KEY MAP

NOT TO SCALE

SECTION 20, T16N, R23E - HUNTZINGER BOAT LAUNCH
SECTION 20, T16N, R23E - HUNTZINGER FISHING ACCESS PIER
SECTION 33, T17N, R23E - SOUTH SAND HOLLOW MITIGATION SITE

SHEET INDEX



LOCATION MAP

0 2000 4000

SCALE IN FEET

WATER ELEVATIONS - WANAPUM RESERVOIR	ELEV. FT
MAXIMUM HIGH WATER ELEVATION	505.65'
ORDINARY HIGH WATER ELEVATION	495.0'
MINIMUM WATER ELEVATION	487.6'
WATER ELEVATIONS - PRIEST RAPIDS RESERVOIR	ELEV. FT
MAXIMUM HIGH WATER ELEVATION	578.74'
ORDINARY HIGH WATER ELEVATION	575.04'
MINIMUM WATER ELEVATION	561.30'

PURPOSE: CONSTRUCT PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) & FISHING ACCESS & MITIGATE OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW.

DATUM: NAD 83 HORZ, NAVD 88 VERT

ADJACENT PROPERTY OWNERS:

PUD #2 OF GRANT COUNTY, USAOE, USBR, USBLM, BROWN

HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS SITE

VICINITY MAP

APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON

REFERENCE #:

SITE ADDRESS: N/A

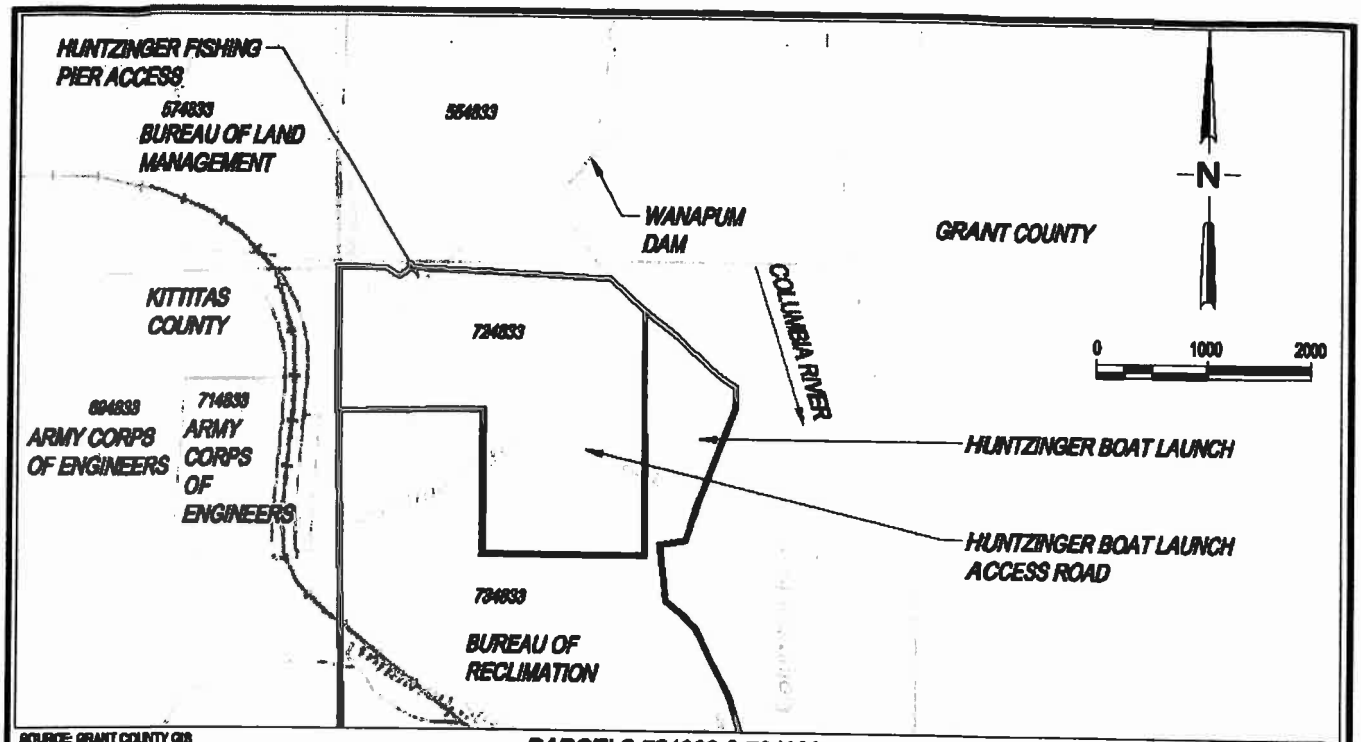
PROPOSED: GRADING, NEW FLOAT, FISHING PIER, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING.

IN: COLUMBIA RIVER (WANAPUM & PRIEST RAPIDS RESERV.)

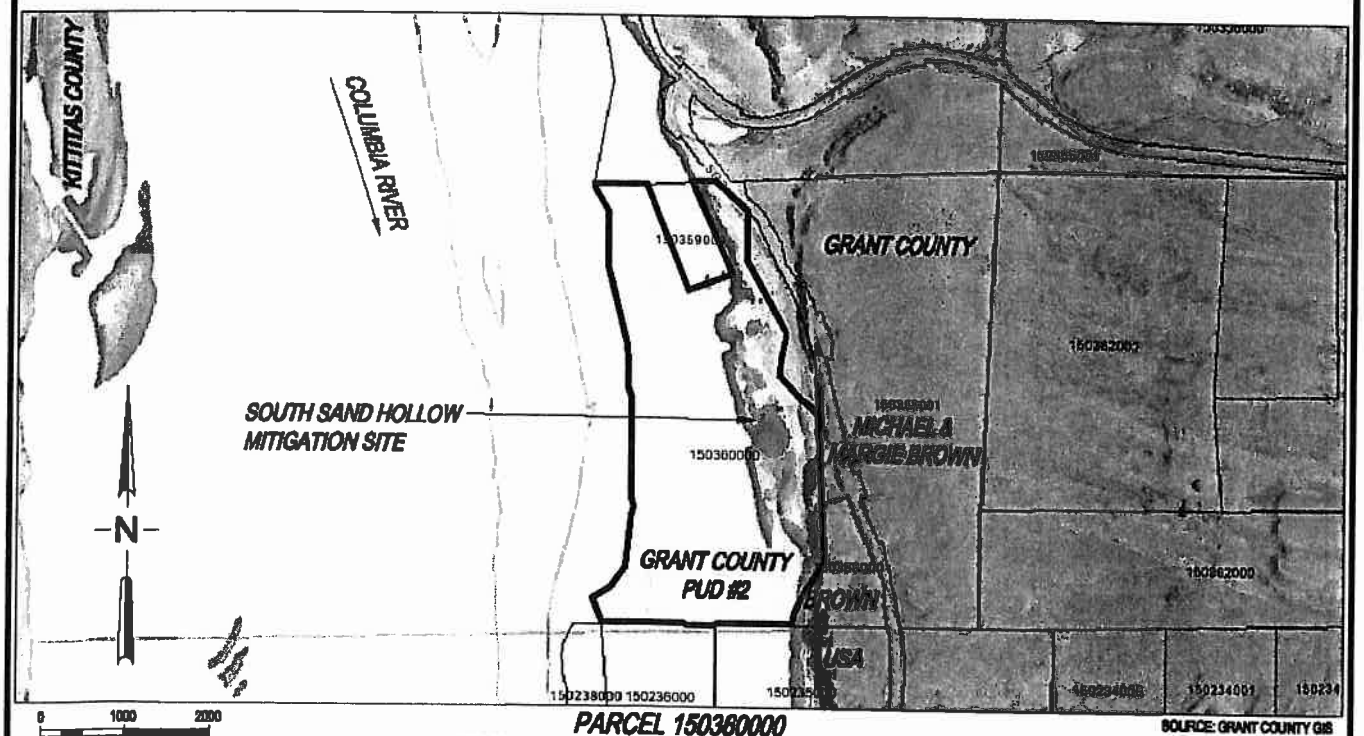
NEAR/AT: BEVERLY, WA (2.75 MILES TO SOUTHEAST)

