US Army Corps of Engineers
Seattle District

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Joint Public Notice

Application for a Department of the Army Permit and a Washington Department of Ecology Water Quality Certification and/or Coastal Zone Management Consistency Concurrence

US Army Corps of Engineers
Regulatory Branch
Post Office Box 3755
Seattle, WA 98124-3755
Telephone: (206) 764-3482
ATTN: Karen Urelius,
Project Manager

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

Public Notice Date: March 11, 2013
Expiration Date: April 10, 2013

Reference No.: NWS-2012-944
Name: Grant County PUD
(Kittitas County Boat Launch)

Interested parties are hereby notified that the U.S. Army Corps of Engineers (Corps) and the Washington Department of Ecology (Ecology) have received an application to perform work in waters of the United States as described below and shown on the enclosed drawings dated November 16, 2012.

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

APPLICANT: Public Utility District No. 2 of Grant County
Attention: Ms. Debbie Knaub
30 C Street Southwest, P.O. Box 878
Ephrata, Washington 98823

Telephone: (509) 754-0511

LOCATION: Kittitas County Public Boat Launch in the Wanapum Reservoir of the Columbia River at Vantage, Kittitas County, Washington; 46.9556 N, -119.9485 W.

WORK:
Proposed In-Water Work:

- Boat Ramp – In order to construct the new boat ramp, two existing concrete boat ramps, asphalt paving, and riprap would be removed. The existing pre-cast concrete boat ramps are approximately 86 feet (ft.) long by 46 ft. wide and 86 ft. long by 12 ft. wide. The proposed 140-ft. long boat ramp would include a new concrete approach apron, two 20-ft. wide concrete launch lanes and concrete float abutments. The ramp would be constructed on a 12-inch deep prepared gravel foundation. Riprap would be installed around the boat ramp at the toe and along the north and south edges. There would be a net increase of 940 square feet (sq. ft.) of riprap waterward of the ordinary high water mark (OHWM) that would replace native cobbles, sand, and silt. There would be a net increase of 1,181 sq. ft. of new concrete waterward of the OHWM that would replace angular rock and quarry spalls.

- Handling Floats – The proposed floats would be installed in the center of the new boat ramp. The floats would consist of eight, 20-ft. long by 8-ft. wide aluminum floats supported by seven new 12.75-inch diameter steel pipe piles. A 10-ft. long by 8-ft. wide aluminum transfer span would be installed. All floats would be 100% grated meeting current light penetration standards and ADA requirements. The floats would be placed above the concrete boat ramp and a small portion of the navigation channel. Existing floats and two 12.75-inch diameter steel piles would be removed, resulting in a net increase of 331 sq. ft. of overwater structures.
- Navigation Channel – The navigation channel would be improved by dredging 12,280 cubic yards of material to widen the channel from 40 ft. to 50 ft. and deepening it from an elevation of 570 ft. to an elevation of 560.5 ft. In compliance with the U.S. Coast Guard's Federal private aids to navigation requirements, five navigation aids would be installed to mark the navigation channel. These would consist of dayboards mounted on 12.75-inch diameter steel pipe piles.
- Navigation Channel Side Slope Stabilization – The 2.5:1 side slopes of the navigation channel would be stabilized with a 1.5-ft. thick layer of quarry spalls to protect exposed slopes from waves and currents, and to minimize future maintenance and dredging. The quarry spalls would be a maximum size of 10-inches.
- South Jetty – The rock jetty would be reduced in size by approximately 300 sq. ft. It would be modified by removing and/or reconfiguring the large existing jetty rock and replacing portions of the riprap jetty with suitable substrates to support riparian vegetation.
- Streambed Enhancement for Shoreline Area – The shoreline area south of the south jetty would be enhanced by placing natural rounded gravel and cobble along a 25-ft. wide and 200-ft. long portion of the shoreline below the OHWM at a 7:1 slope to improve habitat substrates for fish.
- Streambed Enhancement to Remove Fish Stranding Areas – Dredged material would be placed in the depressions along the river bottom in a 7,500-sq. ft. area adjacent to the south jetty where fish become stranded at lower water levels.

Proposed Upland Facilities:

- Parking Lot Reconfiguration – The parking lot would be reconstructed. Parking spaces closest to the Columbia River would be relocated. The surface would be repaved with asphalt over a gravel base. A concrete walk would be positioned immediately east of the queuing lane and would connect to the picnic area and the handling floats. The Kittitas County Sheriff's Department may construct a metal clad boat storage structure in the west end of the parking lot.
- Picnic Tables and Paths – Five new picnic tables would be added. The existing path connecting the parking area to Riverstone Resort would be removed. Both paths on the jetties would be removed. A new trail connecting the boat launch area with the Riverstone Resort would be created.

PURPOSE: Provide boat access at all water levels of the Wanapum Reservoir of the Columbia River at the existing Kittitas County Boat Launch.

DREDGED MATERIAL MANAGEMENT PROGRAM (DMMP):
Dredged Material Testing: The proposed dredged material has been tested according to the procedures specified by the DMMP, a multi-agency program for the evaluation of dredged material proposed for disposal at open-water sites in Washington State. The DMMP evaluations may include both chemical and biological testing of sediments. For this project, the DMMP agencies determined that all 12,280 cubic yards were suitable for upland or in-water beneficial reuse. The sediment testing data are available at the Corps, Seattle District, Dredged Material Management Office.

Disposal Site Use Conditions: The following standard site-use conditions will be specified by the Corps and the Washington Department of Natural Resources as part of the Federal/State permitting processes: (1) Dredged material must be deposited at an upland site, and be in compliance with rules and regulations promulgated by the local health district. The location of the disposal site must be provided to the Corps, Seattle District, Regulatory

Branch Project Manager (by telephone, (206) 764-3482) at least 14 days prior to commencement of dredging; and (2) For projects outside of Puget Sound: The United States Coast Guard (USCG) must be notified by letter 14 days prior to commencing dredging operations. Notification should be sent to Commander (dpw), Thirteenth Coast Guard District, 915 Second Avenue, Seattle, Washington 98174-1067 or faxed to (206) 220-7265 so that the information can be issued in the Local Notice to Mariners. The notification to USCG must include the radio frequencies/channels that the dredger will be monitoring so that any traffic in the area can contact the dredger if needed.

MITIGATION:
To compensate for permanent impacts to 2,130 sq. ft. of benthic habitat, the applicant would:

- Place 105 cubic yards of streambed cobble and gravel over a 2,426-sq. ft. area of the reservoir bottom along the southern shoreline of the modified south jetty to cover the existing quarry spall beach. The new substrate would emulate natural streambed cobbles and gravels that historically deposited in the hydraulic shadow areas along the Columbia River.
- Enhance approximately 6,800 sq. ft. of the shoreline management area by planting native shrub and tree species. The vegetation would provide shade, cover, and a source of organic debris that would enhance aquatic habitat.
- Improve water quality and stormwater handling at the site by creating 11,490 sq. ft. of new stormwater handling areas within the existing parking lot inside pockets of demolished asphalt. Decrease impervious surfaces (concrete and asphalt) within the shoreline management area by 7,977 sq. ft.

ENDANGERED SPECIES: The Endangered Species Act (ESA) requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the ESA on all actions that may affect a species listed (or proposed for listing) under the ESA as threatened or endangered or any designated critical habitat. The Corps Engineers is evaluating the potential impacts to listed species and their designated critical habitat and will consult with the NMFS and USFWS.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The proposed action would impact EFH in the project area. The Corps has determined that the proposed action will adversely affect designated EFH for federally managed fisheries in Washington waters. The Corps will initiate EFH consultation with the NMFS.

CULTURAL RESOURCES: The Corps has reviewed the latest published version of the National Register of Historic Places, lists of properties determined eligible and other sources of information. A historic properties investigation has been conducted within the permit area. No historic properties determined eligible for or listed on the National Register of Historic Places were found to exist within the permit area. The Corps invites responses to this public notice from Native American Tribes or tribal governments; Federal, State, and local agencies; historical and archeological societies; and other parties likely to have knowledge of or concerns regarding historic properties and sites of religious and cultural significance at or near the project area. After receipt of comments from this public notice, the Corps will evaluate potential impacts and consult with the State Historic Preservation Officer and Native American Tribes in accordance with Section 106 of the National Historic Preservation Act, as appropriate.

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

EVALUATION – CORPS: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the

national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

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

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

SOURCE OF FILL MATERIAL: The source of the fill material for the concrete would be a local concrete supplier. The foundation gravel for the boat ramp would come from a local aggregate supplier. Quarry spalls and riprap would come from a local rock quarry. The cobble gravel mix for the streambed enhancement would come from reuse of dredged material and from a local aggregate supplier.

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

COMMENT AND REVIEW PERIOD: Conventional mail or e-mail comments on this public notice will be accepted and made part of the record and will be considered in determining whether it would be in the public interest to authorize this proposal. In order to be accepted, e-mail comments must originate from the author's e-mail account and must include on the subject line of the e-mail message the permit applicant's name and reference number as shown below. Either conventional mail or e-mail comments must include the permit applicant's name and reference number, as shown below, and the commentator's name, address, and phone number. All comments whether conventional mail or e-mail must reach this office, no later than the expiration date of this public notice to ensure consideration.

CORPS COMMENTS: All e-mail comments should be sent to karen.m.urelius@usace.army.mil. Conventional mail comments should be sent to: U.S. Army Corps of Engineers, Regulatory Branch, Attention: Karen Urelius, P.O. Box 3755, Seattle, Washington 98124-3755. All comments received will become part of the administrative record and are subject to public release under the Freedom of Information Act including any personally identifiable information such as names, phone numbers, and addresses.

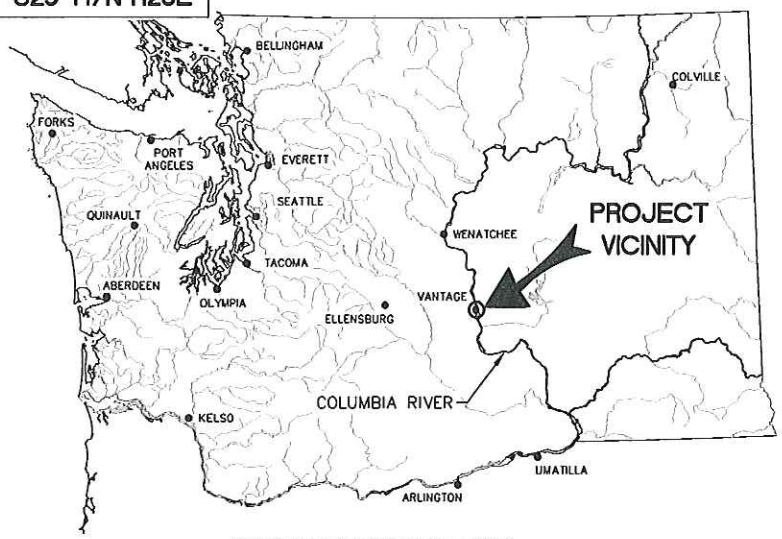
ECOLOGY COMMENTS: Any person desiring to present views on the project pertaining to a request for water quality certification under Section 401 of the CWA may do so by submitting written comments to the following address: Washington State Department of Ecology, Attention: Federal Permit Coordinator,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

NWS-2012-944, Grant County PUD (Kittitas County Boat Launch)

To ensure proper consideration of all comments, responders must include the following name and reference number in the text of their comments: Grant County PUD (Kittitas County Boat Launch); NWS-2012-944.