COUNTY: GRANT STATE: WA

SHEET 1 OF 28 DATE: 12/07/11

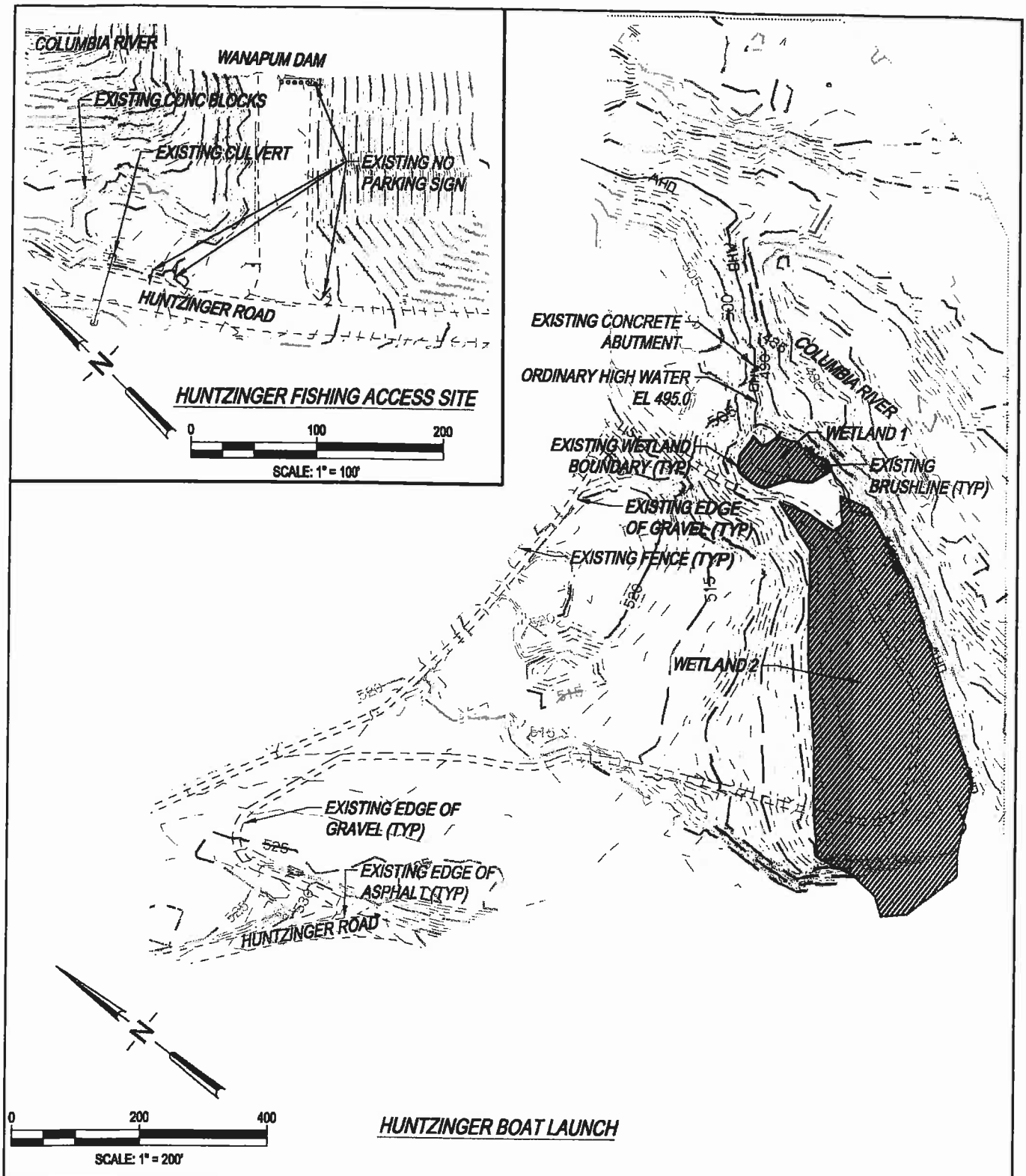


PARCELS 724833 & 734833
HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS

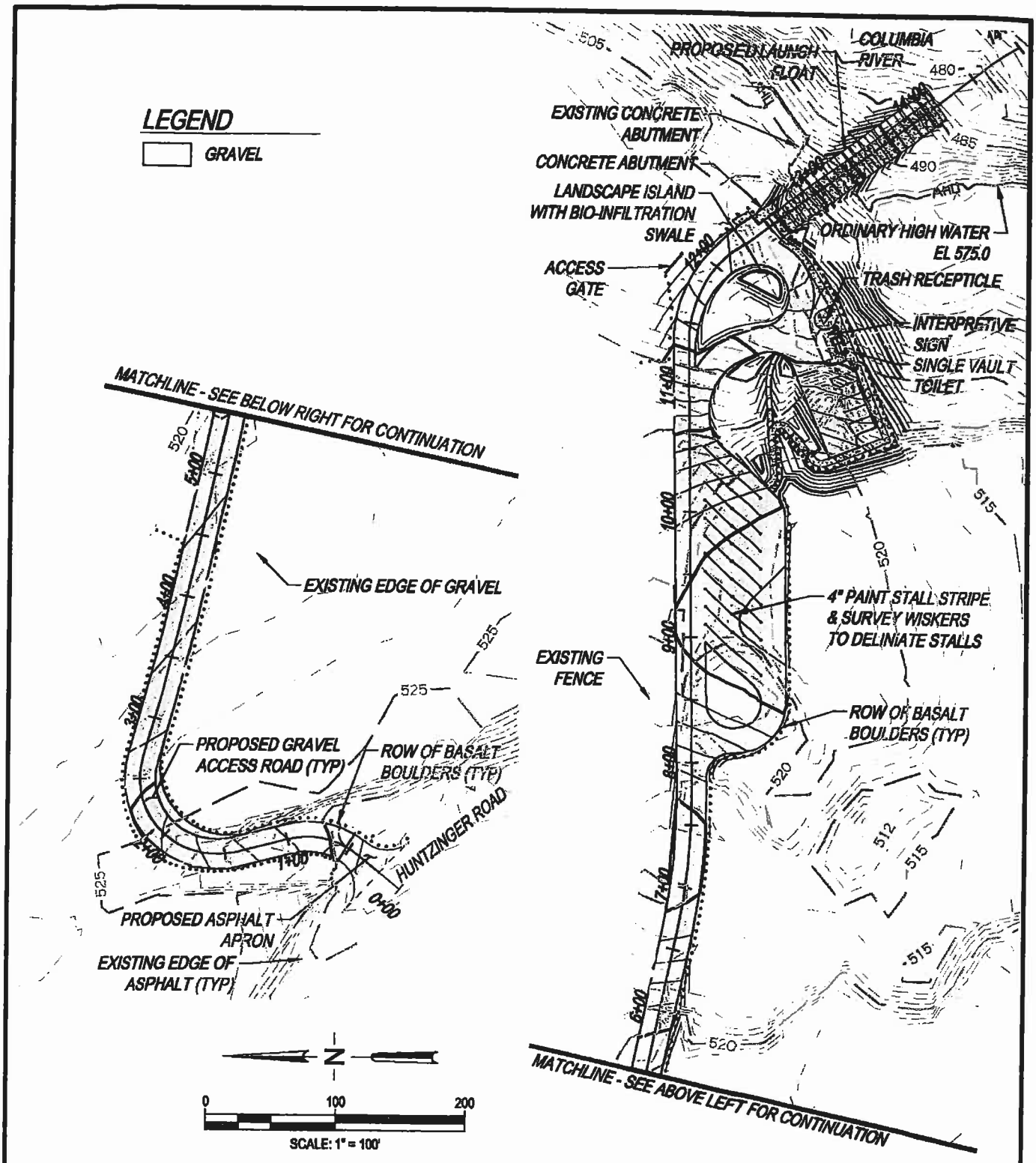


PARCEL 150360000
SOUTH SAND HOLLOW MITIGATION SITE

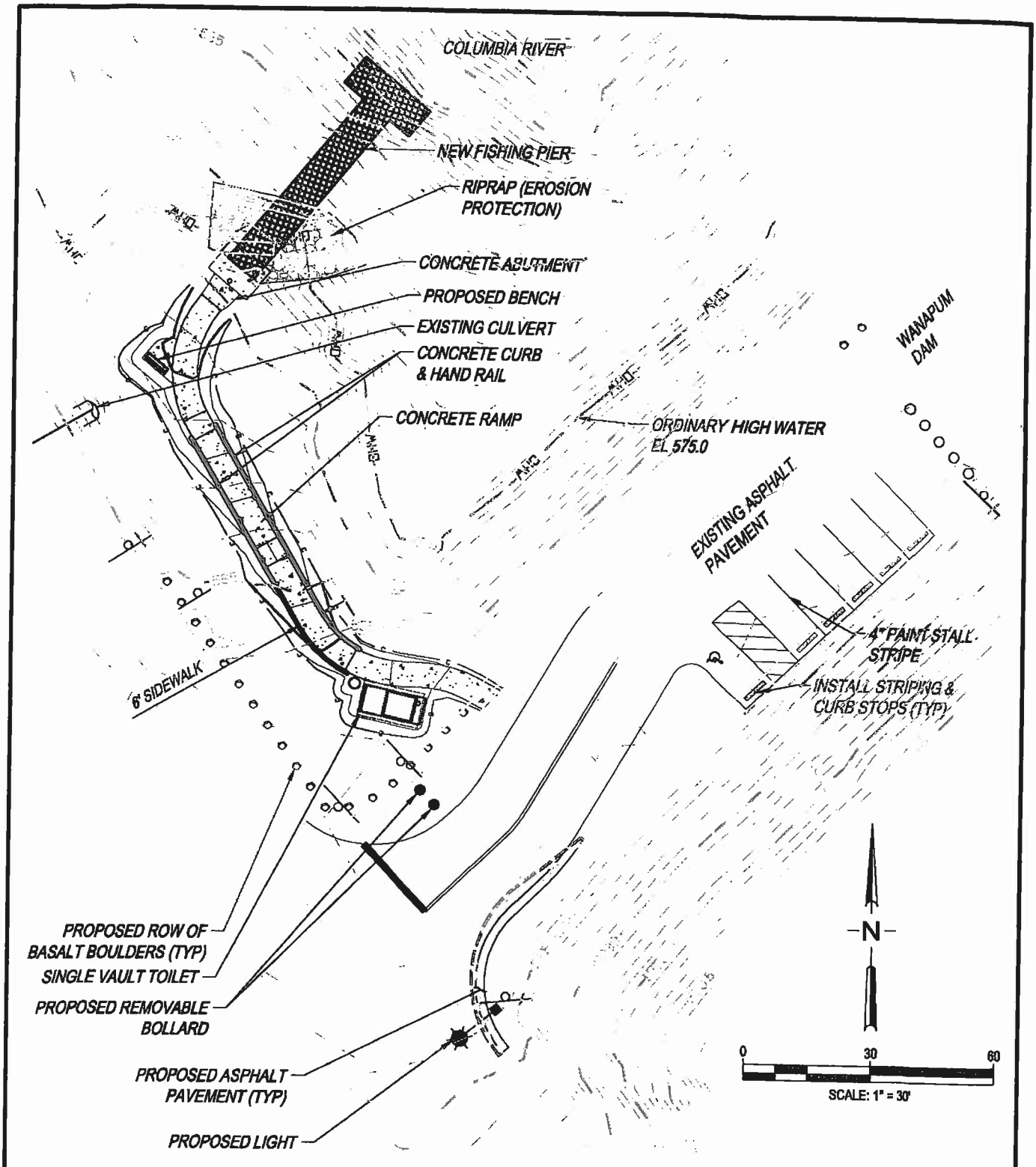
PURPOSE: CONSTRUCT PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) & FISHING ACCESS & MITIGATE OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: NAD 83 HORZ, NAVD 88 VERT ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	**HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS SITE** **PARCEL MAP** APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: GRADING, NEW FLOAT, FISHING PIER, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING. IN: COLUMBIA RIVER (WANAPUM & PRIEST RAPIDS RESERV.) NEAR/AT: BEVERLY, WA (2.75 MILES TO SOUTHEAST) COUNTY: GRANT STATE: WA SHEET 2 OF 28 DATE: 12/09/11



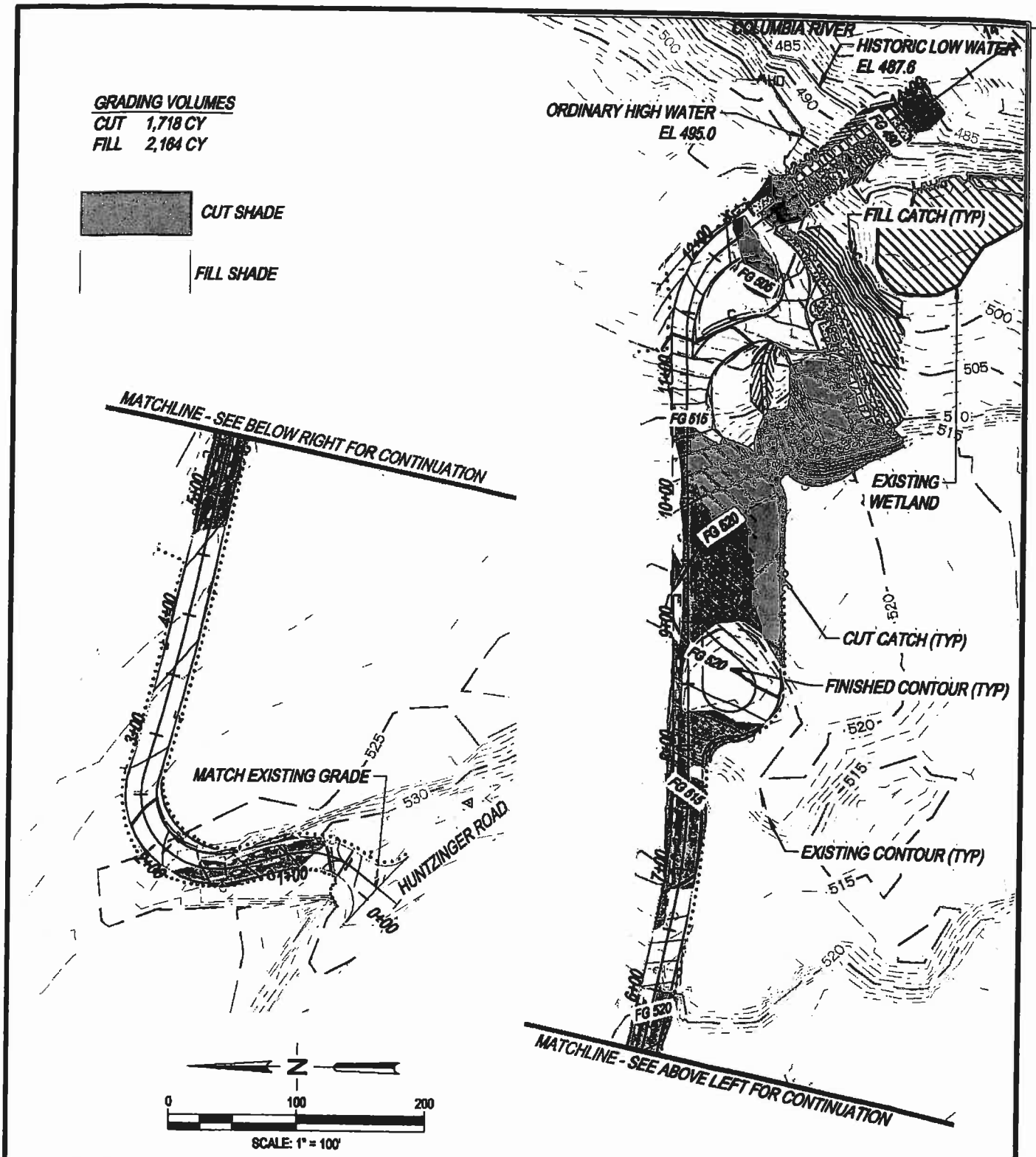
PURPOSE: CONSTRUCT A NEW PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) AND MITIGATE FOR BOAT LAUNCH OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: NAD 83 HORZ, NAVD 88 VERT ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	**HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS SITE** **EXISTING CONDITION** APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: GRADING, NEW FLOAT, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING. IN: COLUMBIA RIVER (WANAPUM RESERVOIR) NEAR/AT: BEVERLY, WA (2.75 MILES TO SOUTHEAST) COUNTY: GRANT STATE: WA SHEET 3 OF 28 DATE: 2/22/12



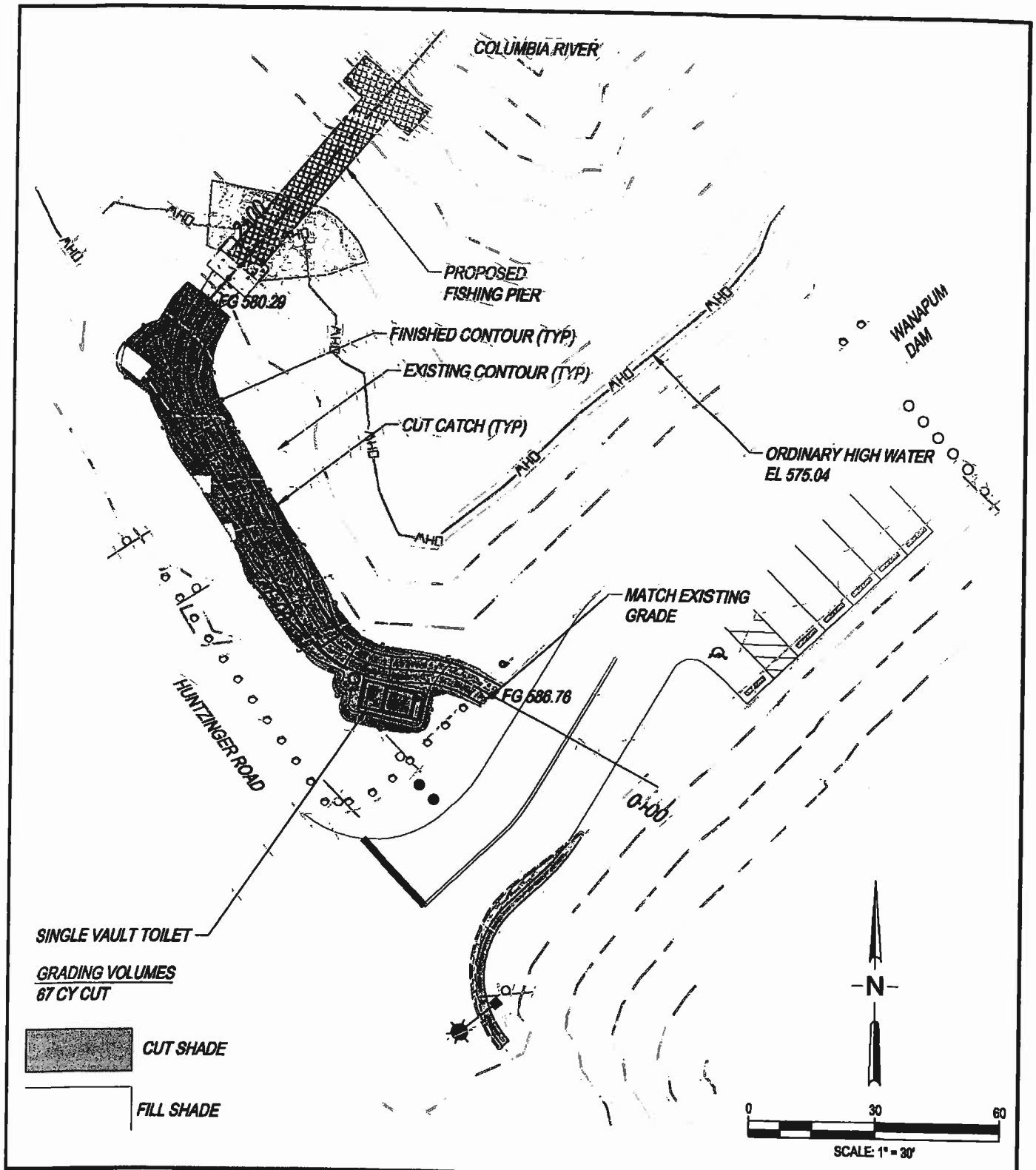
PURPOSE: CONSTRUCT PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) & FISHING ACCESS & MITIGATE OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: NAD 83 HORZ, NAVD 88 VERT ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	**HUNTZINGER BOAT LAUNCH** **BOAT LAUNCH SITE PLAN** APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS:	PROPOSED: GRADING, NEW FLOAT, FISHING PIER, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING. IN: COLUMBIA RIVER (WANAPUM & PRIEST RAPIDS RESERV.) NEAR/AT: BEVERLY, WA (2.75 MILES TO SOUTHEAST) COUNTY: GRANT STATE: WA SHEET 4 OF 28 DATE: 12/07/11



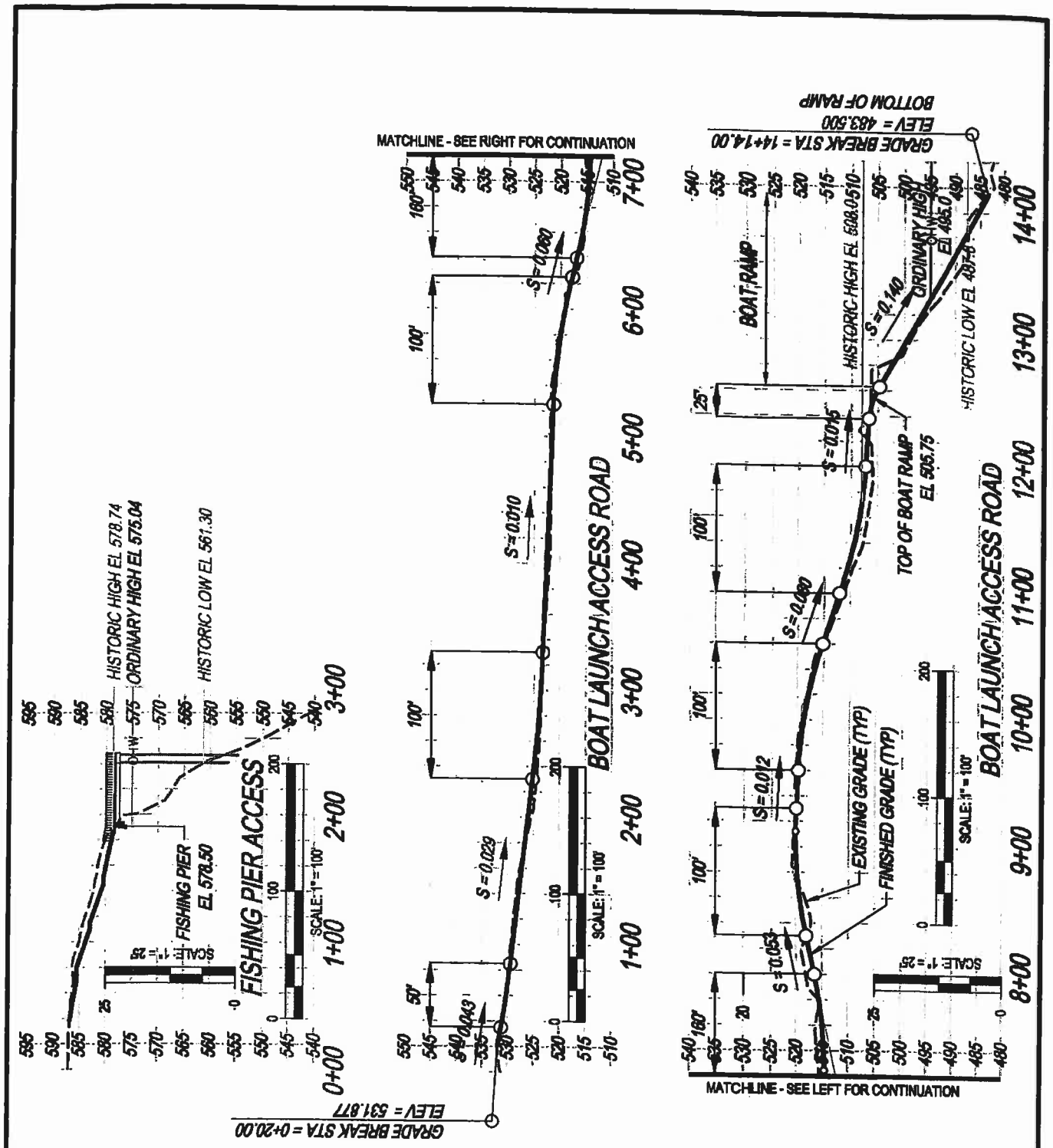
PURPOSE: CONSTRUCT A NEW PUBLIC FISHING FACILITY (HUNTZINGER FISHING ACCESS SITE) AND MITIGATE FOR FISHING PIER OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: NAD 83 HORZ, NAVD 88 VERT ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	**HUNTZINGER FISHING ACCESS SITE** **SITE PLAN** APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: GRADING, NEW FISHING PIER, PARKING LOT STRIPING, AND MITIGATION PLANTING. IN: COLUMBIA RIVER (WANAPUM RESERVOIR) NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTHEAST) COUNTY: GRANT STATE: WA SHEET 5 OF 28 DATE: 12/07/11