Encl: Figures 1-24

S29 T17N R23E



WASHINGTON KEY MAP

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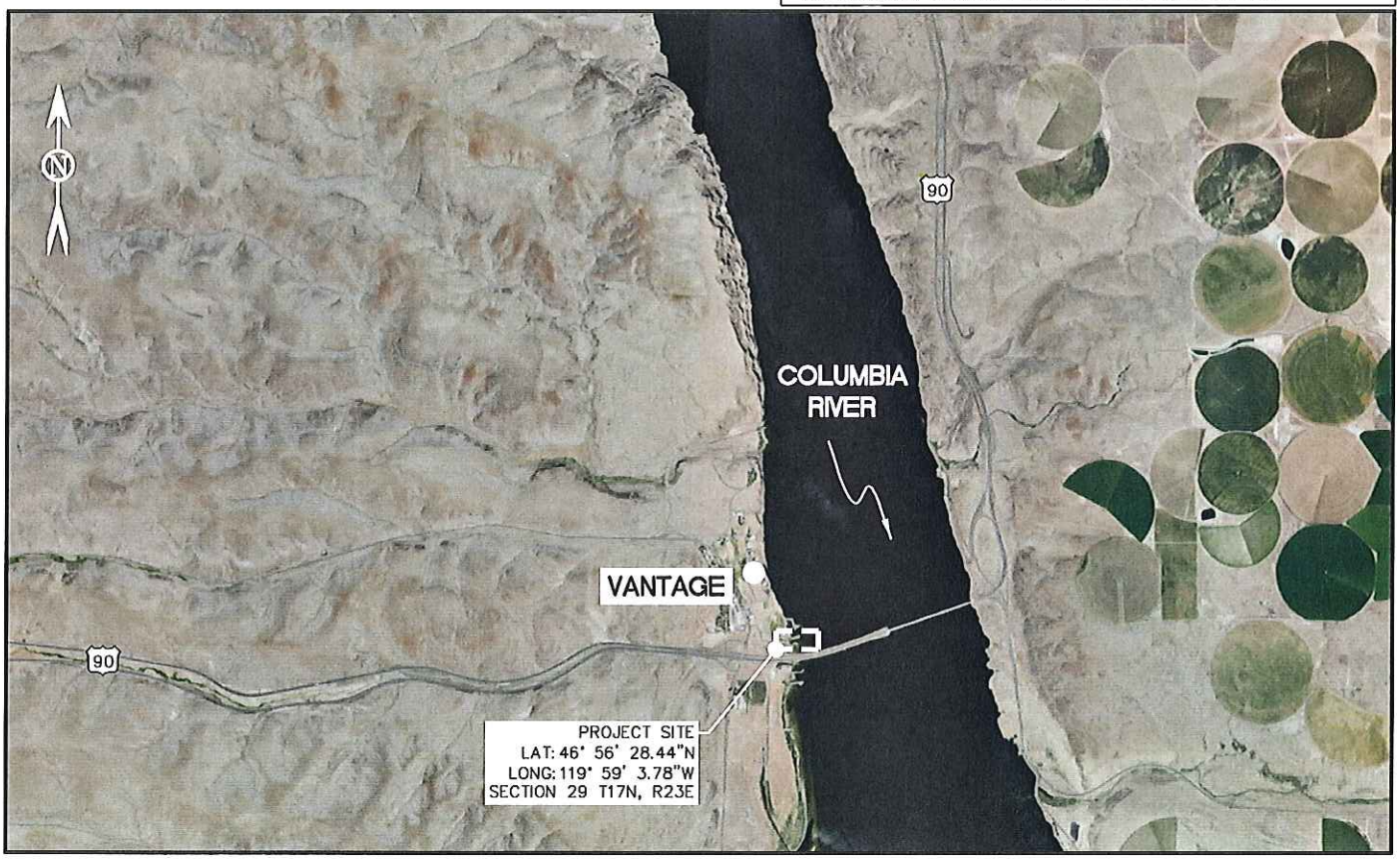
24. MITIGATION PLANTING PLAN SPECIES AND SEED LIST



LOCATION MAP

0 300 600

SCALE IN FEET

POOL WATER LEVELS (NAVD88)	
MAXIMUM OPERATING POOL	578.6'
MINIMUM OPERATING POOL	563.6'

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

VICINITY MAP

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 1 OF 24 DATE: 11/16/12

SURVEY NOTES:

1. THE BASIS OF BEARING IS WASHINGTON STATE PLANE SOUTH ZONE NAD 83(91).
2. THE VERTICAL DATUM IS NAVD 88.
3. TOPOGRAPHIC SURVEY CONDUCTED BY NORTHWEST GEODIMENSIONS ON 6/29/09 AND 7/2/09.
4. ORDINARY HIGH WATER (OHW) ELEVATION VARIES AS SHOWN, APPROXIMATELY EL +575.0'.

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

EXISTING PROJECT AREA SITE PLAN

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 2 OF 24 DATE: 11/16/12

SURVEY NOTES:

1. THE BASIS OF BEARING IS WASHINGTON STATE PLANE SOUTH ZONE NAD 83(91).
2. THE VERTICAL DATUM IS NAVD 88.
3. TOPOGRAPHIC SURVEY CONDUCTED BY NORTHWEST GEODIMENSIONS ON 6/29/09 AND 7/2/09.

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

OVERALL PROJECT IMPROVEMENTS SITE PLAN

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 3 OF 24 DATE: 11/16/12

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

IN-WATER PROJECT IMPROVEMENTS SITE PLAN

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 4 OF 24 DATE: 11/16/12

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

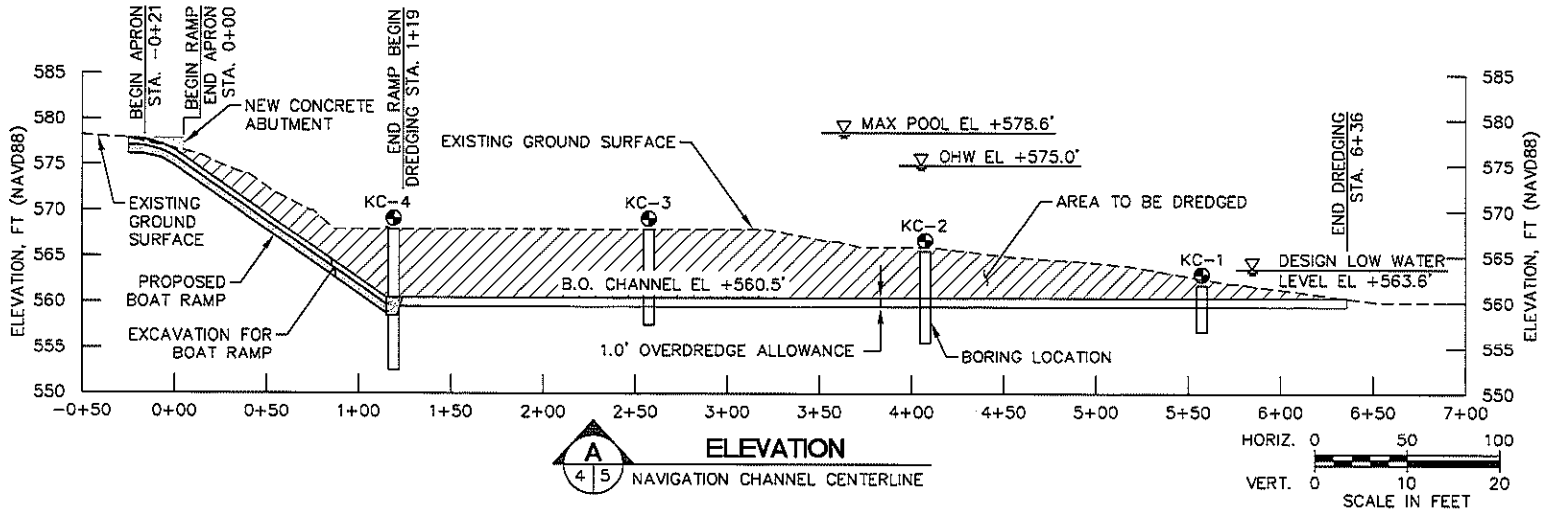
ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

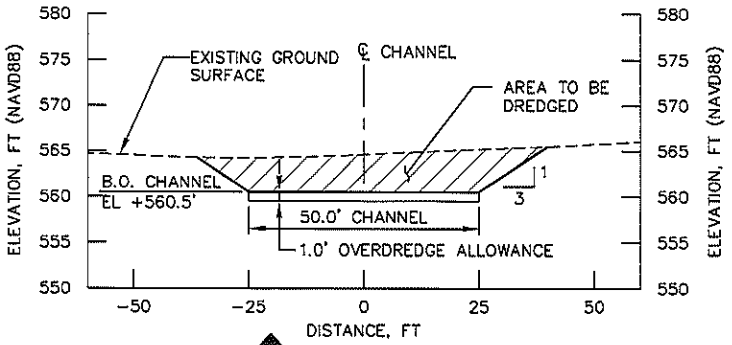
KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

DREDGING SECTIONS

APPLICATION BY: GRANT COUNTY PUD



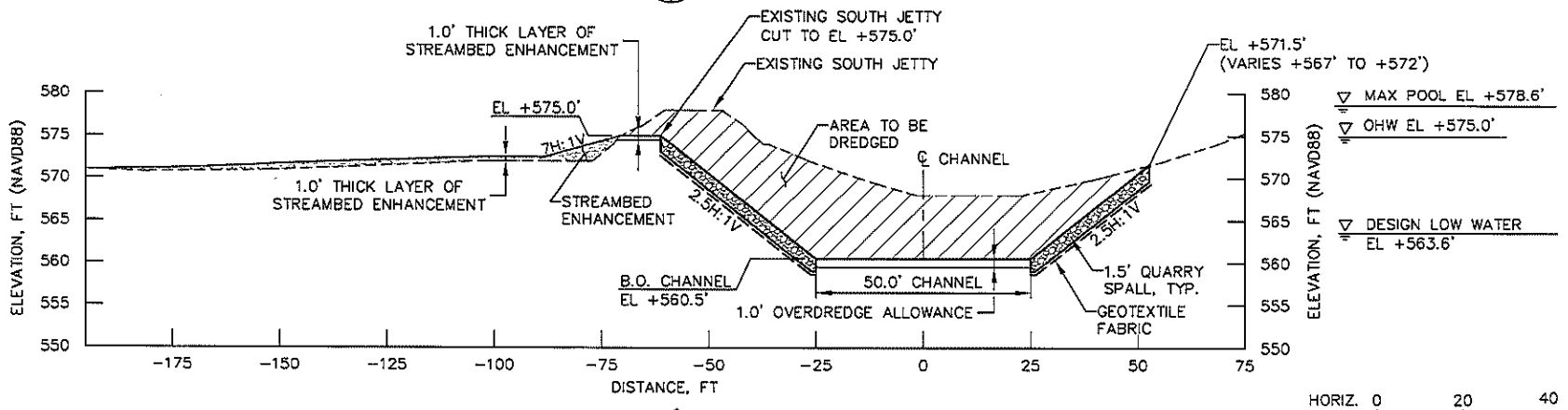
A 4|5 **ELEVATION**
NAVIGATION CHANNEL CENTERLINE