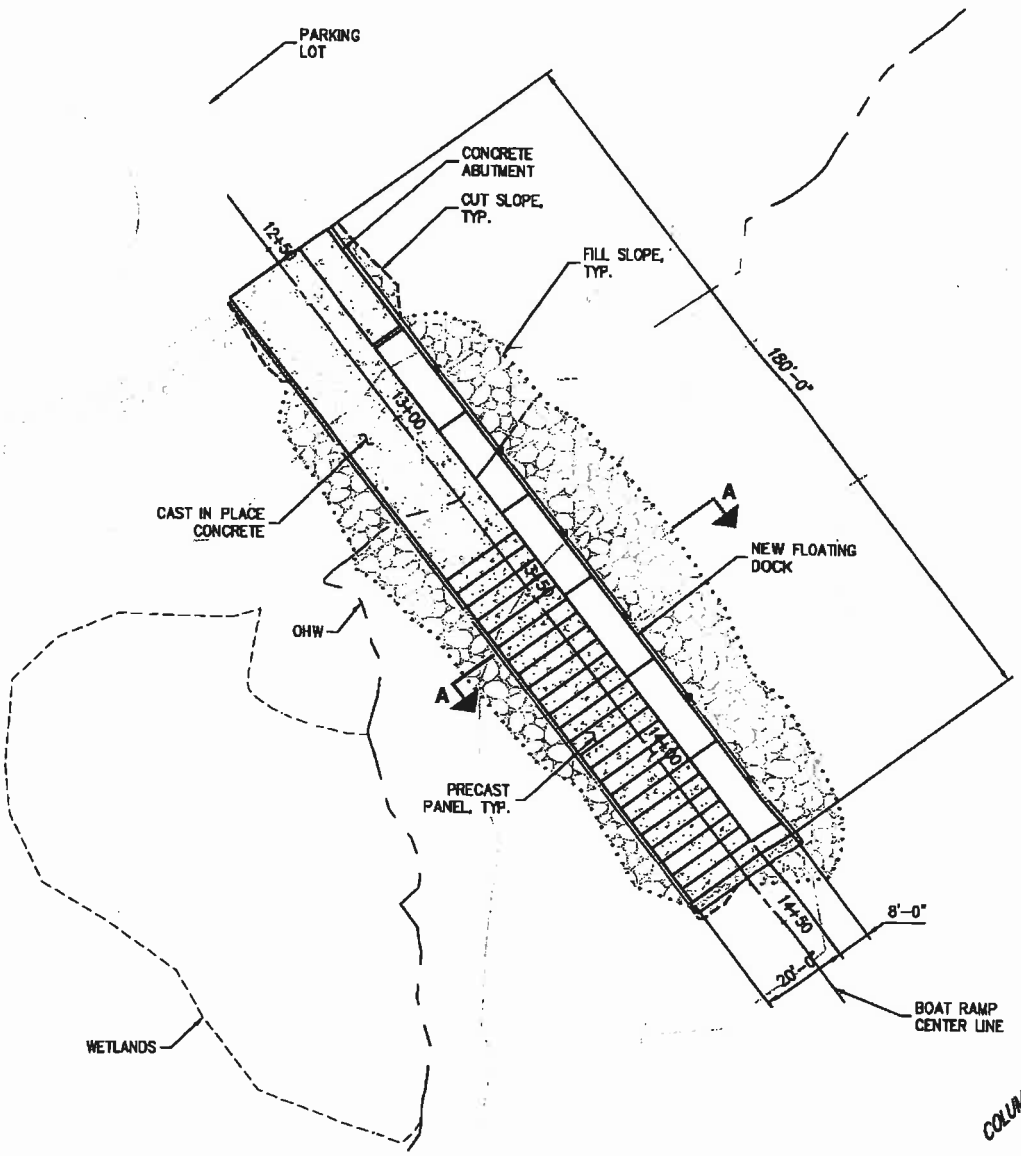
PURPOSE: CONSTRUCT PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) & FISHING ACCESS & MITIGATE OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: NAD 83 HORZ, NAVD 88 VERT ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	**HUNTZINGER BOAT LAUNCH GRADING PLAN** APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: GRADING, NEW FLOAT, FISHING PIER, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING. IN: COLUMBIA RIVER (WANAPUM & PRIEST RAPIDS RESERV.) NEAR/AT: BEVERLY, WA (2.75 MILES TO SOUTHEAST) COUNTY: GRANT STATE: WA SHEET 6 OF 28 DATE: 12/07/11



PURPOSE: CONSTRUCT A NEW PUBLIC FISHING FACILITY (HUNTZINGER FISHING ACCESS SITE) AND MITIGATE FOR FISHING PIER OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: NAD 83 HORZ, NAVD 88 VERT ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	**HUNTZINGER FISHING ACCESS SITE GRADING PLAN** APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: GRADING, NEW FISHING PIER, PARKING LOT STRIPING, AND MITIGATION PLANTING. IN: COLUMBIA RIVER (WANAPUM RESERVOIR) NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTHEAST) COUNTY: GRANT STATE: WA SHEET 7 OF 28 DATE: 12/08/11



PURPOSE: CONSTRUCT PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) & FISHING ACCESS & MITIGATE OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: NAD 83 HORZ, NAVD 88 VERT ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	**HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS SITE** **GRADING SECTIONS** APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: GRADING, NEW FLOAT, FISHING PIER, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING. IN: COLUMBIA RIVER (WANAPUM & PRIEST RAPIDS RESERV.) NEAR/AT: BEVERLY, WA (2.75 MILES TO SOUTHEAST) COUNTY: GRANT STATE: WA SHEET 8 OF 28 DATE: 12/07/11



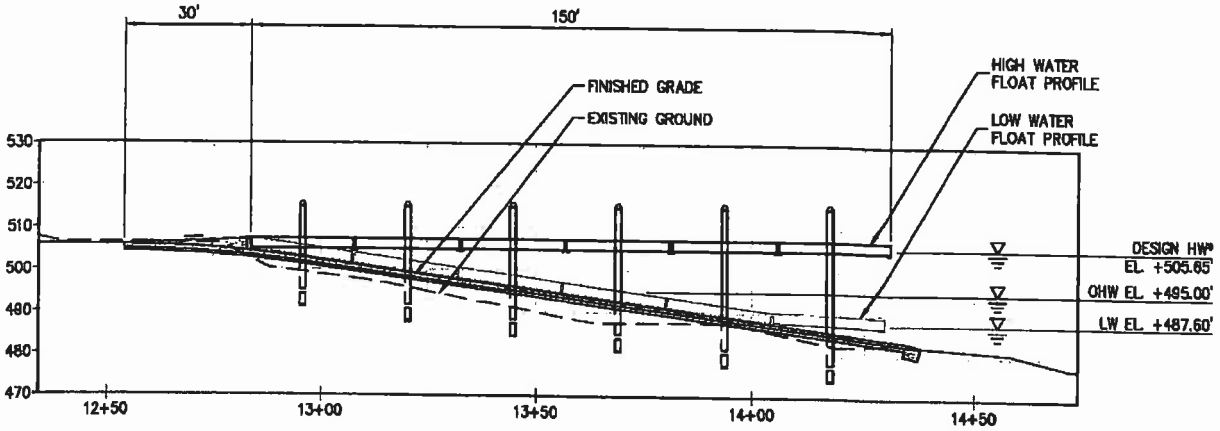
PLAN

WATER ELEVATION	ELEVATION
MAXIMUM HIGH WATER	505.65'
ORDINARY HIGH WATER	495.00'
MINIMUM WATER ELEVATION	487.60'

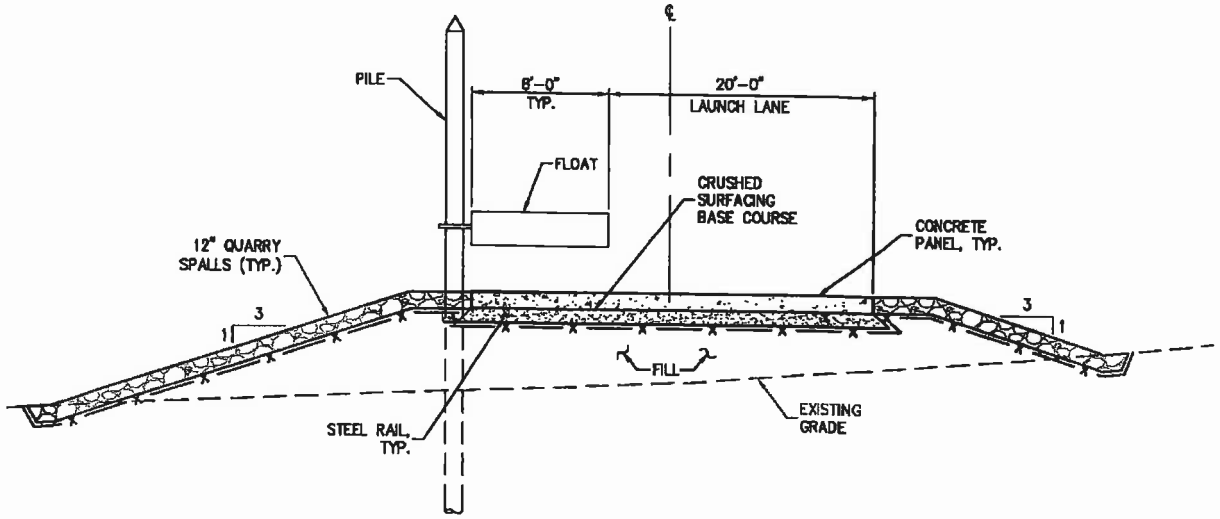
PURPOSE: CONSTRUCT PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) & FISHING ACCESS & MITIGATE OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW.
DATUM: NAD 83 HORZ, NAVD 88 VERT
ADJACENT PROPERTY OWNERS:
PUD #2 OF GRANT COUNTY, USACE, USBR, USBLM

HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS SITE
SITE PLAN
APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON
REFERENCE #:
SITE ADDRESS: N/A

PROPOSED: GRADING, NEW FLOAT, FISHING PIER, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING.
IN: COLUMBIA RIVER (WANAPUM & PRIEST RAPIDS RESERV.)
NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTHEAST)
COUNTY: GRANT STATE: WA
SHEET 9 OF 28 DATE: 12/09/11

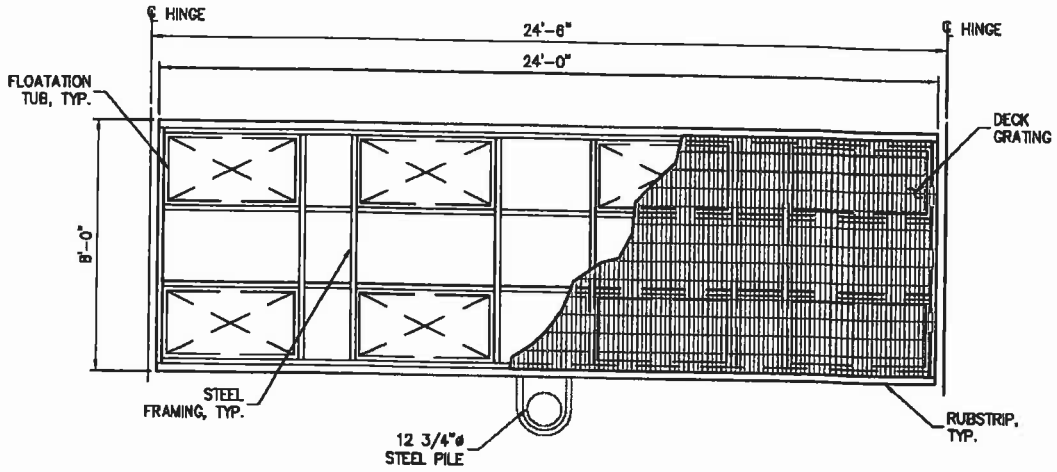


PROPOSED PROFILE

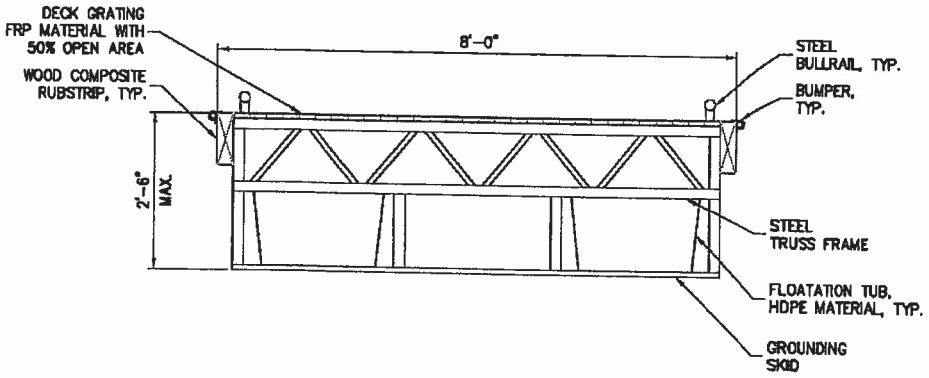


SECTION A-A

PURPOSE: CONSTRUCT PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) & FISHING ACCESS & MITIGATE OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: NAD 83 HORZ, NAVD 88 VERT ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACE, USBR, USBLM	*HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS SITE PROFILE & SECTION* APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE#: SITE ADDRESS: N/A	PROPOSED: GRADING, NEW FLOAT, FISHING PIER, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING. IN: COLUMBIA RIVER (WANAPUM & PRIEST RAPIDS RESERV.) NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTHEAST) COUNTY: GRANT STATE: WA SHEET 10 OF 28 DATE: 12/09/11



PLAN

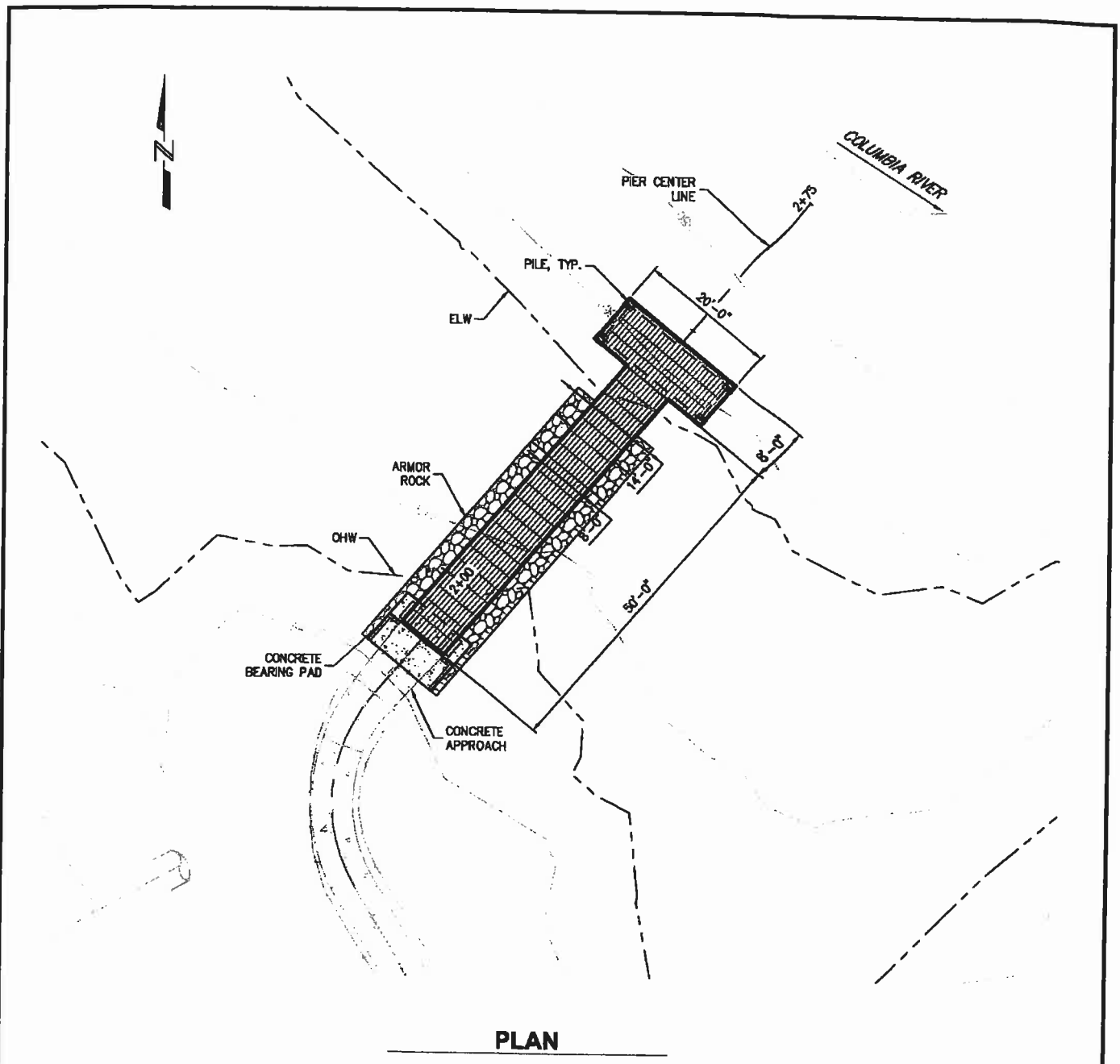


SECTION

FLOAT

NOTE:
ANCHORING SYSTEM FOR FLOATING DOCK WILL BE DRIVEN STEEL PILES.

PURPOSE: CONSTRUCT PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) & FISHING ACCESS & MITIGATE OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: NAD 83 HORZ, NAVD 88 VERT ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACE, USBR, USBLM	*HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS SITE* *FLOAT DETAILS* APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: GRADING, NEW FLOAT, FISHING PIER, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING. IN: COLUMBIA RIVER (WANAPUM & PRIEST RAPIDS RESERV.) NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTHEAST) COUNTY: GRANT STATE: WA SHEET 11 OF 28 DATE: 12/09/11



PLAN

WATER ELEVATION	ELEVATION
MAXIMUM HIGH WATER	579.00'
ORDINARY HIGH WATER	578.50'
MINIMUM WATER ELEVATION (ELW)	563.00'

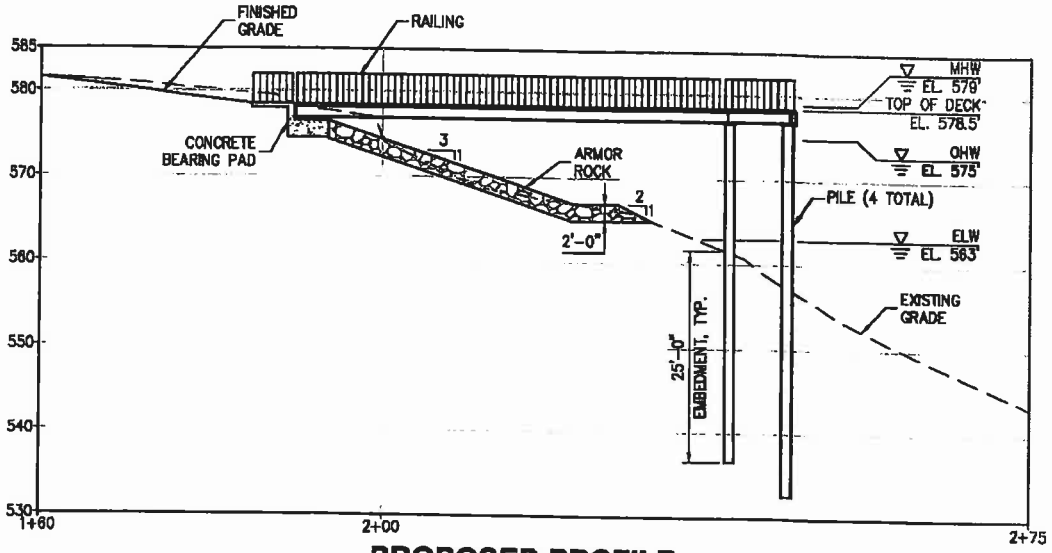
PURPOSE: CONSTRUCT PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) & FISHING ACCESS & MITIGATE OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW.
DATUM: NAD 83 HORZ, NAVD 88 VERT
ADJACENT PROPERTY OWNERS:
PUD #2 OF GRANT COUNTY, USACE, USBR, USBLM

HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS SITE SITE PLAN

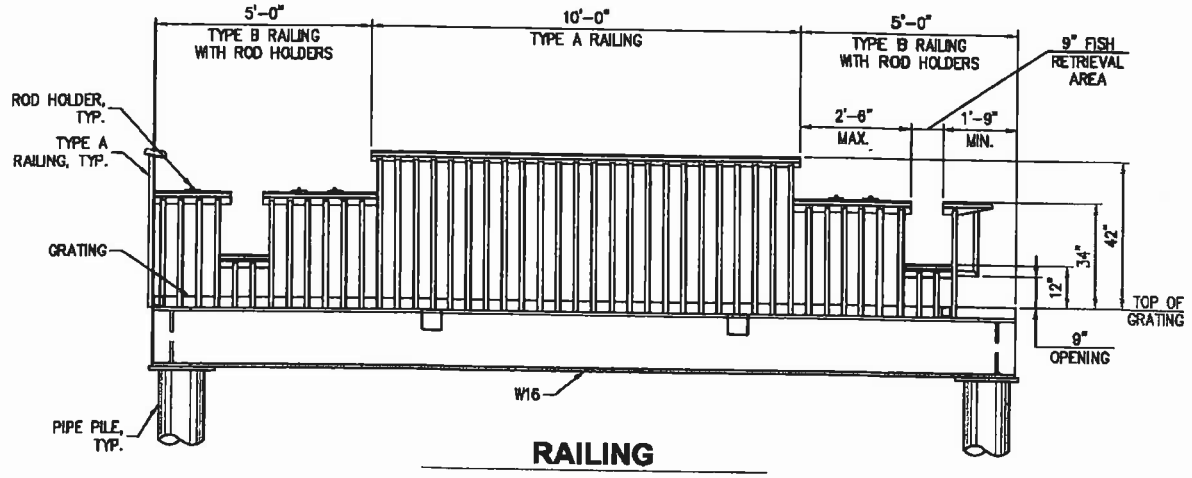
APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON
REFERENCE #:
SITE ADDRESS: N/A

PROPOSED: GRADING, NEW FLOAT, FISHING PIER, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING.
IN: COLUMBIA RIVER (WANAPUM & PRIEST RAPIDS RESERV.)
NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTHEAST)
COUNTY: GRANT STATE: WA
SHEET 12 OF 28 DATE: 12/09/11

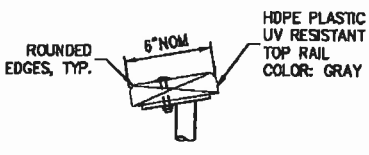
Drawings\2009\024057.05 - Grant County Recreation Facility-Huntzinger Road Fishing Pier\JARPA Permits\024057.05-12.dgn



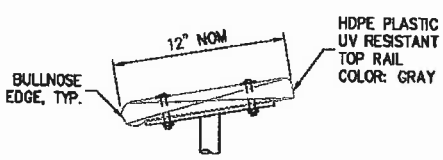
PROPOSED PROFILE



RAILING



TYPE A TOP RAIL



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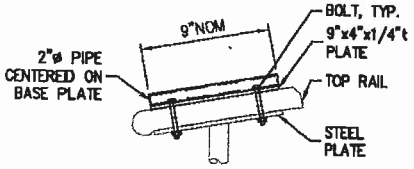
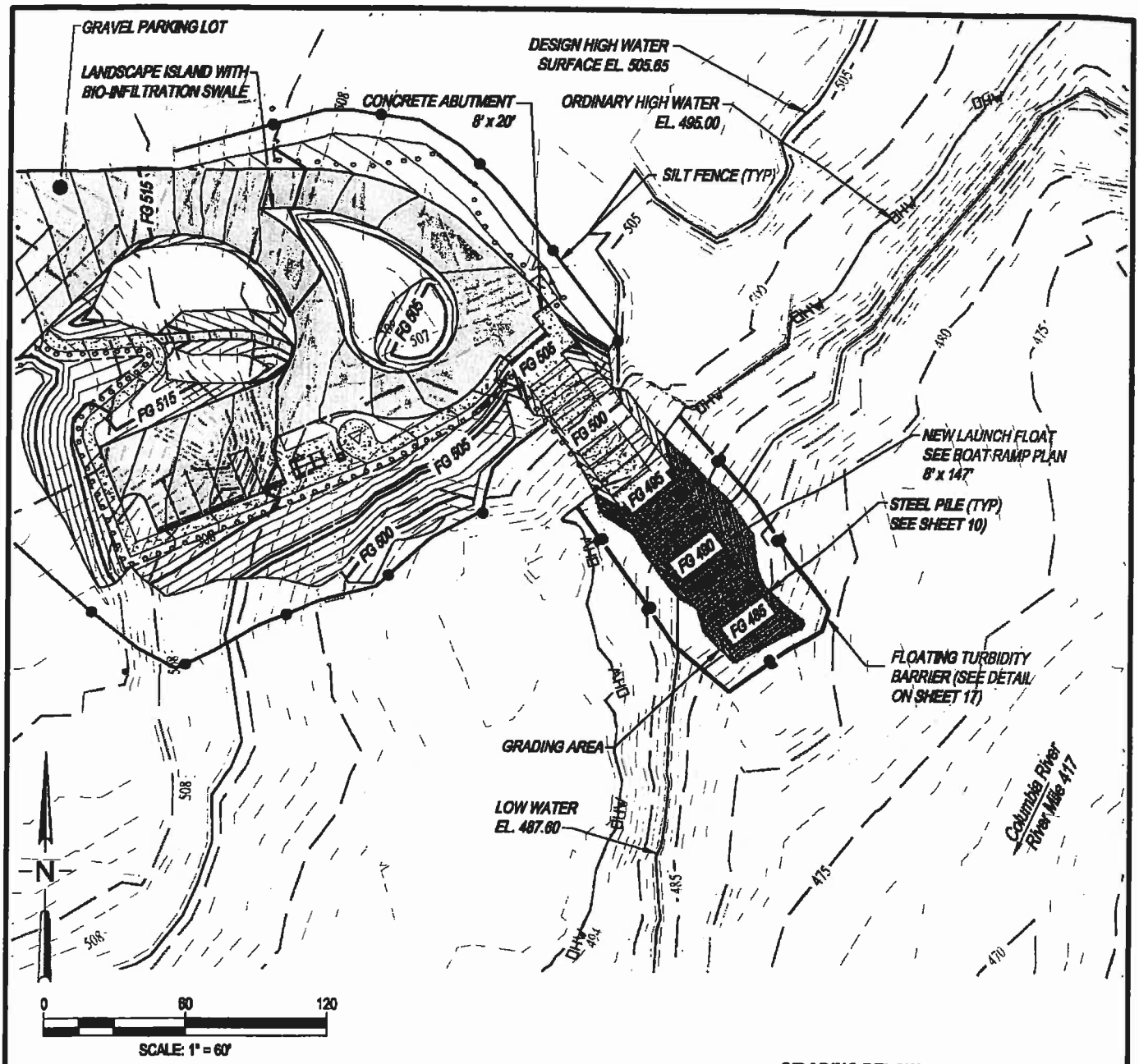


ROD HOLDER

PURPOSE: CONSTRUCT PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) & FISHING ACCESS & MITIGATE OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: NAD 83 HORZ, NAVD 88 VERT ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACE, USBR, USBLM	*HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS SITE* *ELEVATION & DETAILS* APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE#: SITE ADDRESS: N/A	PROPOSED: GRADING, NEW FLOAT, FISHING PIER, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING. IN: COLUMBIA RIVER (WANAPUM & PRIEST RAPIDS RESERV.) NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTHEAST) COUNTY: GRANT STATE: WA SHEET 13 OF 28 DATE: 12/09/11



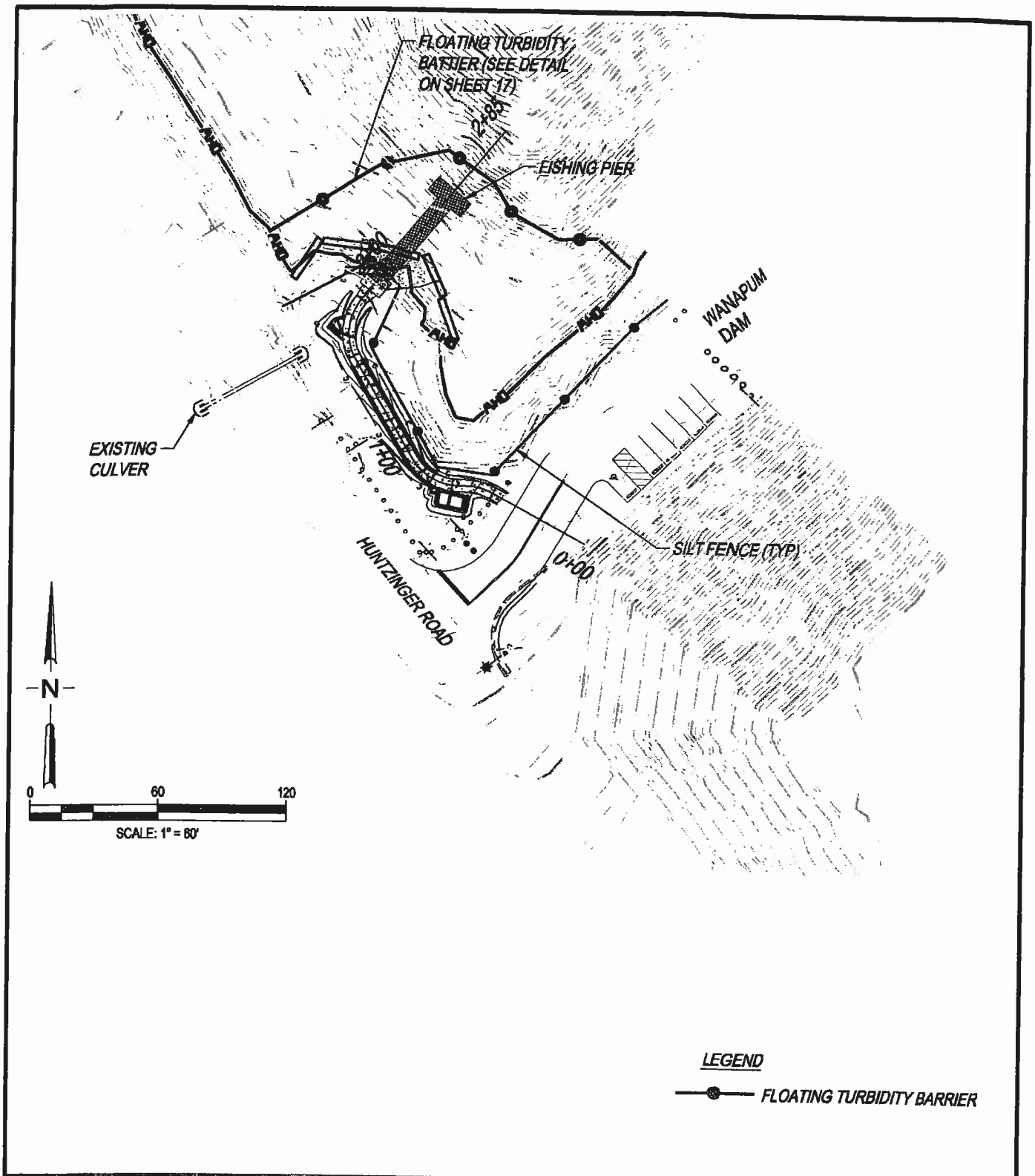
GRADING BELOW OHW QUANTITIES

80 CUBIC YARDS OF CUT
80 CUBIC YARDS OF FILL
57 CY OF PLACED CRUSHED ROCK
40 CY OF PLACED QUARRY SPALLS

LEGEND

UNDERWATER GRADING AREA
FLOATING TURBIDITY BARRIER

PURPOSE: CONSTRUCT PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) & FISHING ACCESS & MITIGATE OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: NAD 83 HORZ, NAVD 88 VERT ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	HUNTZINGER BOAT LAUNCH EROSION CONTROL PLAN APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS:	PROPOSED: GRADING, NEW FLOAT, FISHING PIER, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING. IN: COLUMBIA RIVER (WANAPUM & PRIEST RAPIDS RESERV.) NEAR/AT: BEVERLY, WA (2.75 MILES TO SOUTHEAST) COUNTY: GRANT STATE: WA SHEET 14 OF 28 DATE: 12/07/11



PURPOSE: CONSTRUCT PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) & FISHING ACCESS & MITIGATE OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: NAD 83 HORZ, NAVD 88 VERT ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	**HUNTZINGER FISHING ACCESS SITE** **EROSION CONTROL PLAN** APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS:	PROPOSED: GRADING, NEW FLOAT, FISHING PIER, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING. IN: COLUMBIA RIVER (WANAPUM & PRIEST RAPIDS RESERV.) NEAR/AT: BEVERLY, WA (2.75 MILES TO SOUTHEAST) COUNTY: GRANT STATE: WA SHEET 15 OF 28 DATE: 12/07/11

NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO ANY LAND DISTURBING ACTIVITY CAUSED BY CLEARING OR GRADING. THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE SITED, DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE WASHINGTON STATE DEPARTMENT OF ECOLOGY STORMWATER MANUAL FOR EASTERN WASHINGTON, AND WSDOT SPECIFICATIONS.

2. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THROUGHOUT CONSTRUCTION ACTIVITY UNTIL FINAL SITE STABILIZATION.

3. THE CONTRACTOR SHALL MAINTAIN ON SITE A WRITTEN DAILY LOG OF EROSION CONTROL BMP MAINTENANCE.

4. IF THE OWNER OR ENGINEER(S) HAS EVIDENCE OF POOR CONSTRUCTION PRACTICES OR IMPROPER EROSION PREVENTION BMPs, A STOP WORK ORDER SHALL BE ISSUED AT THE CONTRACTOR'S EXPENSE UNTIL PROPER MEASURES HAVE BEEN TAKEN AND APPROVED.

5. INSTALL SEDIMENT FENCE IN ACCORDANCE WITH WSDOT STANDARD DETAIL I-30.15-00.

6. SEDIMENT CONTROL BMPs SHALL BE INSPECTED WEEKLY AND AFTER ANY STORM EVENT PRODUCING RUNOFF. THE INSPECTION FREQUENCY FOR STABILIZED, INACTIVE SITES SHALL BE ONCE EVERY TWO WEEKS OR MORE FREQUENTLY AS DETERMINED BY THE LOCAL PERMITTING AUTHORITY BASED ON THE LEVEL OF SOIL STABILITY AND POTENTIAL FOR ADVERSE ENVIRONMENTAL IMPACTS.

7. IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST ONE OR MORE OF THE FOLLOWING PREVENTATIVE MEASURES SHALL BE TAKEN FOR DUST CONTROL:
   -MINIMIZE THE PERIOD OF SOIL EXPOSURE THROUGH THE USE OF TEMPORARY GROUND COVER AND OTHER TEMPORARY STABILIZATION PRACTICES.
   -SPRINKLE THE SITE WITH WATER UNTIL THE SURFACE IS WET.
   -SPRAY EXPOSED SOIL AREAS WITH A DUST PALLIATIVE. NOTE: USE OF PETROLEUM PRODUCTS OR POTENTIALLY HAZARDOUS MATERIALS ARE PROHIBITED

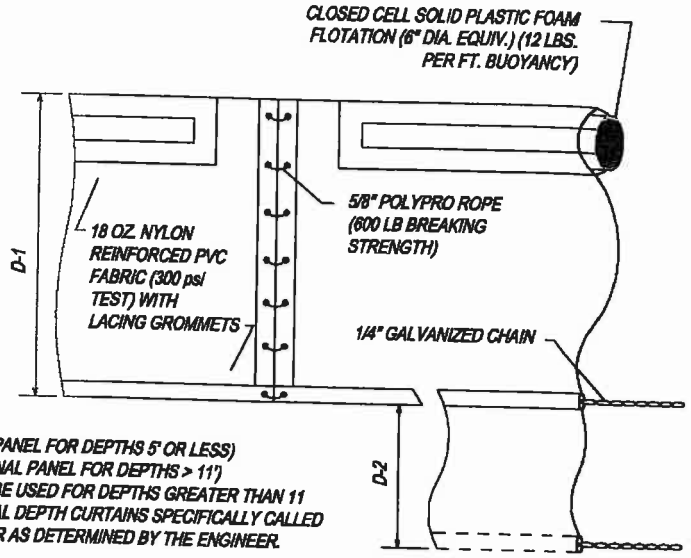
8. CLEARING LIMITS SHALL BE CLEARLY MARKED PRIOR TO ANY SOIL DISTURBANCE.

9. CONSTRUCTION ACCESS BMP SHALL BE INSTALLED AND MAINTAINED TO KEEP SOIL FROM BEING TRACKED ONTO ROADWAYS.

10. HIGHLY TURBID OR CONTAMINATED DEWATERING WATER FROM CONSTRUCTION EQUIPMENT OPERATION SHALL BE HANDLED SEPARATELY FROM STORMWATER. UTILIZE CONTAINMENT BERMS AND FLOATING TURBIDITY BARRIER AS SPECIFIED HEREIN. CONTROL OF DEWATERING MAY INCLUDE FILTRATION WITH BERMS, GROUND INFILTRATION, ON SITE TANK TREATMENT, OR OTHER SIMILAR SYSTEMS PRIOR TO DISCHARGE BACK INTO SURFACE WATERS.

11. FLOATING TURBIDITY BARRIER SHALL BE DEPLOYED AROUND ALL IN-WATER WORK AREAS. (BMP C233).

PURPOSE: CONSTRUCT PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) & FISHING ACCESS & MITIGATE OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: NAD 83 HORZ, NAVD 88 VERT ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS SITE EROSION CONTROL NOTES APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS:	PROPOSED: GRADING, NEW FLOAT, FISHING PIER, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING. IN: COLUMBIA RIVER (WANAPUM & PRIEST RAPIDS RESERV.) NEAR/AT: BEVERLY, WA (2.75 MILES TO SOUTHEAST) COUNTY: GRANT STATE: WA SHEET 16 OF 28 DATE: 12/07/11



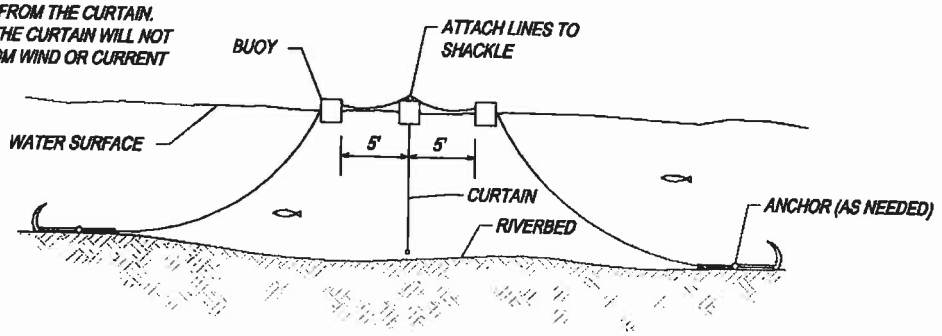
D-1=5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS)
D-2=5' STD. (ADDITIONAL PANEL FOR DEPTHS > 11')
TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 11 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

NOTES:
1. TURBIDITY BARRIERS ARE TO BE USED IN ALL PERMANENT BODIES OF WATER REGARDLESS OF WATER DEPTH.
2. NUMBER AND SPACING OF ANCHORS DEPENDENT ON CURRENT VELOCITIES.
3. MAX GAP BETWEEN BOTTOM OF BARRIER AND RIVER BED SHALL BE 6 INCHES.

FLOATING TURBIDITY BARRIER

NO SCALE

NOTE: ANCHORING WITH BUOYS, AS SHOWN, REMOVES ALL VERTICAL FORCES FROM THE CURTAIN. HENCE, THE CURTAIN WILL NOT SINK FROM WIND OR CURRENT LOADS.

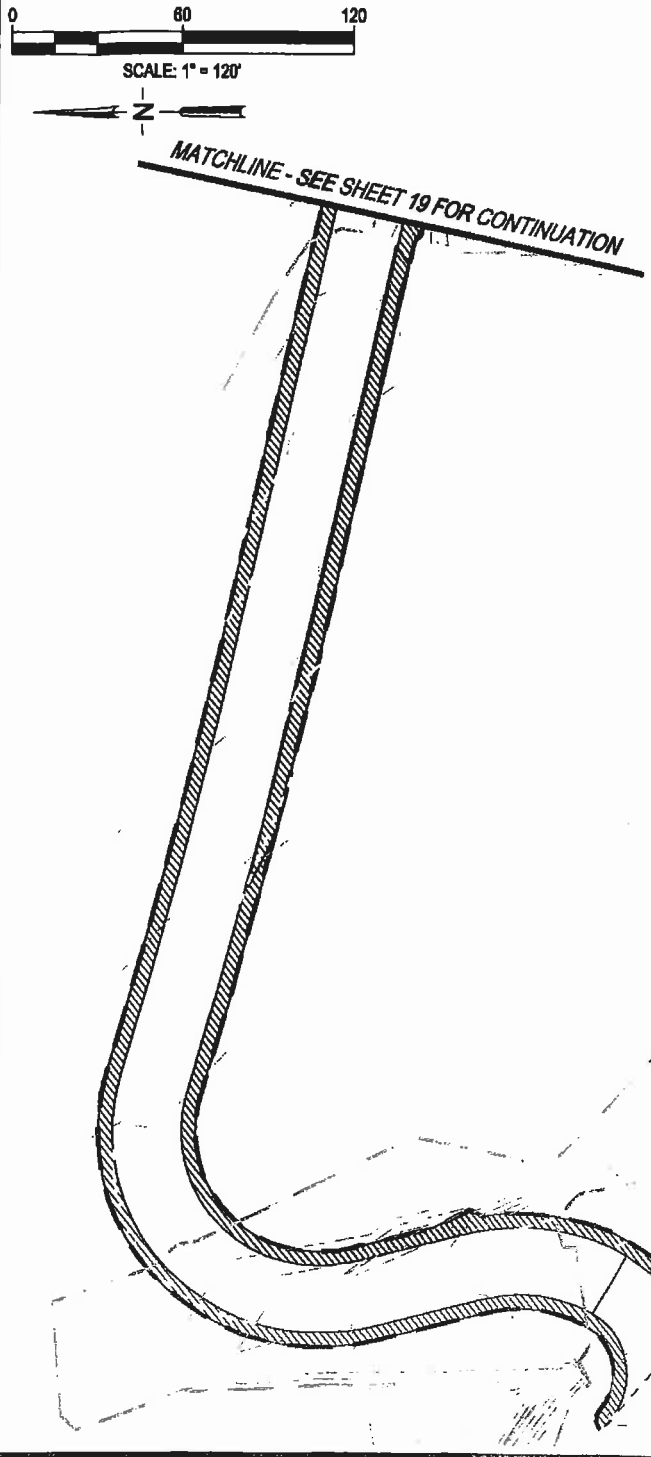


ANCHOR DETAIL

NO SCALE

PURPOSE: CONSTRUCT PUBLIC BOAT LAUNCH FACILITY (HUNTZINGER BOAT LAUNCH) & FISHING ACCESS & MITIGATE OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: NAD 83 HORZ, NAVD 88 VERT ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	**HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS SITE EROSION CONTROL DETAILS** APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS:	PROPOSED: GRADING, NEW FLOAT, FISHING PIER, PARKING LOT CONSTRUCTION, ACCESS DRIVE CONSTRUCTION, AND MITIGATION PLANTING. IN: COLUMBIA RIVER (WANAPUM & PRIEST RAPIDS RESERV.) NEAR/AT: BEVERLY, WA (2.75 MILES TO SOUTHEAST) COUNTY: GRANT STATE: WA SHEET 17 OF 28 DATE: 12/07/11

HUNTZINGER BOAT LAUNCH SITE RESTORATION / MITIGATION MAP



NOTE:
SEE SHEET 22 FOR SUMMARY OF PROPOSED MITIGATION AND PLANT MATERIALS LEGEND.

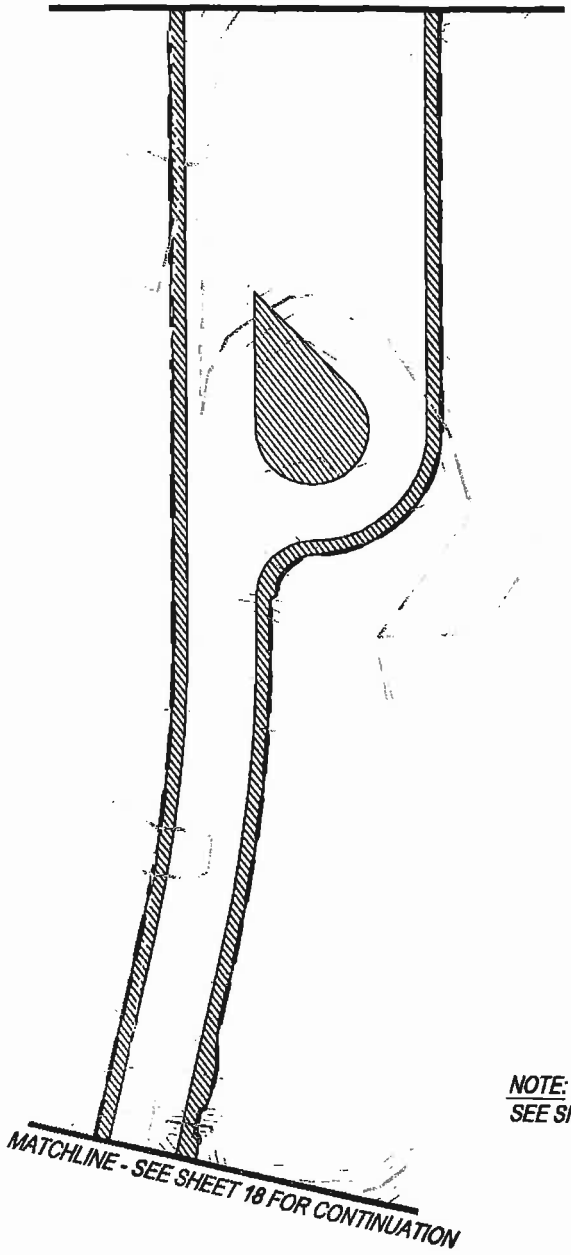
PURPOSE: UPGRADE EXISTING PUBLIC BOAT LAUNCH FACILITY (UPPER BOAT LAUNCH) AND MITIGATE FOR BOAT LAUNCH OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. **DATUM:** VERTICAL: NAVD 88 HORIZONTAL: NAD 83 **ADJACENT PROPERTY OWNERS:** PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	**HUNTZINGER BOAT LAUNCH MITIGATION SITE MAP** APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	**PROPOSED:** DREDGE, FILL, NEW FLOAT, PARKING LOT EXPANSION & PAVING, ACCESS DRIVE PAVING/REPAIR, AND MITIGATION PLANTING **IN:** COLUMBIA RIVER (WANAPUM RESERVOIR) **NEAR/AT:** BEVERLY, WA (3.25 MILES TO SOUTH) **COUNTY:** GRANT **STATE:** WA **SHEET** 18 OF 28 **DATE:** 2/22/12

HUNTZINGER BOAT LAUNCH SITE RESTORATION / MITIGATION MAP

0 60 120

SCALE: 1" = 120'