B 4|5 **SECTION**
STA 4+83

LEGEND

- QUARRY SPALLS (CHANNEL)
- DREDGE AREA
- STREAMBED ENHANCEMENT



C 4|5 **SECTION**
STA 1+89

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 5 OF 24 DATE: 11/16/12

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

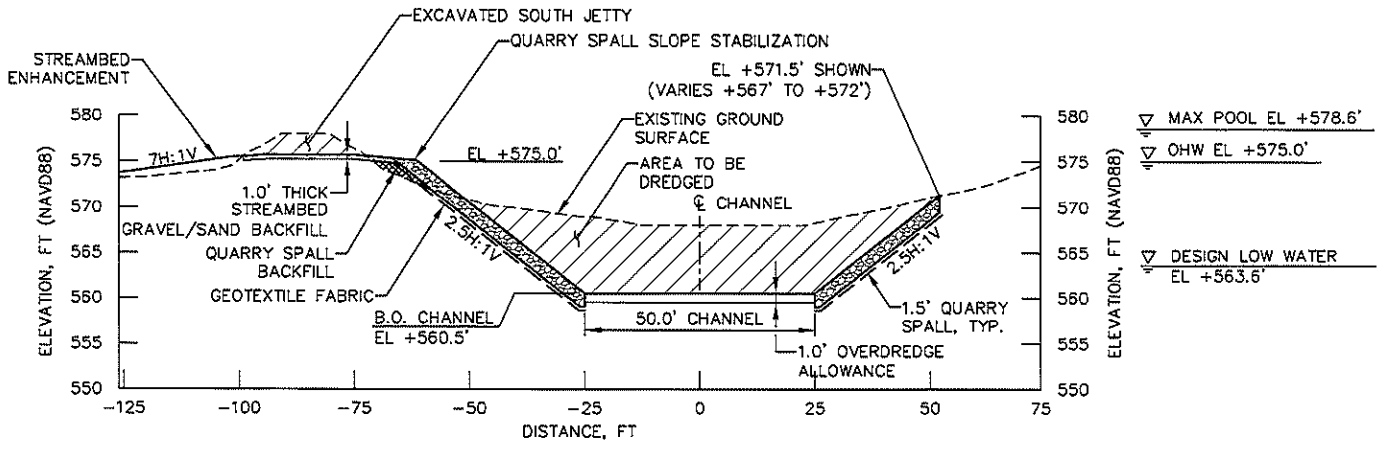
1. STOCKDALE, INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

SHORELINE IMPROVEMENTS

SECTIONS

APPLICATION BY: GRANT COUNTY PUD

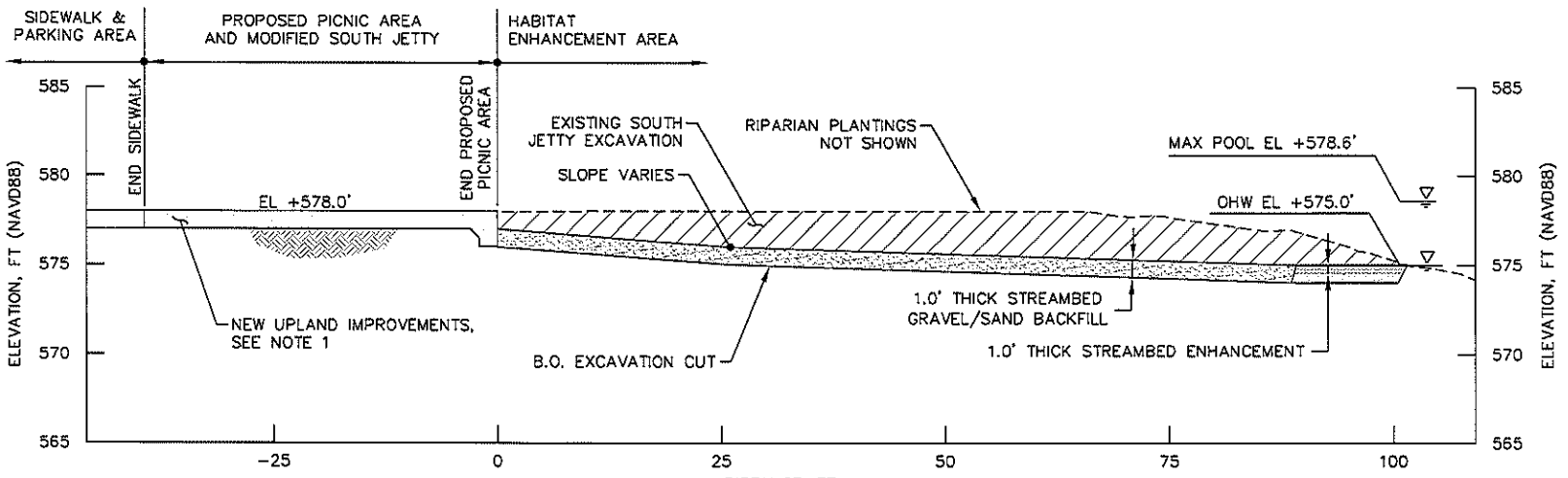


D SECTION 4 | 6 STA 1+31

HORIZ. 0 20 40

VERT. 0 10 20

SCALE IN FEET



E SECTION 4 | 6 MODIFIED JETTY

HORIZ. 0 10 20

VERT. 0 5 10

SCALE IN FEET

LEGEND

- QUARRY SPALL (CHANNEL)
- EXCAVATION AREA
- NEW CONCRETE
- STREAMBED GRAVEL/SAND BACKFILL
- QUARRY SPALL BACKFILL
- STREAMBED ENHANCEMENT

NOTES:

1. ALL UPLAND IMPROVEMENTS NOT SHOWN. SEE SHEET 10 FOR DETAILS.
2. NEW HANDLING FLOATS NOT SHOWN FOR CLARITY ON SECTION D.

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 6 OF 24 DATE: 11/16/12

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

BOAT RAMP SITE PLAN AND SECTION

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

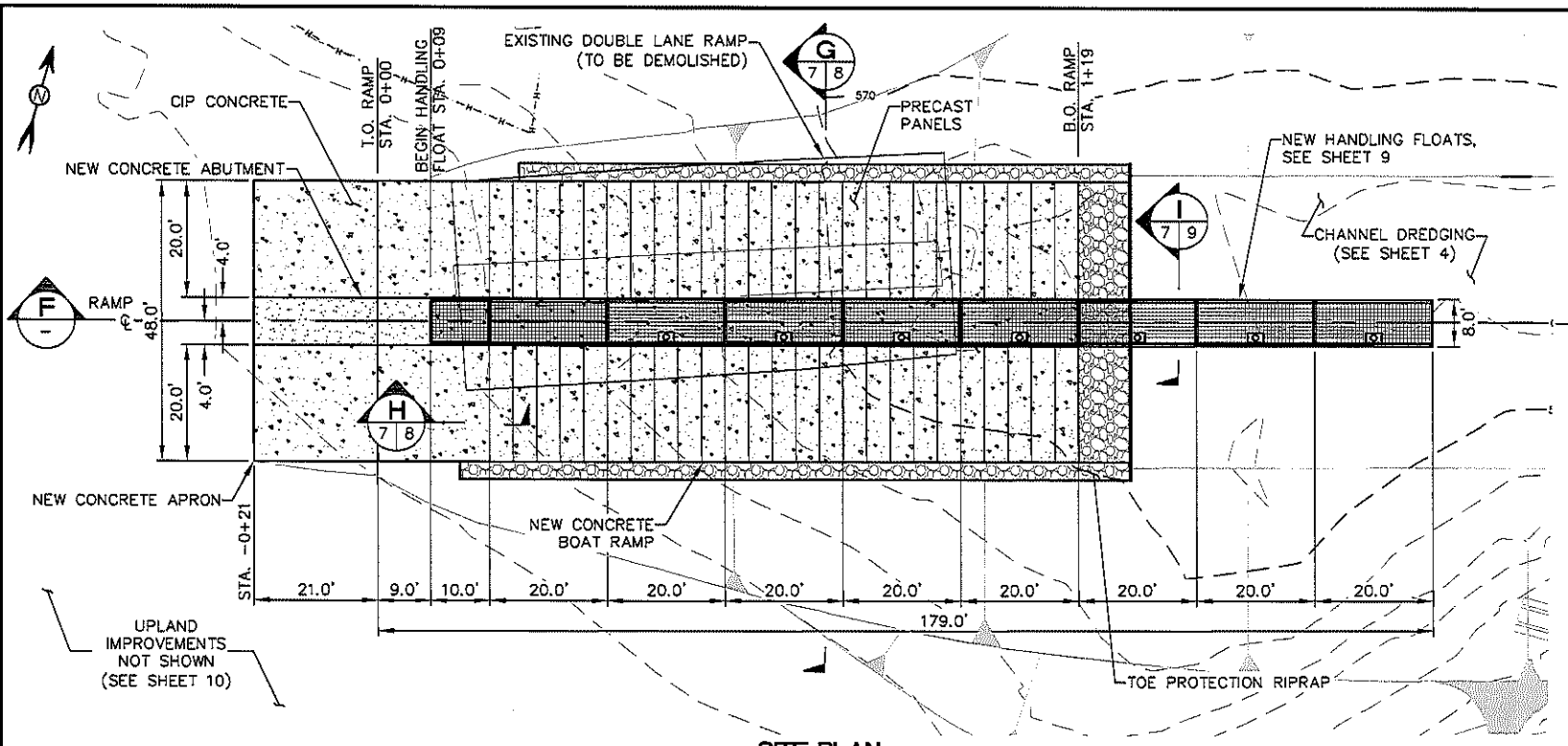
REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

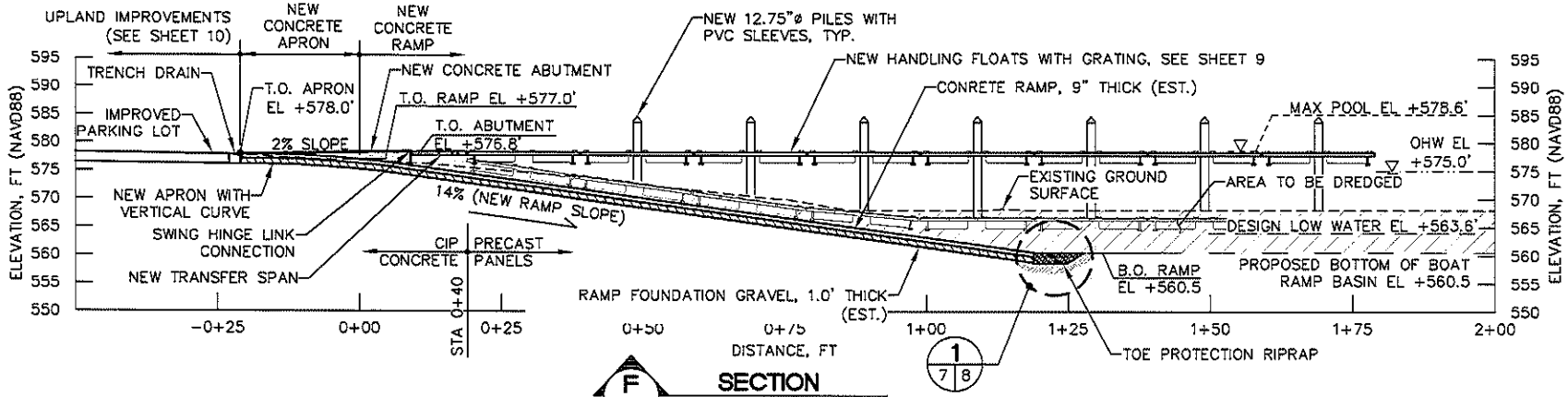
COUNTY: KITTITAS STATE: WASHINGTON

SHEET 7 OF 24 DATE: 11/16/12



SITE PLAN

BOAT RAMP



SECTION

BOAT RAMP CENTERLINE

0 15 30

SCALE IN FEET

NOTES:

1. HANDLING FLOAT STRUCTURAL FRAMING TO BE FABRICATED OF ALUMINUM OR GALVANIZED STEEL MATERIALS.
2. FLOAT GRATING TO BE MINIMUM 60% OPEN AREA, USING BAR TYPE PRODUCT FOR AN ADA COMPLIANT SURFACE.

LEGEND

- DREDGE AREA
- NEW CONCRETE
- RIPRAP (RAMP)

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

BOAT RAMP AND FLOAT DETAILS

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

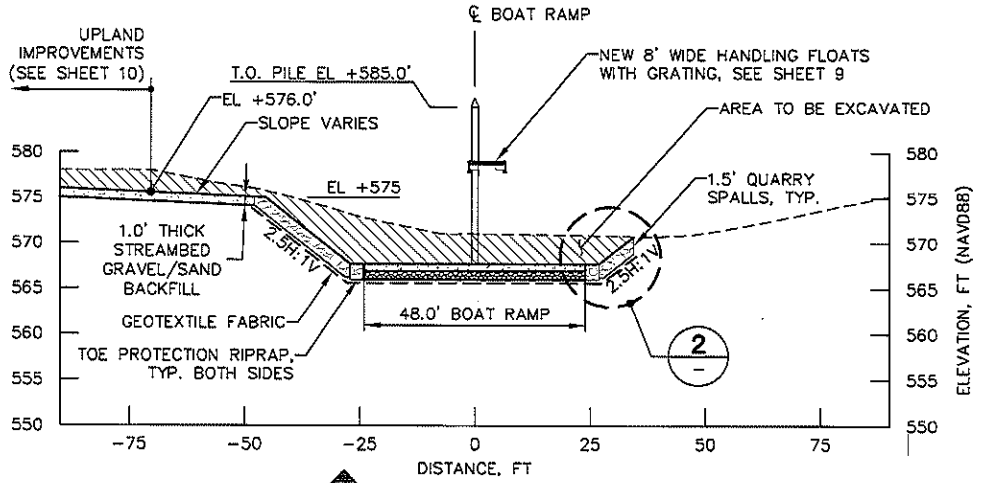
REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

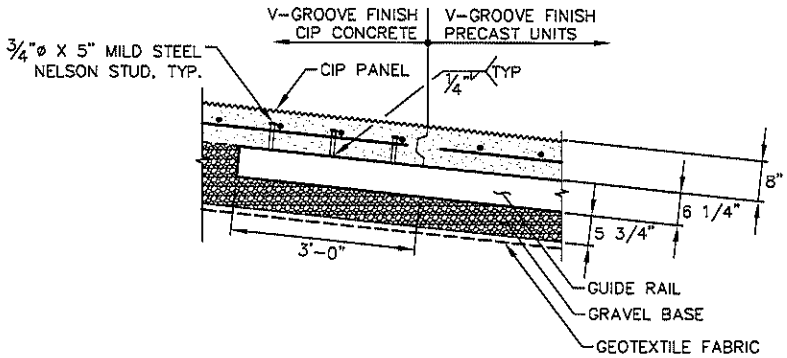
COUNTY: KITTITAS STATE: WASHINGTON

SHEET 8 OF 24 DATE: 11/16/12



G 7 8 SECTION
BOAT RAMP, STA 0+80

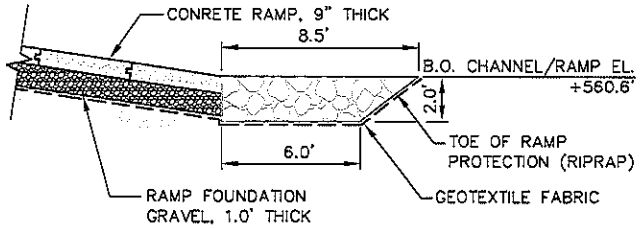
HORIZ. 0 20 40
VERT. 0 10 20
SCALE IN FEET



H 7 8 SECTION
0 1.5 3
SCALE IN FEET

LEGEND

- RIPRAP (RAMP)
- EXCAVATION AREA
- NEW CONCRETE
- RAMP FOUNDATION GRAVEL
- STREAMBED GRAVEL/SAND BACKFILL
- QUARRY SPALLS



1 7 8 DETAIL
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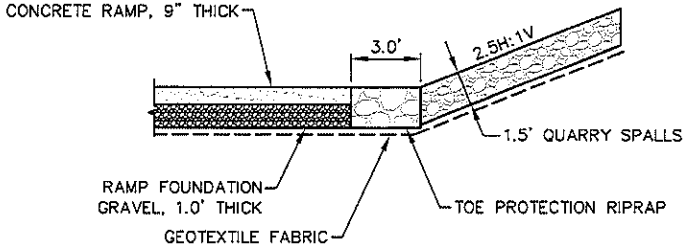
SCALE IN FEET



2 – DETAIL
0 4 8
SCALE IN FEET

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W DATUM: NAVD88

ADJACENT PROPERTY OWNERS:

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

HANDLING FLOAT AND NAVIGATION AID DETAILS

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

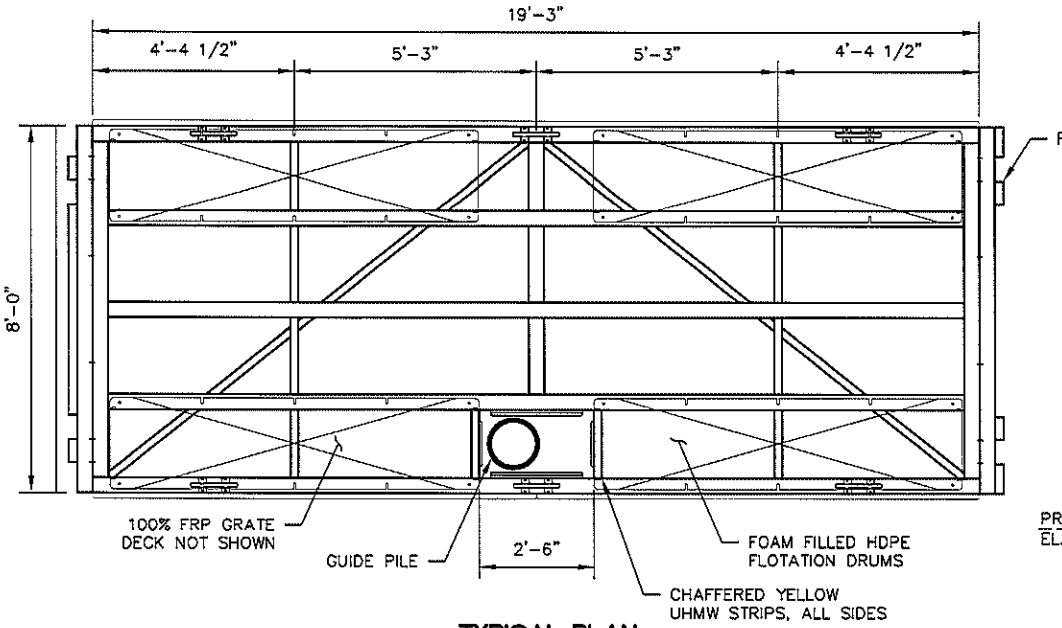
REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 9 OF 24 DATE: 11/16/12

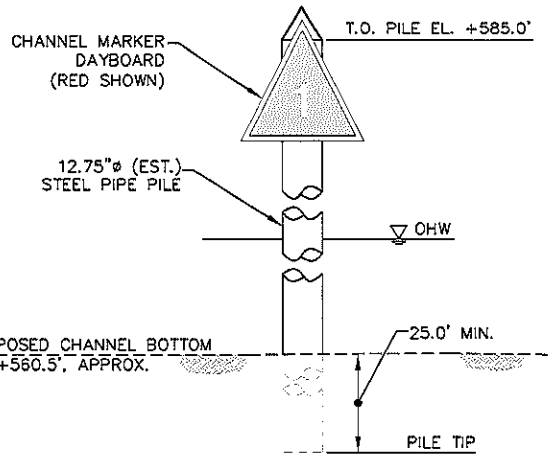


TYPICAL PLAN

ALUMINUM HANDLING FLOAT

0 2 4

SCALE IN FEET

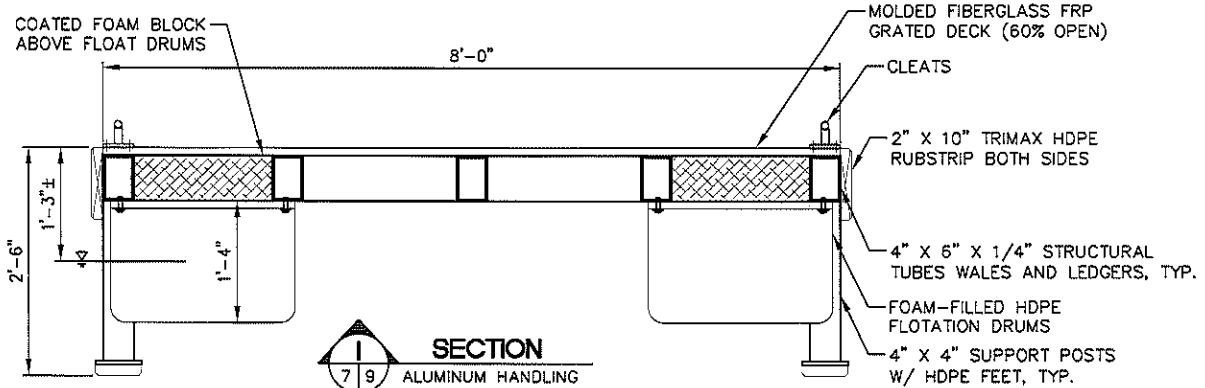


CHANNEL MARKER

PILE MOUNTED CHANNEL MARKER DAYBOARD

0 3 6

SCALE IN FEET



SECTION

7 | 9

ALUMINUM HANDLING FLOAT

0 1 2

SCALE IN FEET

NOTES:

1. GUIDE PILE NOT SHOWN ON HANDLING FLOAT FOR CLARITY.
2. HANDLING FLOAT STRUCTURAL FRAMING TO BE FABRICATED OF ALUMINUM OR GALVANIZED STEEL FRAME MATERIALS.
3. FLOAT GRATING TO BE MINIMUM 60% OPEN AREA, USING BAR TYPE PRODUCT FOR AN ADA COMPLIANT SURFACE.
4. HANDLING AND DAY USE FLOATS SHALL BE CONSTRUCTED OF ONE OF THE MATERIAL ALTERNATIVES TO MEET THE DIMENSION REQUIREMENTS SHOWN.