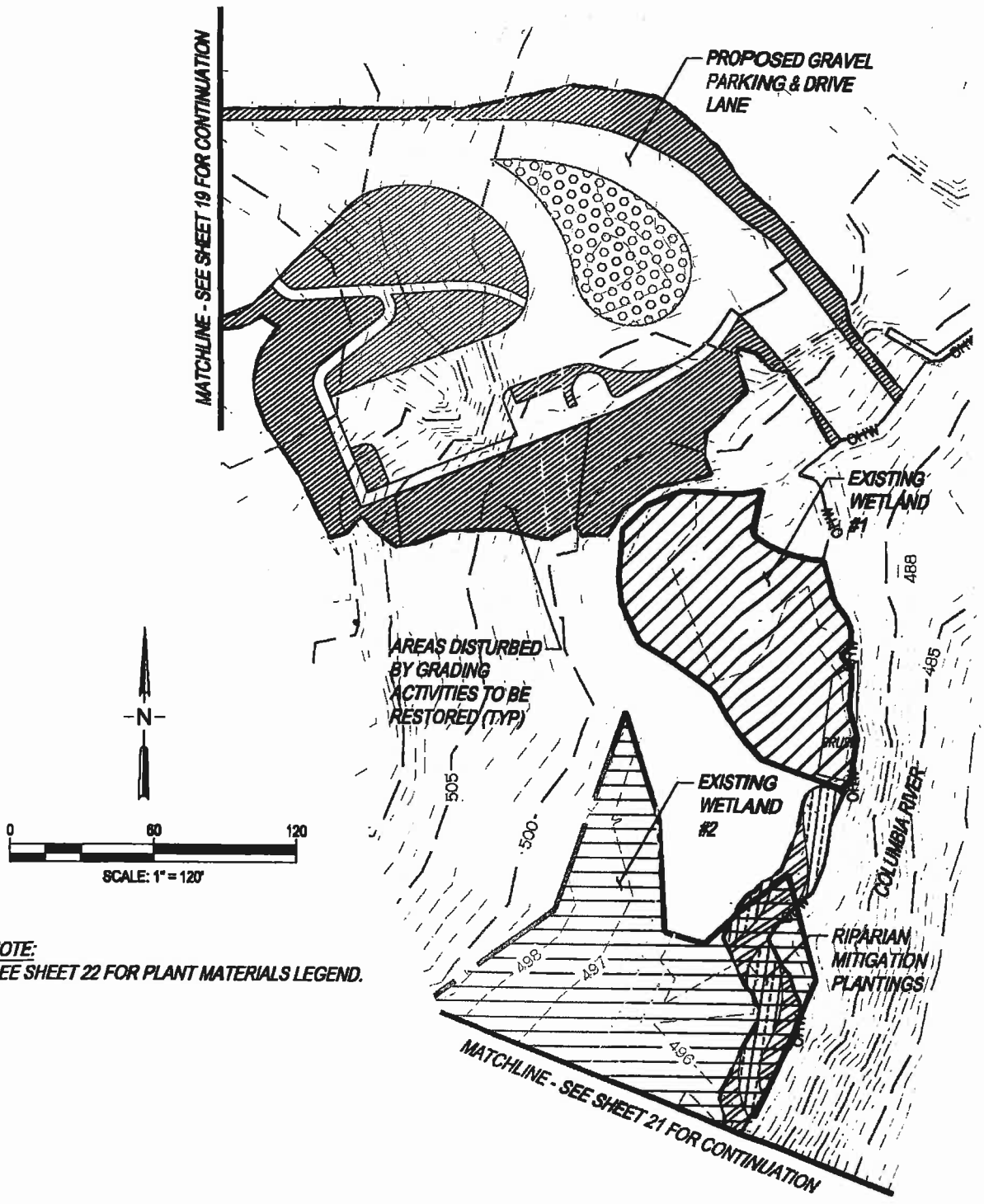
N



NOTE:
SEE SHEET 22 FOR PLANT MATERIALS LEGEND.

PURPOSE: UPGRADE EXISTING PUBLIC BOAT LAUNCH FACILITY (UPPER BOAT LAUNCH) AND MITIGATE FOR BOAT LAUNCH OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: VERTICAL: NAVD 88 HORIZONTAL: NAD 83 ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	**HUNTZINGER BOAT LAUNCH MITIGATION SITE MAP** APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: DREDGE, FILL, NEW FLOAT, PARKING LOT EXPANSION & PAVING, ACCESS DRIVE PAVING/REPAIR, AND MITIGATION PLANTING IN: COLUMBIA RIVER (WANAPUM RESERVOIR) NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTH) COUNTY: GRANT STATE: WA SHEET 19 OF 28 DATE: 12/07/11

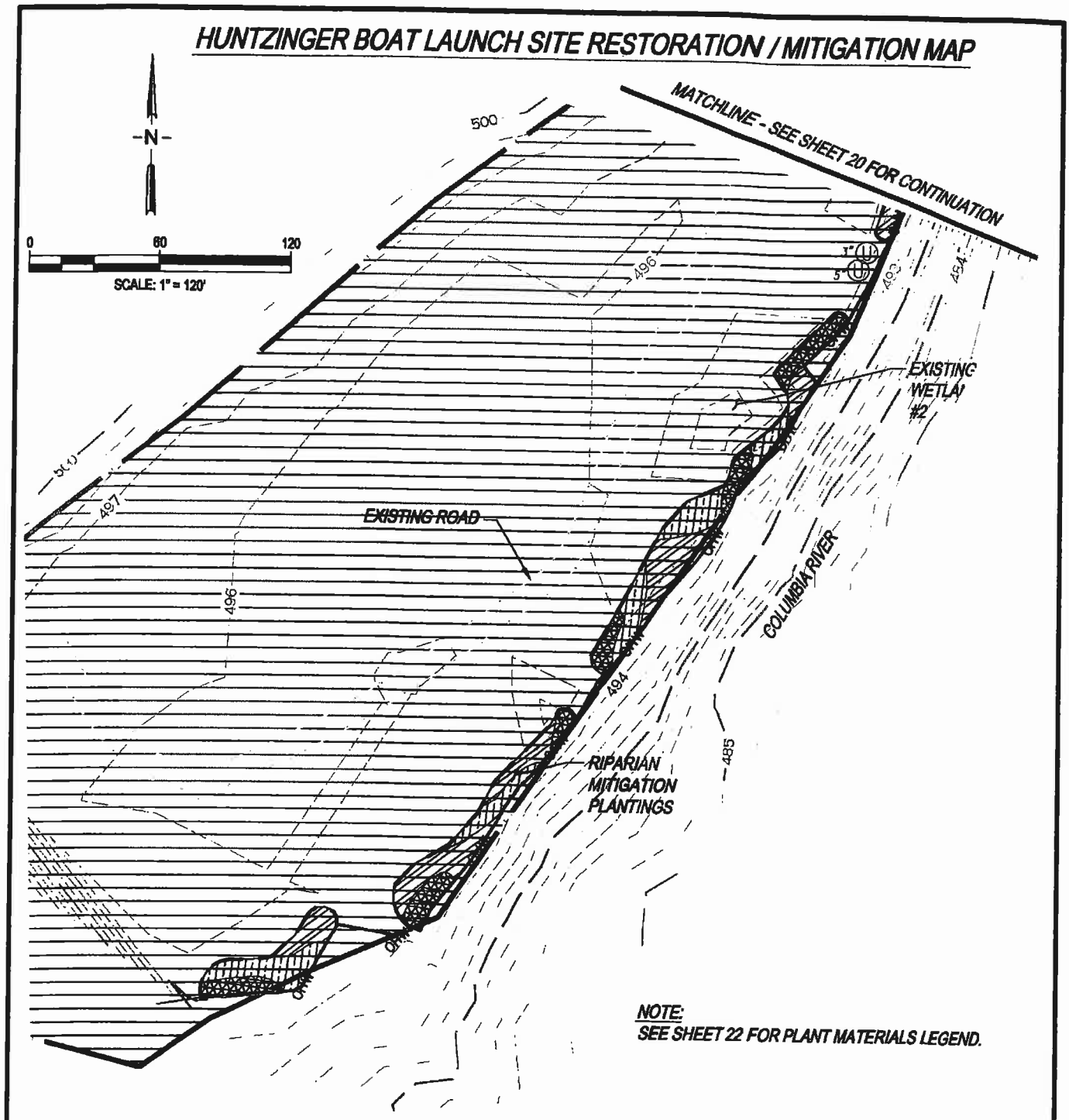
HUNTZINGER BOAT LAUNCH SITE RESTORATION / MITIGATION MAP



NOTE:
SEE SHEET 22 FOR PLANT MATERIALS LEGEND.

PURPOSE: UPGRADE EXISTING PUBLIC BOAT LAUNCH FACILITY (UPPER BOAT LAUNCH) AND MITIGATE FOR BOAT LAUNCH OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: VERTICAL: NAVD 88 HORIZONTAL: NAD 83 ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	HUNTZINGER BOAT LAUNCH MITIGATION SITE MAP APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: DREDGE, FILL, NEW FLOAT, PARKING LOT EXPANSION & PAVING, ACCESS DRIVE PAVING/REPAIR, AND MITIGATION PLANTING IN: COLUMBIA RIVER (WANAPUM RESERVOIR) NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTH) COUNTY: GRANT STATE: WA SHEET 20 OF 28 DATE: 12/07/11

HUNTZINGER BOAT LAUNCH SITE RESTORATION / MITIGATION MAP



PURPOSE: UPGRADE EXISTING PUBLIC BOAT LAUNCH FACILITY (UPPER BOAT LAUNCH) AND MITIGATE FOR BOAT LAUNCH OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: VERTICAL: NAVD 88 HORIZONTAL: NAD 83 ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	**HUNTZINGER BOAT LAUNCH MITIGATION SITE MAP** APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: DREDGE, FILL, NEW FLOAT, PARKING LOT EXPANSION & PAVING, ACCESS DRIVE PAVING/REPAIR, AND MITIGATION PLANTING IN: COLUMBIA RIVER (WANAPUM RESERVOIR) NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTH) COUNTY: GRANT STATE: WA SHEET 21 OF 28 DATE: 12/07/11

DISTURBED AREA

DISTURBANCE TO BE MITIGATED	IMPACT AREA
OVER WATER STRUCTURE AREA	718 SQFT
FACILITIES BELOW ORDINARY HIGH	1,858 SQFT
TOTAL	2,576 SQFT

PROPOSED MITIGATION AREA

MITIGATION AREA	PROPOSED
RIPARIAN MITIGATION AREA[a]	7,850 SQFT

[a]RIPARIAN MITIGATION AREA INCLUDES PLANTING TO MITIGATION FOR BOTH OVER WATER STRUCTURE AREA & FACILITIES BELOW ORDINARY HIGH

PLANT MATERIALS LEGEND

symbol description

EXISTING TREES

LIMIT OF SEEDING

WATER QUALITY SWALE SEED MIX:
APPLICATION RATE: 1 LB PER 1,000 S.F.
MULCH: BONDED FIBER MULCH APPLIED AT 1,500 LBS. PER ACRE.

"WATER QUALITY SWALE SEED MIX"

COMMON NAME	BOTANICAL NAME	%
MACINTIRE SANDBURG BLUE GRASS	POA SECUNDA 'MCINTYRE'	30
SODAR STREAMBANK WHEATGRASS	AGROPYRON RIPARIUM	70

AMENDED RESTORATION PLANTING SEED MIX: "MID-COLUMBIA SANDY SITES SEED MIX"

AMEND THIS MIX TO INCLUDE ERIOGONUM NIVEUM (SNOW BUCKWHEAT) AT 1/10 LB PER 1,000 S.F. AND ERICAMERIA NAUSEAOSA (GRAY RABBIT BRUSH) AT 1/10 LB PER 1,000 S.F. OR APPROVED EQUAL. AVAILABLE FROM BFI NATIVE SEEDS, LLC MOSES LAKE, WA, (509)765-6348.
APPLICATION RATE: 7/10 LB PER 1,000 S.F.
MULCH: BONDED FIBER MULCH APPLIED AT 1,500 LBS. PER ACRE.

"MID-COLUMBIA SANDY SITES SEED MIX"

COMMON NAME	BOTANICAL NAME	%
BLUEBUNCH WHEATGRASS	AGROPYRON SPICATUM	36
INDIAN RICEGRASS	ACHNATHERUM HYMENOIDES	16
NEEDLE & THREAD GRASS	HESPEROSTIPA COMATA	8
SAND DROPSEED	SPOROBOLUS CRYPTANDRUS	6
SANDBERG BLUEGRASS	POA SECUNDA	12
THICKSPIKE WHEATGRASS	ELYMUS LANCEOLATUS	22

WETLAND ENHANCEMENT PLANTINGS

COMMON NAME	BOTANICAL NAME	SIZE	SPACING	%	QUANTITY
RIPARIAN ZONE					
COYOTE WILLOW	SALIX EXIGUA	LIVE POLES	4' O.C.		726*
PACIFIC WILLOW	SALIX LASIANDRA	LIVE POLES	4' O.C.		670*
WATER BIRCH	BETULA OCCIDENTALIS	D40 TUBES	4' O.C.	10	11
BLACK COTTONWOOD	POPULUS TRICHOCARPA	D40 TUBES	4' O.C.	90	90

* LIVE POLES TO BE PLANTED IN CLUSTERS OF 3, WITH 3 LIVE CUTTINGS PLACED IN EACH HOLE TO INCREASE SUCCESS RATES. SEE PLANTING DETAIL 1, SHEET 26.

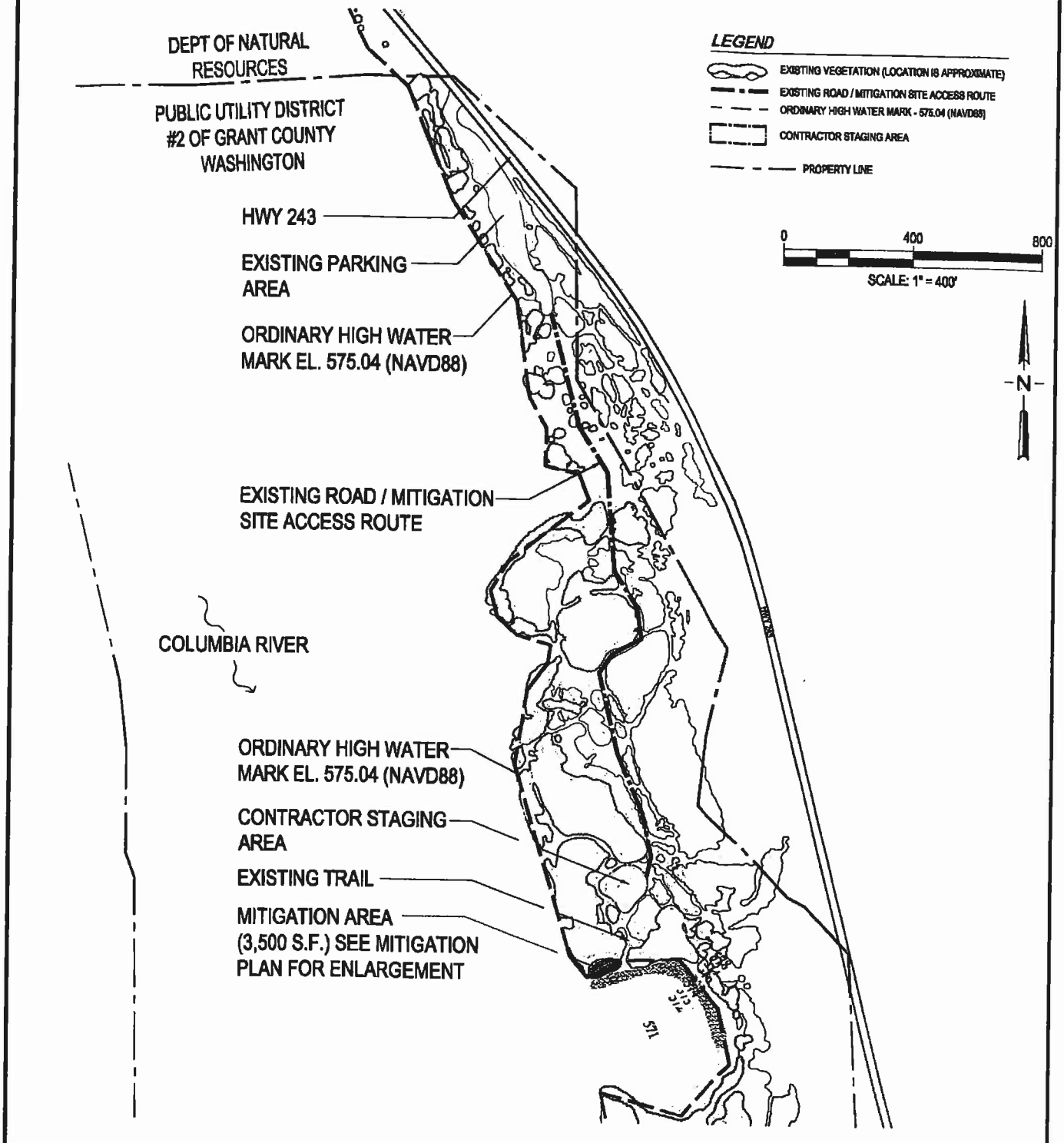
PURPOSE: UPGRADE EXISTING PUBLIC BOAT LAUNCH FACILITY (UPPER BOAT LAUNCH) AND MITIGATE FOR BOAT LAUNCH OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW.
DATUM: VERTICAL: NAVD 88 HORIZONTAL: NAD 83
ADJACENT PROPERTY OWNERS:
PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN