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES; BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W DATUM: NAVD88

ADJACENT PROPERTY OWNERS:
1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

UPLAND SWPPP NOTES

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 10 OF 24 DATE: 11/16/12

CSWPPP NARRATIVE AND DUST/EROSION CONTROL PLAN

12 ELEMENTS AND PREFERRED BMP'S

ELEMENT #1 – MARK CLEARING LIMITS
PRIOR TO BEGINNING ANY LAND DISTURBING ACTIVITIES, MARK ALL CLEARING LIMITS.
MARK TREES TO BE PRESERVED.
MARK SENSITIVE AREAS.
BMP: C101 – PRESERVE NATURAL VEGETATION
BMP: C102 – VEGETATED BUFFER ZONE
BMP: C103 – HIGH VISIBILITY PLASTIC OR METAL FENCE.
BMP: C233 – SILT FENCE

ELEMENT #2 – ESTABLISH CONSTRUCTION ACCESS
CONSTRUCTION AND MATERIAL DELIVERY VEHICLE INGRESS AND EGRESS SHALL BE LIMITED TO THE CONSTRUCTION ENTRANCES SHOWN IN THIS SWPPP.
CONSTRUCTION PERSONNEL SHALL USE ON-SITE PARKING SHOWN IN THIS PLAN.
APPROACH ROADS SHALL BE KEPT CLEAN.
BMP: C105 – STABILIZED CONSTRUCTION ENTRANCE
BMP: C107 – STABILIZED CONSTRUCTION ROAD/PARKING AREA

ELEMENT #3 – CONTROL FLOW RATES
FLOW RATES ON-SITE SHALL BE CONTROLLED THROUGH STABILIZATION AND VELOCITY CHECKS, WHERE APPLICABLE.
CONVEYANCE FOR OFF-SITE RUNOFF TRIBUTARY TO/THROUGH THE SITE SHALL BE ADDRESSED AS ENCOUNTERED.
BMP: C200 – INTERCEPTOR DIKES AND SWALES
BMP: C207 – CHECK DAMS
BMP: C203 – WATER BARS
BMP: C206 – LEVEL SPREADER

ELEMENT #4 – INSTALL SEDIMENT CONTROLS
PERIMETER SEDIMENT CONTROLS AND TEMPORARY SEDIMENT PONDS SHALL BE INSTALLED AS ONE OF THE FIRST ACTIVITIES DURING MOBILIZATION AND GRADING AND SHALL BE FUNCTIONAL BEFORE MASS EXCAVATION TAKES PLACE.
BMP: C102 – VEGETATED BUFFER ZONE
BMP: C200 – INTERCEPTOR DIKES AND SWALES
BMP: C231 – BRUSH BARRIER
BMP: C232 – GRAVEL FILTER BERM
BMP: C233 – SILT FENCE
BMP: C235 – STRAW WATTLES
BMP: C240 – SEDIMENT TRAP
BMP: C241 – TEMPORARY SEDIMENT PONDS.
BMP: XXXX – COIR LOGS

ELEMENT #5 – STABILIZE SOILS
NO SOILS SHALL REMAIN EXPOSED AND UNWORKED FOR MORE THAN THE TIME PERIODS SET FORTH BELOW TO PREVENT WIND AND WATER EROSION.
DURING THE REGIONAL DRY SEASON (JULY 1 TO SEPT 30) : 30 DAYS
DURING THE REGIONAL WET SEASON (OCT 1 TO JUNE 30) : 15 DAYS
EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY APPLICATION OF A BMP THAT WILL PROTECT THE SOIL FROM THE EROSIVE FORCES OF RAIN DROP IMPACT, FLOWING WATER, AND WIND.
BMP: C120 – TEMPORARY & PERMANENT SEEDING.
BMP: C125 – TOP SOILING
BMP: C130 – SURFACE ROUGHENING
BMP: C140 – DUST CONTROL.
BMP: C126 – APPLICATION OF PAM
BMP: C107 – APPLICATION OF GRAVEL BASE (ROADBED/PARKING AREA STABILIZATION)

ELEMENT #6 – PROTECT SLOPES
SLOPES HAVE BEEN DESIGNED TO LIMIT THE CONTINUOUS LENGTH OF SLOPE.
CONSTRUCT CUT AND FILL SLOPES IN A MANNER THAT WILL MINIMIZE EROSION (BMPs IDENTIFIED BELOW).
OFF-SITE STORMWATER SHALL BE DIVERTED AWAY FROM DISTURBED AREAS (SEE ELEMENTS #3 AND #4)
BMP: C120 – TEMPORARY & PERMANENT SEEDING
BMP: C130 – SURFACE ROUGHENING
BMP: C235 – STRAW WATTLES
BMP: C122 – NETS AND BLANKETS
BMP: XXXX – COIR LOGS

ELEMENT #7 – PROTECT DRAIN INLETS
EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS.
BMP: C220 – STORM DRAIN INLET PROTECTION

ELEMENT #8 – STABILIZE CHANNELS & OUTLETS
TEMPORARY CONVEYANCE CHANNELS SHALL BE DESIGNED FOR APPROPRIATE CONVEYANCE CAPACITY. OUTLETS SHALL BE ARMORED.
BMP: C202 – CHANNEL LINING
BMP: C209 – OUTLET PROTECTION

ELEMENT #9 – CONTROL POLLUTANTS
ALL POLLUTANTS INCLUDING WASTE MATERIALS AND DEMOLITION DEBRIS THAT OCCUR ONSITE SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER.
COVER CONTAINMENT AND PROTECTION FROM VANDALISM SHALL BE PROVIDED FOR ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCTS, AND NON-INERT WASTES PRESENT ON THE SITE.
ON SITE FUELING TANKS SHALL INCLUDE SECONDARY CONTAINMENT.
CONCRETE CHUTES SHALL BE WASHED INTO FORMED AREAS AWAITING INSTALLATION OF CONCRETE OR ASPHALT SURFACES OR OTHER DESIGNATED CONCRETE WASTE AREA.
ALL EQUIPMENT, TRUCKS, BARGES, BACKHOES, ETC. USED WITHIN OR NEAR WATER AS PART OF THIS PROJECT WILL BE CHECKED FOR LEAKS PRIOR TO MOBILIZATION AND DAILY DURING THE WORK PERIOD TO MINIMIZE THE POTENTIAL OF FUELS, OILS, ETC. LEAKING ONTO THE GROUND AND MAKING IT TO THE WATER. ANY LEAKS/SPILLS ON-SITE MUST BE CONTAINED/CLEANED IMMEDIATELY WITH APPROPRIATE MATERIALS THAT ARE KEPT ON-SITE (E.G. ABSORBENT PADS, BOOMS, ETC) AND REPORTED TO GRANT PUD NATURAL RESOURCES STAFF.
ANY REGULATED OR HAZARDOUS MATERIALS THAT SPILL INTO WATERS OF THE STATE MUST ALSO BE REPORTED TO WDOE'S EMERGENCY MANAGEMENT DIVISION AND CENTRAL REGIONAL OFFICE. THE TABLE BELOW PROVIDES THE CONTACT LIST IN THE EVENT OF AN OIL/FUEL SPILL.
BMP: C151 – CONCRETE HANDLING

PERSON/AGENCY	PHONE #	COMMENTS
ROSS HENDRICK – GRANT PUD	509-754-5008, EXT. 2468 OR 509-431-2661	MUST BE NOTIFIED IMMEDIATELY IN THE EVENT OF SPILL
WANAPUM CONTROL ROOM GRANT COUNTY PUD	509-754-5007	MUST BE NOTIFIED IMMEDIATELY IN THE EVENT OF SPILL
WASHINGTON STATE DEPARTMENT OF ECOLOGY	800-258-5990 OR 509-329-3400	MUST BE NOTIFIED IMMEDIATELY IN THE EVENT OF SPILL INTO WATERS OF THE STATE
NATIONAL RESPONSE CENTER	800-424-8802	MUST BE NOTIFIED IMMEDIATELY IN THE EVENT OF SPILL INTO WATERS OF THE STATE
LOCAL EMERGENCIES SERVICES	911 OR 79-911 IF CALLING FROM GRANT PUD PHONE	AS NEEDED IN EVENT OF EMERGENCY

ELEMENT #10 – CONTROL DEWATERING
DEWATERING, IF NECESSARY, SHALL BE CONVEYED INTO AN ONSITE SEDIMENTATION BMP.

ELEMENT #11 – MAINTAIN BMPS
TEMPORARY AND PERMANENT EROSION CONTROL BMP SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ENSURE PERFORMANCE.
INSPECT ALL BMPS WEEKLY DURING THE DRY SEASON AND DAILY DURING WET WEATHER.
REMOVE ALL BMPS WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THEY ARE NO LONGER NEEDED.

ELEMENT #12 – MANAGE THE PROJECT
THE PROJECT WILL BE PHASED AND SCHEDULED TO ADDRESS A NUMBER OF CONSTRAINTS AND CONSIDERATIONS, INCLUDING STORMWATER HANDLING AND SEASONAL LIMITATIONS.
A CESCL SHALL BE RESPONSIBLE FOR MANAGING, UPDATING, AND IMPLEMENTING THE SWPPP AND DUST CONTROL PLANS.
BMPS SHALL BE INSPECTED JUST PRIOR TO EACH WEEKEND AND THE FORECAST CONSULTED.
THE CONTRACTOR SHALL BE COMPENSATED FOR EROSION CONTROL WORK AS SPECIFIED IN THE CONTRACT DOCUMENTS.
BMP: C150 – MATERIALS ON HAND
BMP: C160 – DESIGNATED CESCLS
BMP: C161 – PAYMENT OF EROSION CONTROL WORK
BMP: C162 – SCHEDULING

BMP INSTALLATION NOTES

COIR LOGS

1. COIR LOG SHALL BE INSTALLED PERPENDICULAR TO THE FLOW DIRECTION AND PARALLEL TO THE SLOPE CONTOUR.
2. COIR LOGS SHALL BE ENTRENCHED IN AN ANCHOR TRENCH 3 INCHES DEEP. EXCAVATED SOIL SHALL BE PLACED UPSLOPE FROM THE ANCHOR TRENCH. EXCAVATED SOIL SHALL BE COMPACTED.
3. STAKING OF COIR LOGS IN RIPARIAN PLANTING AREAS MAY UTILIZE WILLOW STAKES IN LIEU OF WOODEN STAKES. STAKING SPACING AND PLACEMENT SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
4. COIR LOGS INSTALLED ON A SLOPE SHALL BE SPACED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

UPLAND DEMOLITION / EROSION AND SEDIMENT CONTROL PLAN 1

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

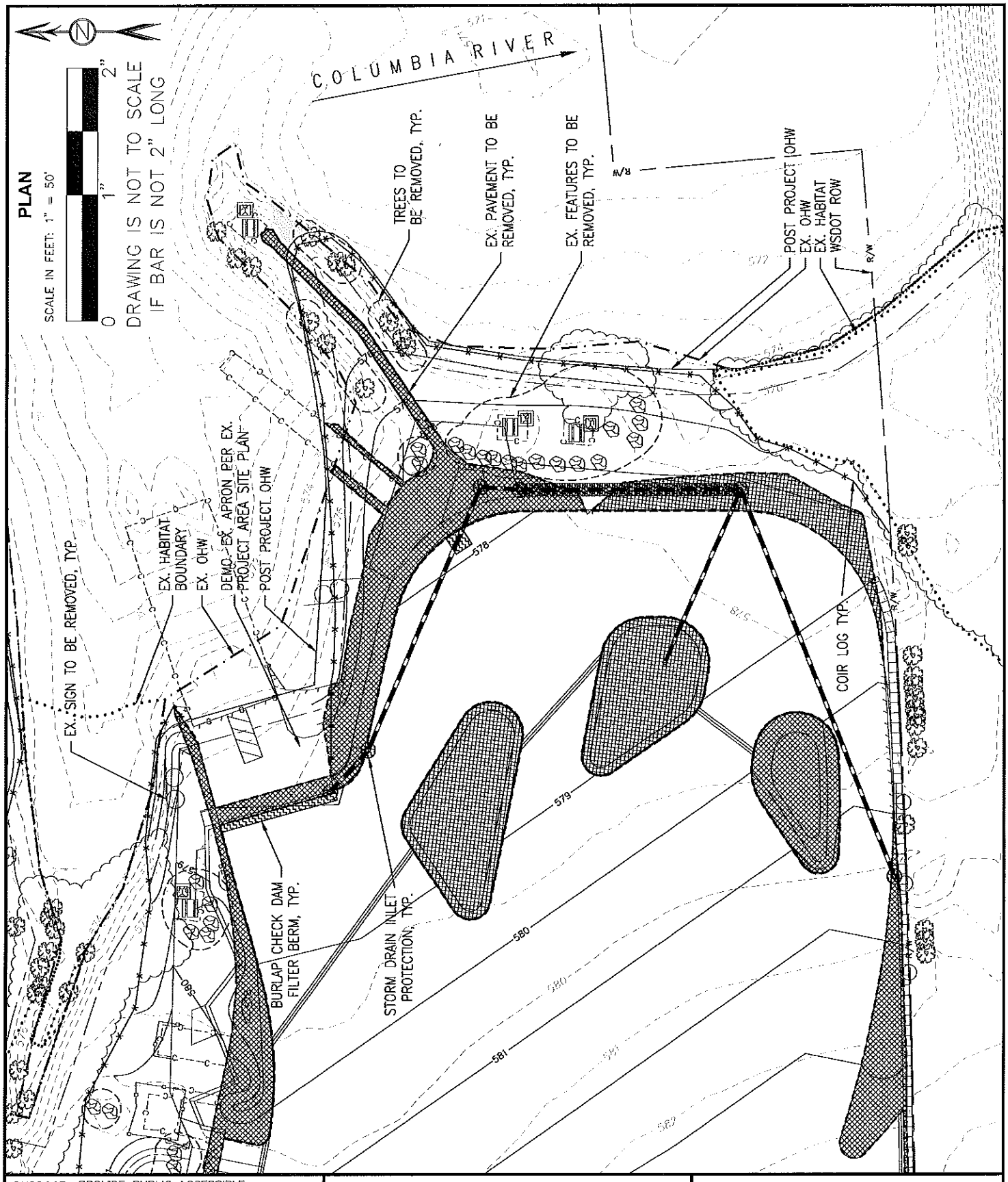
REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 11 OF 24 DATE: 11/16/12



PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

UPLAND DEMOLITION / EROSION AND SEDIMENT CONTROL PLAN 2

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

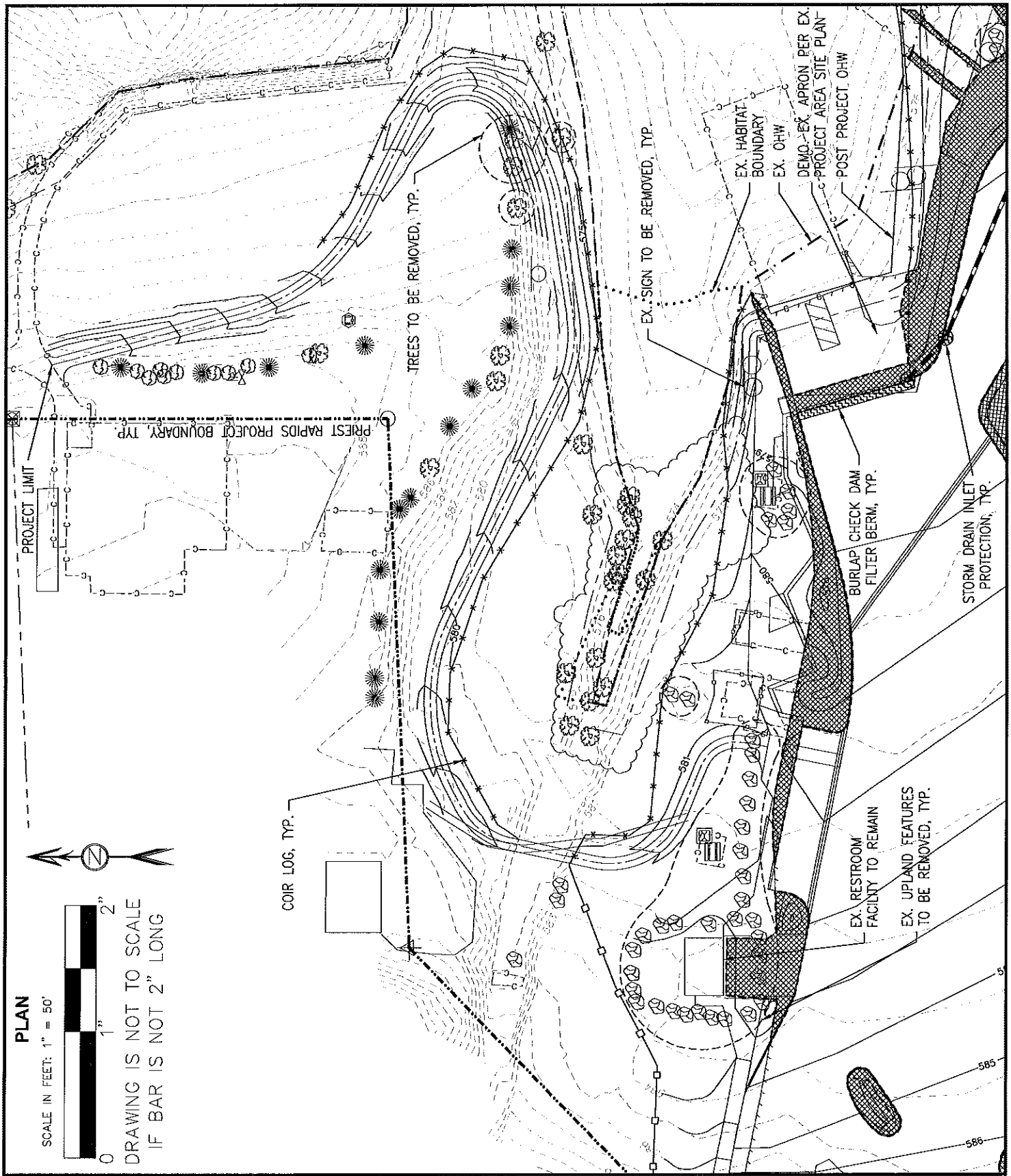
REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 12 OF 24 DATE: 11/16/12



PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

UPLAND DEMOLITION / EROSION AND SEDIMENT CONTROL PLAN 3

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

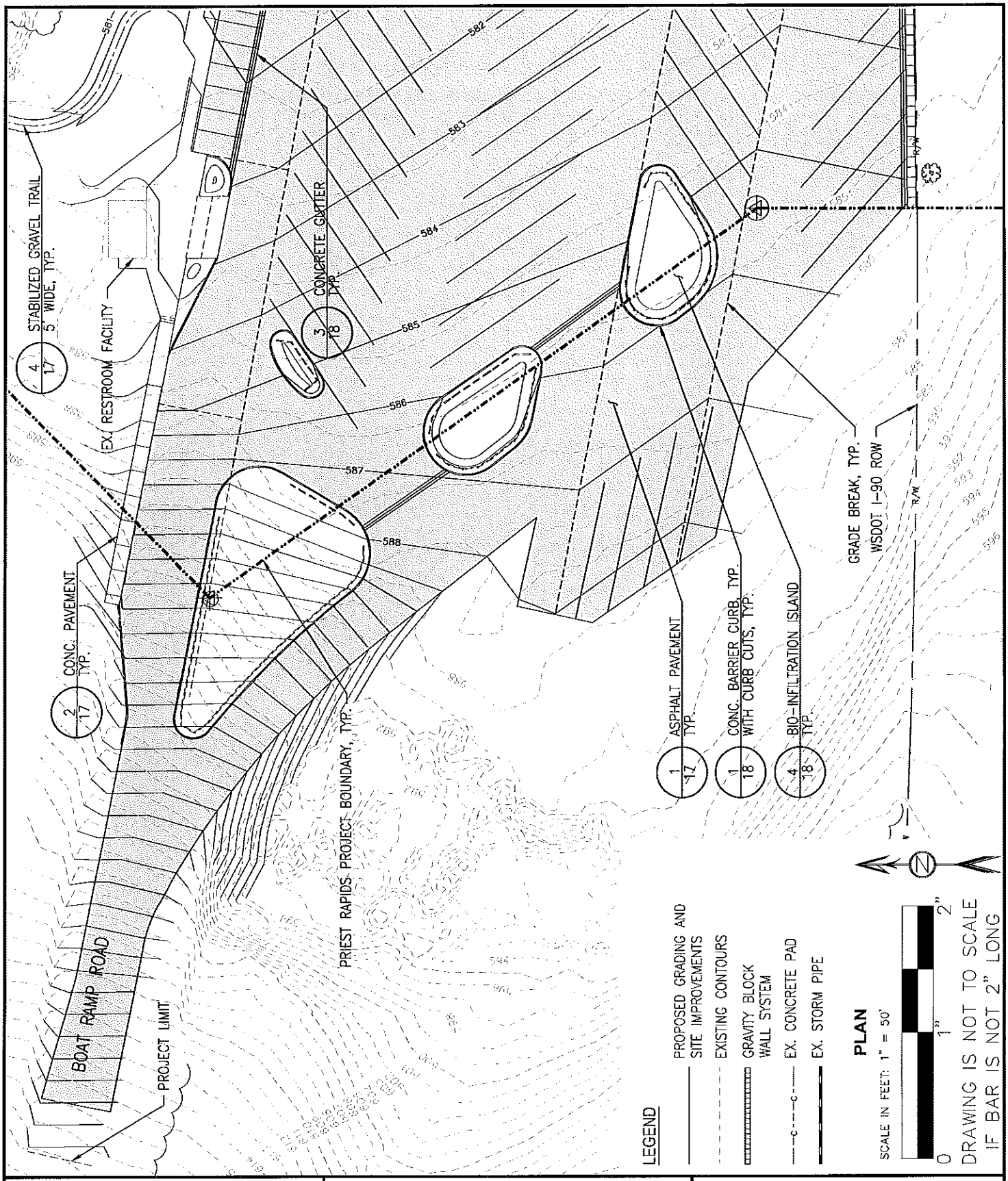
REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 13 OF 24 DATE: 11/16/12



PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

UPLAND SITE AND GRADING PLAN 1

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

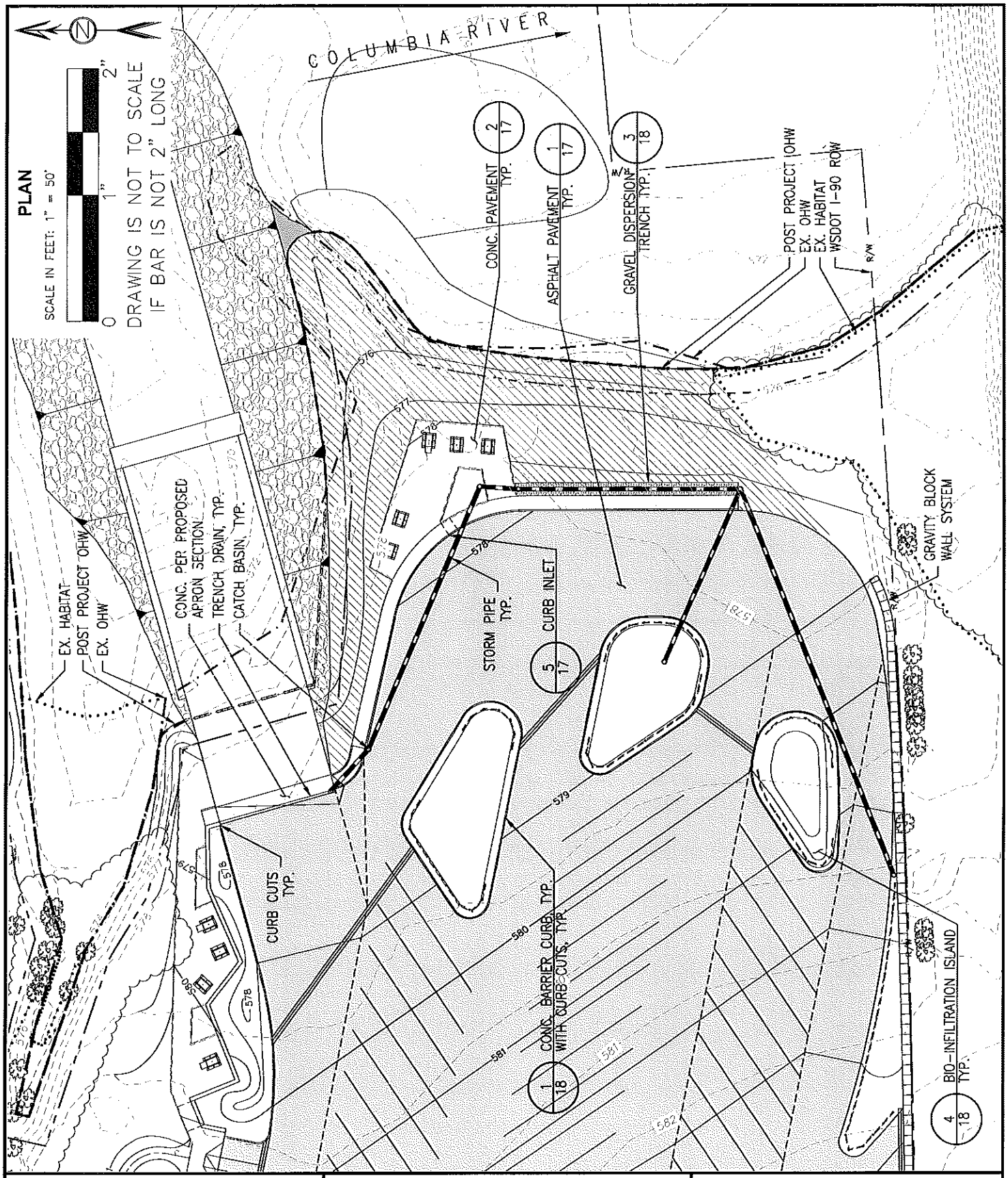
REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 14 OF 24 DATE: 11/16/12



PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

UPLAND SITE AND GRADING PLAN 2

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

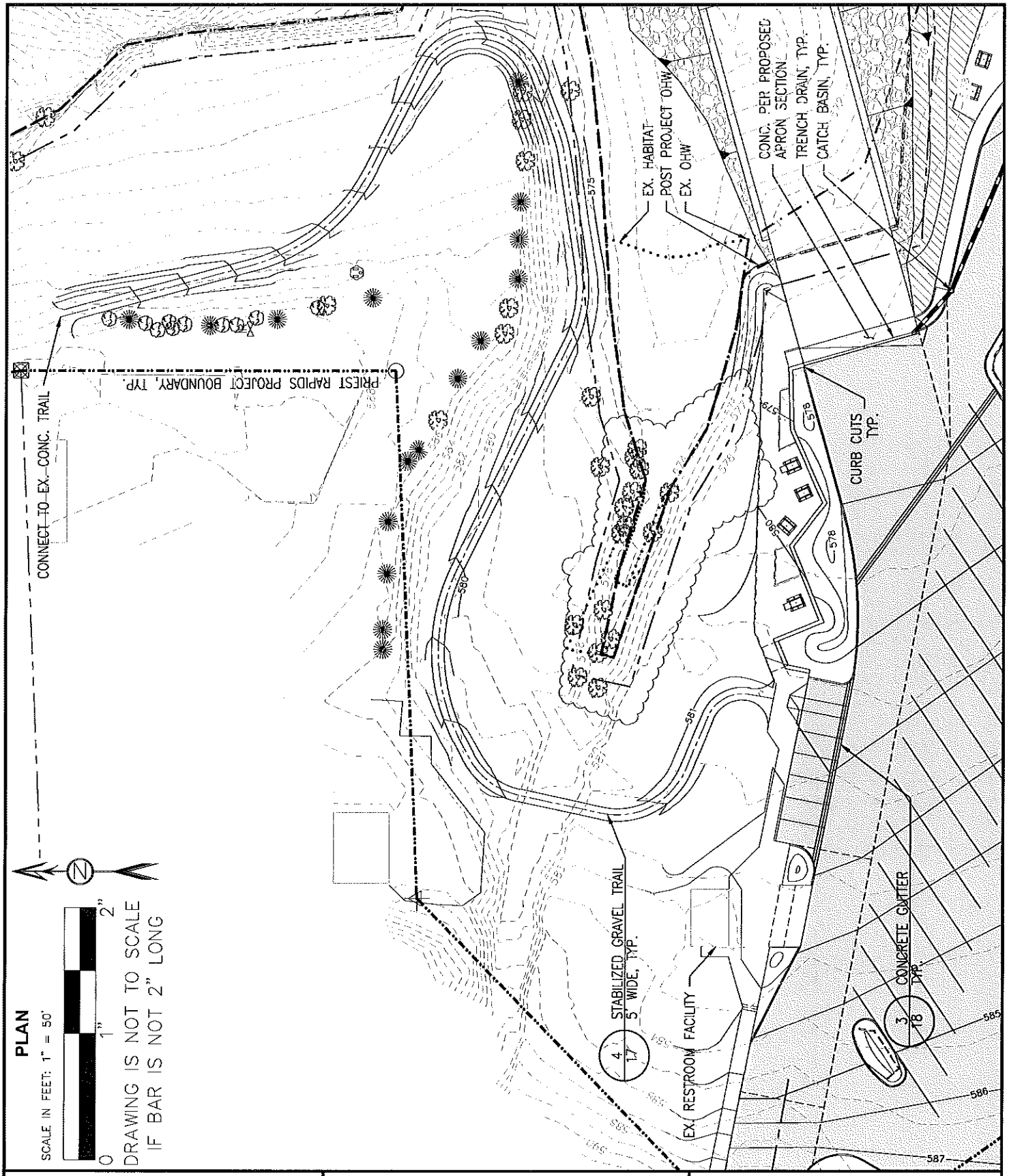
REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 15 OF 24 DATE: 11/16/12



PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES; BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

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2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

UPLAND SITE AND GRADING PLAN 3

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 16 OF 24 DATE: 11/16/12

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES; BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W DATUM: NAVD88

ADJACENT PROPERTY OWNERS:
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3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

UPLAND SITE DETAILS 1

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

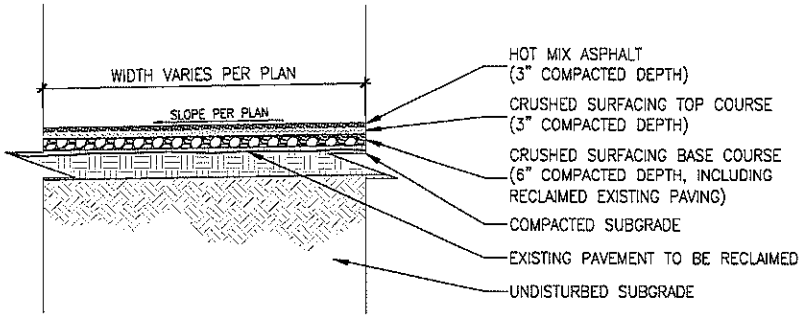
REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

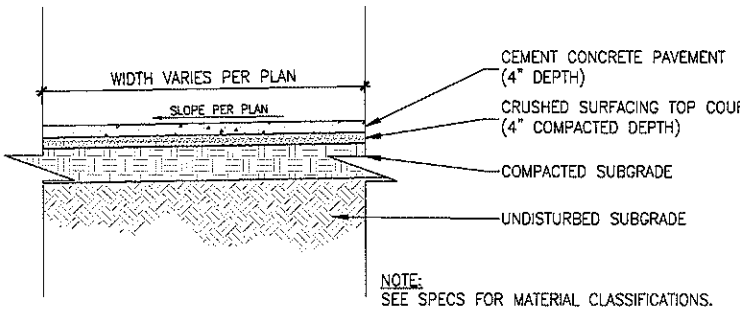
COUNTY: KITTITAS STATE: WASHINGTON

SHEET 17 OF 24 DATE: 11/16/12



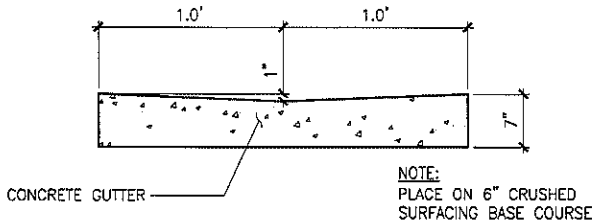
NOTE:
SEE SPECS FOR MATERIAL CLASSIFICATIONS.