HUNTZINGER BOAT LAUNCH PLANTING LEGEND

APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON
REFERENCE #:
SITE ADDRESS: N/A

PROPOSED: DREDGE, FILL, NEW FLOAT, PARKING LOT EXPANSION & PAVING, ACCESS DRIVE PAVING/REPAIR, AND MITIGATION PLANTING
IN: COLUMBIA RIVER (WANAPUM RESERVOIR)
NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTH)
COUNTY: GRANT STATE: WA
SHEET 22 OF 28 DATE: 12/07/11

SAND HOLLOW SITE ENLARGEMENT MAP



PURPOSE: UPGRADE EXISTING PUBLIC BOAT LAUNCH FACILITY (UPPER BOAT LAUNCH) AND MITIGATE FOR BOAT LAUNCH OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: VERTICAL: NAVD 88 HORIZONTAL: NAD 83 ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	**HUNTZINGER FISHING ACCESS SITE MITIGATION SITE MAP** APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: DREDGE, FILL, NEW FLOAT, PARKING LOT EXPANSION & PAVING, ACCESS DRIVE PAVING/REPAIR, AND MITIGATION PLANTING IN: COLUMBIA RIVER (WANAPUM RESERVOIR) NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTH) COUNTY: GRANT STATE: WA SHEET 23 OF 28 DATE: 12/08/11

MITIGATION APPROACH NARRATIVE

THE MITIGATION MEASURES BEING PROVIDED AT THE SAND HOLLOW MITIGATION SITE ARE IN RESPONSE TO OVER-WATER IMPACTS AT THE UPPER WANAPUM DAM BOAT LAUNCH & HUNTZINGER FISHING ACCESS SITE, AS SHOWN ON THE "BOAT LAUNCH SITE PLAN" SHEET AND "HUNTZINGER FISHING ACCESS SITE SITE PLAN" SHEET. ONSITE MITIGATION WAS FOUND TO BE UNFEASIBLE DUE TO A LACK OF SUITABLE SOIL CONDITIONS FOR RIPARIAN PLANTING. THE SAND HOLLOW SITE IS APPROXIMATELY FOUR MILES UPRIVER FROM THE UPPER WANAPUM DAM BOAT LAUNCH. AT THE BOAT LAUNCH SITE, THE PROPOSED FLOAT LAUNCH WILL OCCUPY AN AREA OF APPROXIMATELY 663 SQUARE FEET AND THE HUNTZINGER FISHING ACCESS SITE PIER WITH OCCUPY AND AREA OF APPROXIMATELY 500 SQUARE FEET. PER THE GRANT COUNTY PUBLIC UTILITY DISTRICT'S WILDLIFE HABITAT MANAGEMENT PLAN MITIGATION REQUIREMENTS RATIO OF 3:1, THE TOTAL MITIGATION REQUIRED IS 3,489 SQUARE FEET. THE SAND HOLLOW MITIGATION SITE PROVIDES 3,500 SQUARE FEET OF MITIGATION, AS SHOWN ON THE "MITIGATION PLAN" SHEET. IT IS ANTICIPATED THAT THE PROPOSED MITIGATION MEASURES WILL RESULT IN A LONG-TERM BENEFICIAL EFFECT TO THE RIPARIAN HABITAT CONDITIONS ALONG THE MID-COLUMBIA RIVER AND WILL NOT ADVERSELY AFFECT FISH OR CRITICAL HABITAT. AS STATED IN SECTION 7A OF THE JARPA, THE FOLLOWING MEASURES ARE INTENDED TO AVOID AND MINIMIZE ADVERSE IMPACTS TO THE SAND HOLLOW WETLAND: LIMITING VEGETATION REMOVAL TO MOWING AND WEED EATING SO AS TO MINIMIZE SOIL DISTURBANCE AND EROSION, UTILIZING UNVEGETATED (E.G., SAND BEACHES OR GRAVEL BARS) OR PREVIOUSLY DISTURBED AREAS TO TEMPORARILY STOCKPILE PLANTING MATERIALS AND EQUIPMENT AND USING PLANT SPECIES NATIVE TO THE AREA TO REVEGETATE THE WETLAND.

WETLAND DELINEATION IMPACTS:

THE WETLAND, WHICH IS LOCATED MOSTLY BELOW THE ORDINARY HIGH WATER MARK OF THE COLUMBIA RIVER, IS VEGETATED WITH A MONOCULTURE OF REED CANARYGRASS. GIVEN THE LIMITED DISTURBANCE WITHIN THIS WETLAND, A FORMAL WETLAND DELINEATION WAS NOT CONDUCTED. HOWEVER THE APPROXIMATE BOUNDARY OF THE WETLAND WAS IDENTIFIED BY A QUALIFIED BIOLOGIST AND USED TO INFORM THE MITIGATION PLANTING PLAN. WETLAND IMPACTS WILL BE LIMITED TO REMOVAL OF REED CANARYGRASS, AN INVASIVE SPECIES, AND INSTALLATION OF NATIVE WILLOW AND ALDER STAKES WITHIN A PALUSTRINE, EMERGENT WETLAND LOCATED AT THE SOUTH SAND HOLLOW MITIGATION SITE. THE REED CANARYGRASS WILL BE REMOVED MANUALLY (I.E., MOWING OR WEED EATING); NO GRADING OR SCALPING OF TOPSOIL WILL OCCUR, NOR WILL HERBICIDES BE USED. ADDITIONALLY, INSTALLATION OF THE WILLOW AND ALDER STAKES WILL NOT REQUIRE EXCAVATION OF PLANTING HOLES AS THE STAKES WILL BE DRIVEN INTO THE SOIL.

CLEARING / WEED CONTROL:

THE MITIGATION AT SAND HOLLOW INCLUDES REMOVING NOXIOUS WEEDS. THE DOMINANT INVASIVE SPECIES IS REED CANARY GRASS (PHALARIS ARUNDINACEA). DUE TO THE MITIGATION SITE'S PROXIMITY TO THE RESERVOIR, CHEMICALS WILL NOT BE USED. PRIOR TO PLANTING, CREWS WILL CUT THE GRASS TO THE GROUND WITH A STRING TRIMMER. AFTER THE PLANT MATERIALS ARE INSTALLED, THEY WILL BE SURROUNDED BY TREE PROTECTION FENCING. THE CONTRACTOR WILL CONTINUE TO CUT DOWN THE REED CANARY GRASS THROUGHOUT THE GROWING SEASON. AS THE PLANTS MATURE, THEY WILL SHADE OUT THE CANARY REED GRASS.

ADDITIONALLY, THERE ARE SMALL AMOUNTS OF PURPLE LOOSESTRIFE (LYTHRUM SALICARIA) AND HIMALAYAN BLACKBERRY (RUBUS ARMENIACUS) GROWING AT THE MITIGATION SITE. THE PURPLE LOOSESTRIFE WILL BE HAND-PULLED, REMOVING AS MUCH OF THE ROOT SYSTEM AS POSSIBLE. IF THE PLANT HAS GONE TO SEED AT THE TIME OF REMOVAL, THE FLOWER SPIKE WILL BE REMOVED AND PLACED INTO A BAG. THE FLOWER SPIKE WILL BE PROPERLY DISPOSED OF IN ORDER TO PREVENT FURTHER GERMINATION AND SPREADING OF THE PLANT.

BECAUSE THE MITIGATION SITE IS AT THE ORDINARY HIGH WATER MARK, GROWTH OF THE BLACKBERRY IN THE IMMEDIATE PROXIMITY IS LIMITED BY HYDROLOGY. ANY BLACKBERRY GROWING WITHIN TEN FEET OF THE MITIGATION SITE WILL BE MOWED OR CUT IN THE EARLY PART OF THE GROWING SEASON. FOLLOWING THE INITIAL CUTTING, ANY NEW CANES WILL BE CUT TO THE GROUND THROUGHOUT THE GROWING SEASON.

ANY OTHER NOXIOUS SPECIES FOUND ON THE WASHINGTON STATE NOXIOUS WEED LIST WILL ALSO BE REMOVED FROM THE MITIGATION SITE. THESE SPECIES WOULD BE CUT WITH A STRING TRIMMER OR BY HAND. ALL NOXIOUS WEEDS WILL BE REMOVED FROM THE SITE AND DISPOSED OF AT APPROVED LOCATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR WEED CONTROL FOR A TWO YEAR PERIOD FOLLOWING SUBSTANTIAL COMPLETION. FOLLOWING THIS, THE GRANT COUNTY PUD WILL BE RESPONSIBLE FOR WEED CONTROL FOR AN ADDITIONAL THREE YEAR PERIOD.

PLANTING:

AT THE SAND HOLLOW MITIGATION SITE, PLANTING METHODS INCLUDE USING LIVE STAKES, PLUGS AND D-40 TUBES OF NATIVE PLANT SPECIES TO RE-ESTABLISH NATIVE HABITAT. THE NATIVE RIPARIAN PLANTING SPECIES INCLUDE LAKESHORE SEDGE (CAREX LENTICULARIS), CREEPING SPIKERUSH (ELEOCHARIS PALUSTRIS) AND HARDSTEM BULRUSH (SCHOENOPLECTUS ACUTUS). THE TRANSITION SPECIES INCLUDE RIVER ALDER (ALNUS TENUIFOLIA), WATER BIRCH (BETULA OCCIDENTALIS), BLACK COTTONWOOD (POPULUS TRICOCARPA), COYOTE WILLOW (SALIX EXIGUA) AND THE PACIFIC WILLOW (SALIX LASIANDRA). LIVE STAKES WILL BE COLLECTED FROM LOCAL STANDS OF DORMANT PLANTS GROWING IN SIMILAR ENVIRONMENTAL AND CLIMATOLOGICAL CONDITIONS. AVAILABILITY OF THE CONTANERIZED PLANT MATERIALS HAVE BEEN CHECKED. 10" PLUGS OF SEDGES AND RUSHES WILL BE INSTALLED AT 1' O.C. BELOW OHWM AS SHOWN ON THE MITIGATION PLAN. LIVE STAKES AND D-40 TUBES WILL BE GROUPED ACCORDING TO SPECIES, WITH SHRUBS PLANTED IN GROUPS OF 4-5' PLANTED AT 5' O.C. AND TREES SPACED AS SHOWN ON THE PLANS. THE DISTRIBUTION AND SPACING OF THE PLANT MATERIALS HAS BEEN DESIGNED TO RECREATE A NATURALIZED APPEARANCE. THE PLANT MATERIALS WILL BE INSTALLED WITH A PLANTING BAR, WHICH WILL NOT REQUIRE SOIL TO BE EXCAVATED. THE PLANTING INSTALLATION WILL TAKE PLACE FROM OCTOBER 15 - MARCH 15. PLANTING WILL NOT TAKE PLACE ON DAYS COLDER THAN 32 DEGREES OR WARMER THAN 80 DEGREES.

WATERING:

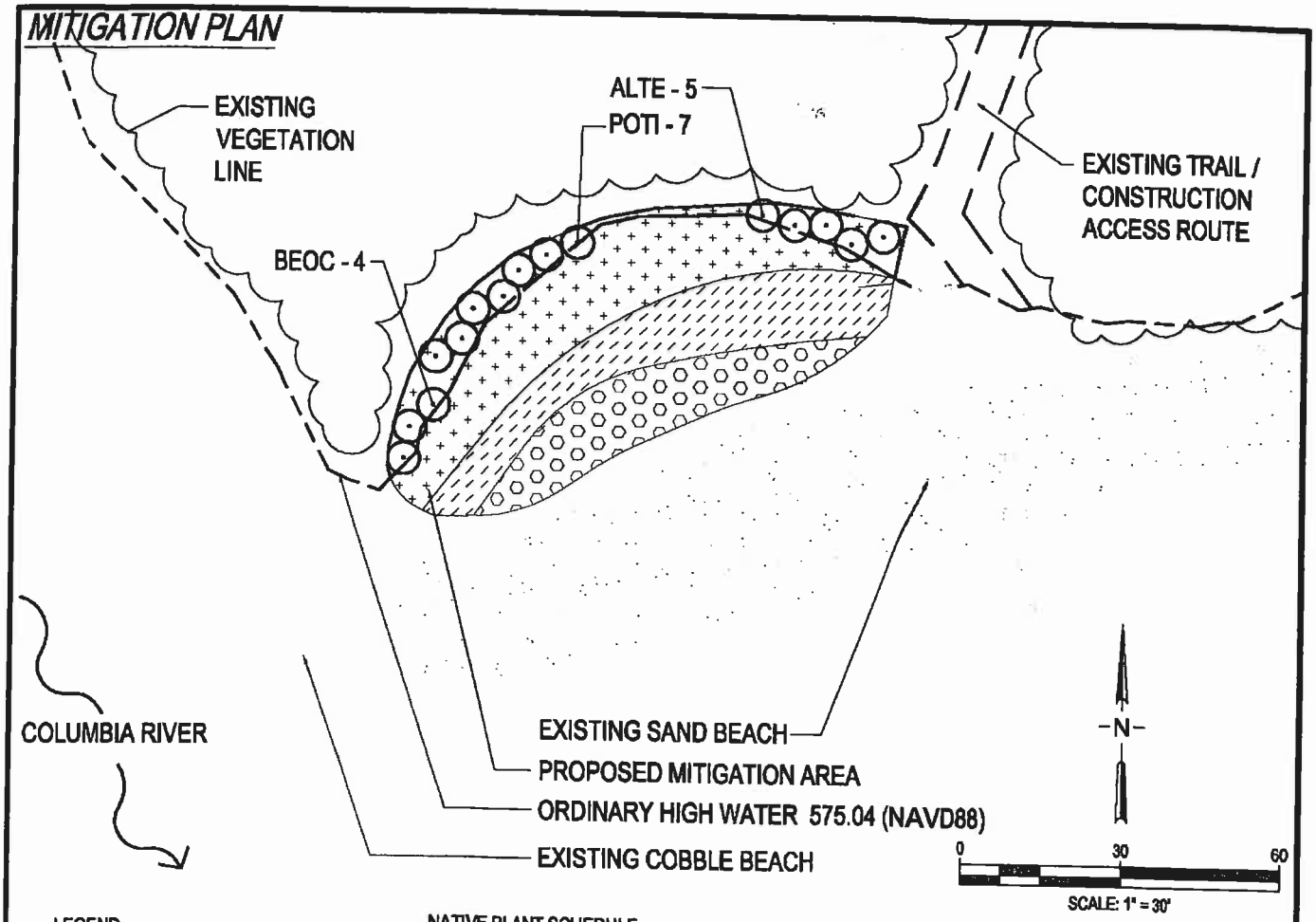
BECAUSE THERE IS NO WATER SOURCE AT THE MITIGATION SITE, THE CONTRACTOR WILL BE RESPONSIBLE FOR WATERING THE PLANT MATERIALS BY HAND. THIS WILL BE ACCOMPLISHED BY WAY OF A BACKPACK WATERING SYSTEM.

MONITORING AND MAINTENANCE:

THE MITIGATION SITE WILL BE MONITORED AND MAINTAINED BY GRANT COUNTY PUD FOR A THREE YEAR PERIOD. MITIGATION SITES WILL BE MAINTAINED TO ENSURE THAT THE MITIGATION AND MANAGEMENT PLAN OBJECTIVES ARE SUCCESSFUL. MONITORING AND MAINTENANCE INCLUDES ROUTINE CUTTING AND HAND PULLING OF THE REMAINING REED CANARY GRASS AS WELL AS THE RIGOROUS, AS-NEEDED ELIMINATION OF OTHER UNDESIRABLE PLANTS. IT ALSO INVOLVES PROMOTING THE GROWTH OF THE MITIGATION PLANTINGS AND PROTECTING THEM FROM THE COMPETITION OF OTHER GRASSES AND HERBACEOUS PLANTS. CORRECTIVE ACTIONS WILL BE TAKEN TO RECTIFY PROBLEMS. AS REQUIRED, BROWSING DAMAGE WILL BE REPAIRED AND ANY DEAD PLANTS WILL BE REPLACED. MONITORING REPORTS WILL BE COMPLETED 1 AND 3 YEARS AFTER THE MITIGATION INSTALLATION.

PURPOSE: UPGRADE EXISTING PUBLIC BOAT LAUNCH FACILITY (UPPER BOAT LAUNCH) AND MITIGATE FOR BOAT LAUNCH OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: VERTICAL: NAVD 88 HORIZONTAL: NAD 83 ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	**HUNTZINGER FISHING ACCESS SITE MITIGATION NARRATIVE** APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: DREDGE, FILL, NEW FLOAT, PARKING LOT EXPANSION & PAVING, ACCESS DRIVE PAVING/REPAIR, AND MITIGATION PLANTING IN: COLUMBIA RIVER (WANAPUM RESERVOIR) NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTH) COUNTY: GRANT STATE: WA SHEET 24 OF 28 DATE: 2/22/12

MITIGATION PLAN



LEGEND

EXISTING VEGETATION (LOCATION IS APPROXIMATE)

EXISTING TRAIL / CONTRACTOR ACCESS ROUTE

ORDINARY HIGH WATER MARK - 575.04 (NAVD88)

MITIGATION AREA

MITIGATION AREA PROPOSED WANAPUM DAM UPPER BOAT LAUNCH	1,989 SF
MITIGATION AREA PROPOSED HUNTZINGER PUBLIC ACCESS FISHING PIER	1,500 SF
PROPOSED MITIGATION AREA	3,500 SF

WATER LINE

ORDINARY HIGH WATER	575.04
MAX HIGH WATER	578.74
LOW WATER	563.14
*NAVD88	

NATIVE PLANT SCHEDULE

	BOTANICAL NAME	COMMON NAME	SIZE AT PLANTING	SPACING	GROUPING	# OF PLANTS	DETAIL
NATIVE TREES							
ALTE	ALNUS TENUIFOLIA	RIVER ALDER	D40 TUBE	AS SHOWN		5	3 L1.3
BEOC	BETULA OCCIDENTALIS	WATER BIRCH	D40 TUBE	AS SHOWN		3	3 L1.3
POTI	POPULUS TRICOCARPA	BLACK COTTONWOOD	D40 TUBE	AS SHOWN		7	3 L1.3
NATIVE SHRUBS							
	SALIX EXIGUA	COYOTE WILLOW	LIVE STAKE	GROUPS AT 5' O.C.	5	407	1,5,6 L1.3
	SALIX LASIANDRA	PACIFIC WILLOW	LIVE STAKE	GROUPS AT 5' O.C.	5	145	1,5,6 L1.3
NATIVE SEDGES & RUSHES							
	CAREX LENTICULARIS	LAKESHORE SEDGE	10" PLUG	1' O.C.	7-11*	286	2,4 L1.3
	ELEOCHARIS PALUSTRIS	CREEPING SPIKERUSH	10" PLUG	1' O.C.	7-11*	286	2,4 L1.3
	SCHOENOPLECTUS ACUTUS	HARDSTEM BULRUSH	10" PLUG	1' O.C.	7-11*	286	2,4 L1.3

* PLANT GROUPS OF LIKE SPECIES TO REFLECT A NATURALIZED PLANTING COMMUNITY

PURPOSE: UPGRADE EXISTING PUBLIC BOAT LAUNCH FACILITY (UPPER BOAT LAUNCH) AND MITIGATE FOR BOAT LAUNCH OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW.

DATUM: VERTICAL: NAVD 88 HORIZONTAL: NAD 83

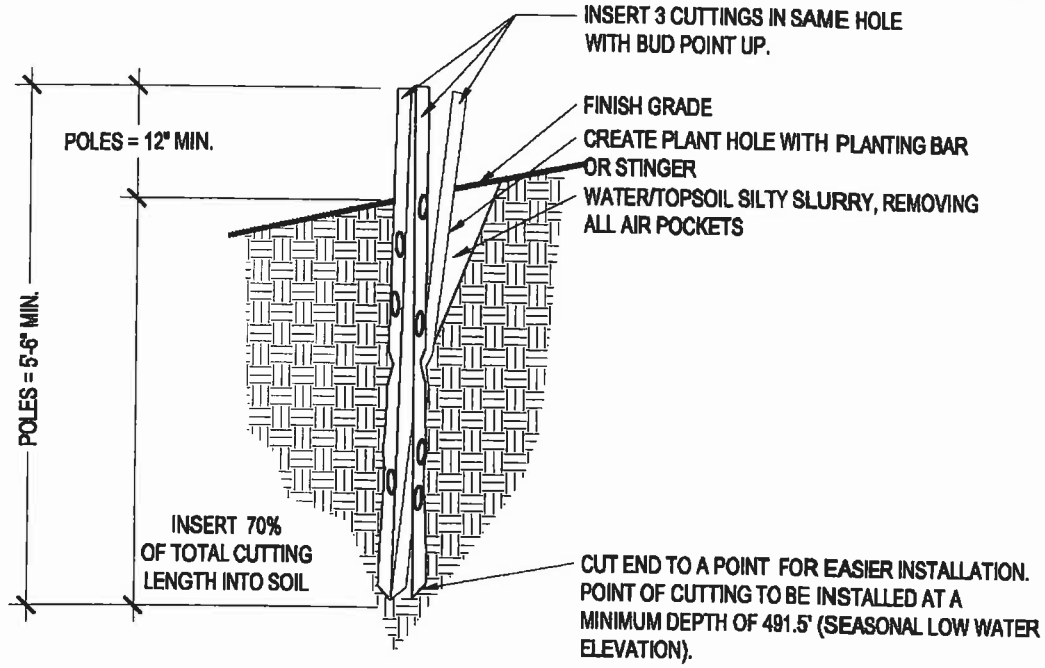
ADJACENT PROPERTY OWNERS:
PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN

HUNTZINGER FISHING ACCESS SITE MITIGATION PLAN

APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON
REFERENCE #:
SITE ADDRESS: N/A

PROPOSED: DREDGE, FILL, NEW FLOAT, PARKING LOT EXPANSION & PAVING, ACCESS DRIVE PAVING/REPAIR, AND MITIGATION PLANTING
IN: COLUMBIA RIVER (WANAPUM RESERVOIR)
NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTH)
COUNTY: GRANT STATE: WA

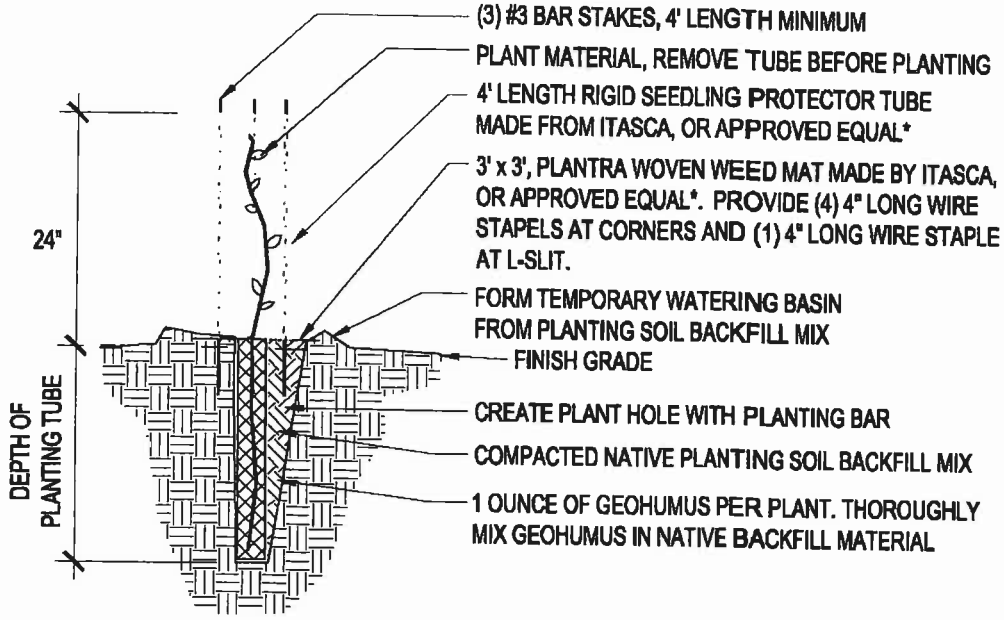
SHEET 25 OF 28 DATE: 2/22/12



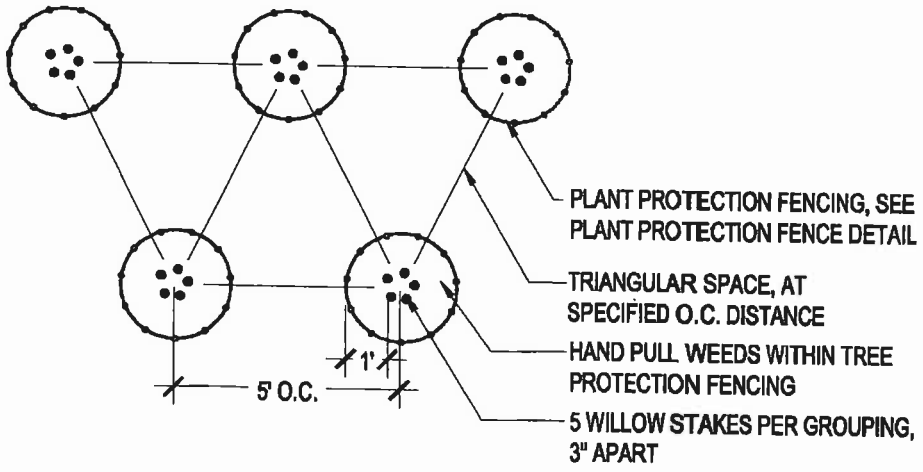
1 *LIVE CUTTING PLANTING*
SCALE: 3/4" = 1'-0"

PURPOSE: UPGRADE EXISTING PUBLIC BOAT LAUNCH FACILITY (UPPER BOAT LAUNCH) AND MITIGATE FOR BOAT LAUNCH OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: VERTICAL: NAVD 88 HORIZONTAL: NAD 83 ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	*HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS SITE* *PLANTING DETAILS* APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: DREDGE, FILL, NEW FLOAT, PARKING LOT EXPANSION & PAVING, ACCESS DRIVE PAVING/REPAIR, AND MITIGATION PLANTING IN: COLUMBIA RIVER (WANAPUM RESERVOIR) NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTH) COUNTY: GRANT STATE: WA SHEET 26 OF 28 DATE: 12/08/11

* BROWSING PROTECTOR TUBES AND PLANTRA WOVEN WEED MATS CAN BE PURCHASED FROM ITASCA GREENHOUSE, INC. COHASSET, MN 55721 (800)-538-TREE



1 *BROWSING PROTECTION & INSTALLATION*
SCALE: 3/4" = 1'-0"

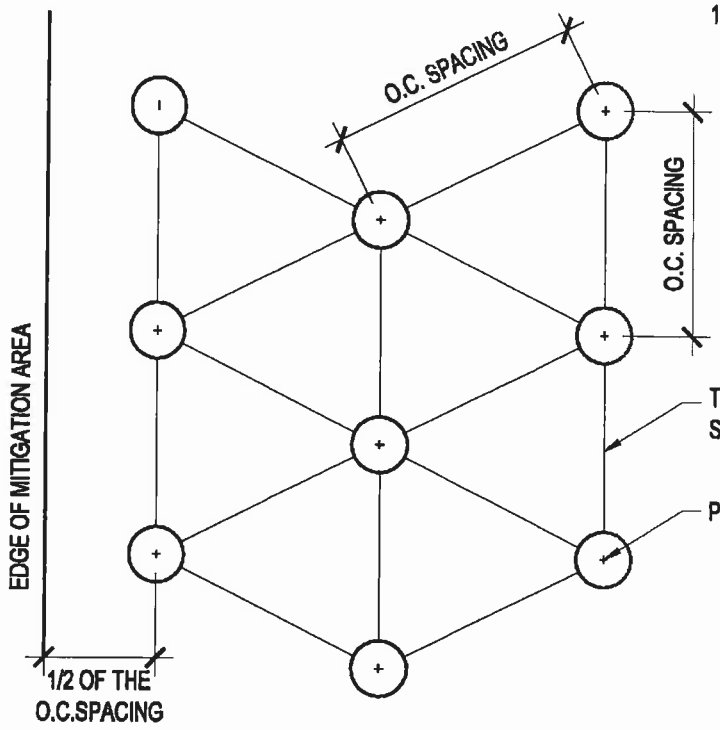


NOTES:
1. SEE PLANT SCHEDULE FOR EACH PLANTS APPROPRIATE O.C. SPACING.

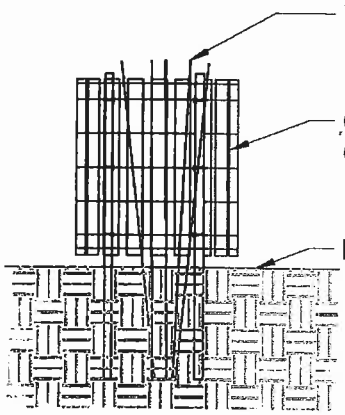
2 *WILLOW STAKE PLANT LAYOUT AND SPACING*
NOT TO SCALE

PURPOSE: UPGRADE EXISTING PUBLIC BOAT LAUNCH FACILITY (UPPER BOAT LAUNCH) AND MITIGATE FOR BOAT LAUNCH OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: VERTICAL: NAVD 88 HORIZONTAL: NAD 83 ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	*HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS SITE* *PLANTING DETAILS* APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: DREDGE, FILL, NEW FLOAT, PARKING LOT EXPANSION & PAVING, ACCESS DRIVE PAVING/REPAIR, AND MITIGATION PLANTING IN: COLUMBIA RIVER (WANAPUM RESERVOIR) NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTH) COUNTY: GRANT STATE: WA SHEET 27 OF 28 DATE: 12/08/11

NOTES:
1. SEE PLANT SCHEDULE FOR EACH PLANTS APPROPRIATE O.C. SPACING.



1 SEDGE AND RUSH PLANT SPACING
NOT TO SCALE



NOTE:
PROTECTION SHALL BE LOCATED AS SHOWN IN WILLOW STAKE LAYOUT AND SPACING DETAIL. INSTALL FENCE PER MANUFACTURER'S SPECIFICATION.

2 PLANT PROTECTION FENCE
NOT TO SCALE

PURPOSE: UPGRADE EXISTING PUBLIC BOAT LAUNCH FACILITY (UPPER BOAT LAUNCH) AND MITIGATE FOR BOAT LAUNCH OVER-WATER IMPACTS OFF-SITE AT SOUTH SAND HOLLOW. DATUM: VERTICAL: NAVD 88 HORIZONTAL: NAD 83 ADJACENT PROPERTY OWNERS: PUD #2 OF GRANT COUNTY, USACOE, USBR, USBLM, BROWN	HUNTZINGER BOAT LAUNCH & FISHING PIER ACCESS SITE PLANTING DETAILS APPLICANT: PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY, WASHINGTON REFERENCE #: SITE ADDRESS: N/A	PROPOSED: DREDGE, FILL, NEW FLOAT, PARKING LOT EXPANSION & PAVING, ACCESS DRIVE PAVING/REPAIR, AND MITIGATION PLANTING IN: COLUMBIA RIVER (WANAPUM RESERVOIR) NEAR/AT: BEVERLY, WA (3.25 MILES TO SOUTH) COUNTY: GRANT STATE: WA SHEET 28 OF 28 DATE: 12/08/11

APPENDIX C

Huntzinger Road Boat Launch and Fishing Access Project

Wetland and Waters of the U.S./State Delineation Report

APPENDIX D

SWPPP PLAN

HUNTZINGER ROAD BOAT LAUNCH AND FISHING PIER IMPROVEMENT PROJECT

APPENDIX E

SPCC PLAN

HUNTZINGER ROAD BOAT LAUNCH AND FISHING PIER IMPROVEMENT PROJECT