1 ASPHALT PAVEMENT
SCALE: 1/4"=1'-0" KCBL-C-PDT-TRAL-ASPHT-PVMNT



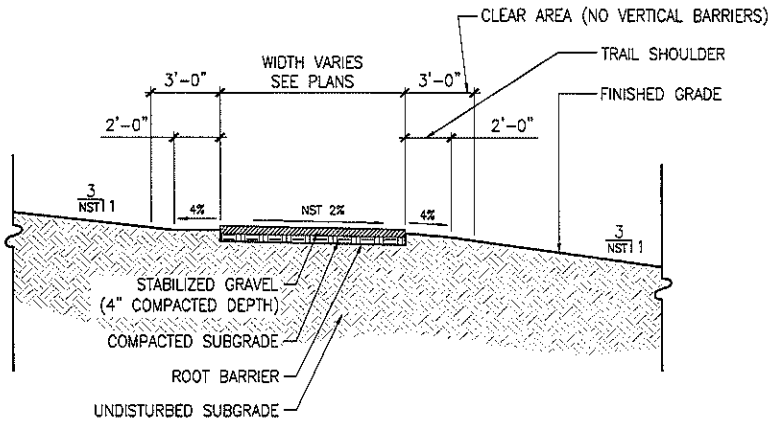
NOTE:
SEE SPECS FOR MATERIAL CLASSIFICATIONS.

2 CONCRETE PAVEMENT
SCALE: 1/4"=1'-0" KCBL-C-PDT-CONC-PVMNT

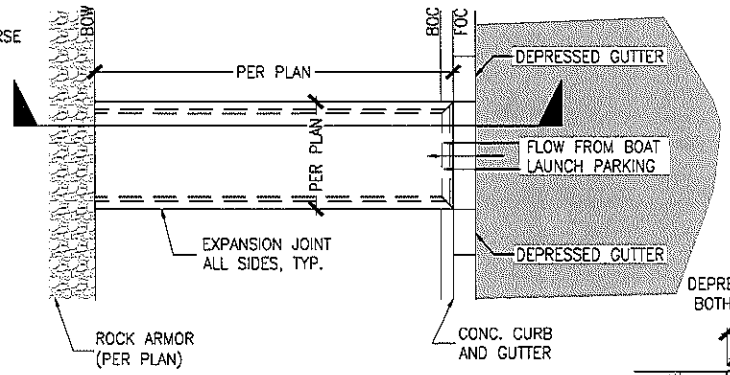


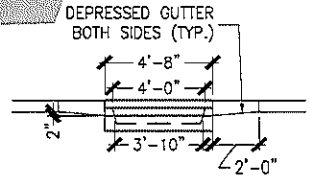
NOTE:
PLACE ON 6" CRUSHED SURFACING BASE COURSE

3 CONCRETE GUTTER
SCALE: NTS KCBL-C-PDT-GUTTER-LNG

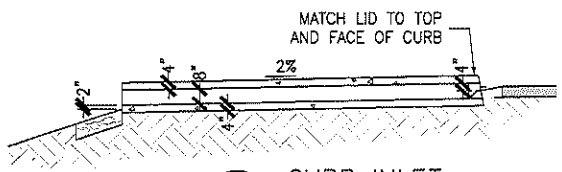


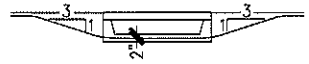
4 STABILIZED GRAVEL TRAIL - 4"
SCALE: 1/4"=1'-0" KCBL-DT-TRAL-GRAV4





VIEW FROM CURB SIDE





VIEW FROM BACK OF WALK

5 CURB INLET
SCALE: 1/4"=1'-0" KCBL-C-PDT-CURB-INLET

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES; BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

UPLAND SITE DETAILS 2

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

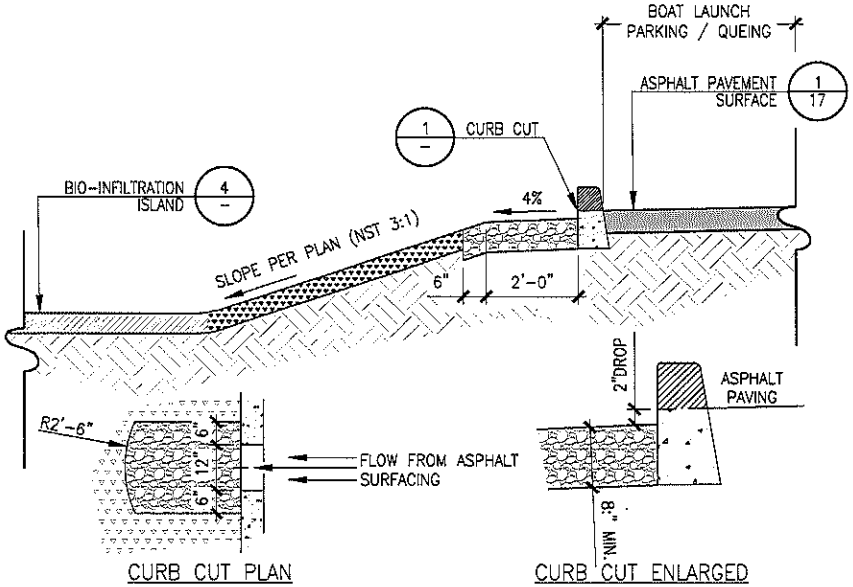
REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

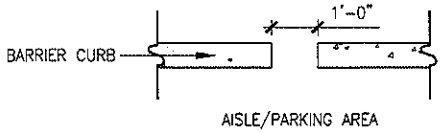
COUNTY: KITTITAS STATE: WASHINGTON

SHEET 18 OF 24 DATE: 11/16/12



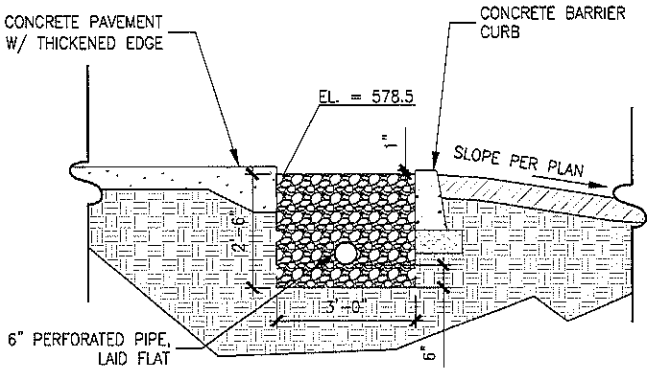
2 CURB CUT DISSIPATER

SCALE: 1/2"=1'-0" KCBL-W-RDT-CCD



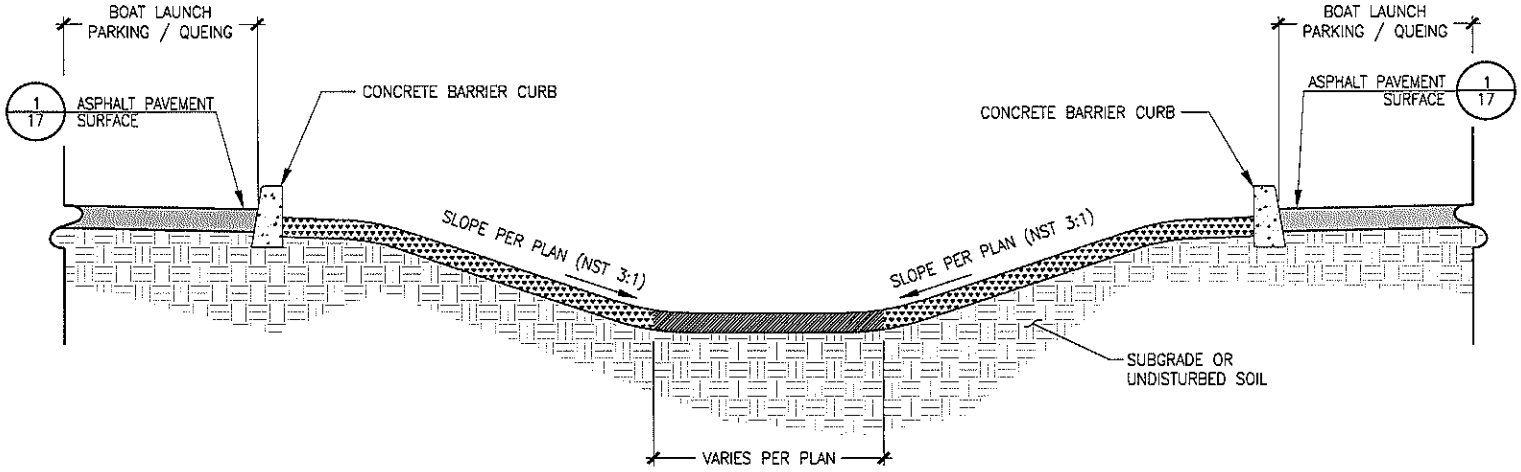
1 CURB CUT – PLAN VIEW

SCALE: NTS KCBL-C-PDT-CURB-CUT



3 GRAVEL DISPERSION TRENCH

SCALE: 1/2"=1'-0" KCBL-W-RDT-GDIS



4 BIO-INFILTRATION ISLAND

SCALE: 1/2"=1'-0" KCBL-W-RDT-IFBA

PLAN

SCALE IN FEET: 1" = 200'

0 1" 2"

DRAWING IS NOT TO SCALE
IF BAR IS NOT 2" LONG

MITIGATION PLANTING PLAN NOTES

SPECIES: NATIVE SPECIES ARE PROPOSED FOR RIPARIAN AND ADJACENT UPLAND/SHRUB STEPPE AREAS. SPECIES LISTS HAVE BEEN DEVELOPED BASED ON A COMBINATION OF SPECIES LISTS FOR THESE AREAS, ADDITIONALLY, COMMERCIAL PLANT MATERIAL SOURCES HAVE BEEN CHECKED FOR AVAILABILITY.

SPACING AND QUANTITIES: PROPOSED QUANTITIES ARE BASED ON THE WDFW AND USACE GUIDANCE FOR SPACING AND CONSIDER PROPOSED STOCK SIZE AND MATURE SIZE. THE SPACINGS/LOCATIONS SHOWN ON THE PLAN ARE DESIGNED TO CREATE A NATURAL LOOKING PLANTING VERSUS A UNIFORM, STREETSCAPE STYLE PLANTING (USING EQUAL, ON-CENTER SPACINGS).

WEED CONTROL: FOR UPLAND/SHRUB STEPPE SEEDING AREAS: THE SEEDING WILL BE ACCOMPLISHED IN TWO APPLICATIONS. THE FIRST APPLICATION WILL BE GRASSES ONLY. THE FIRST APPLICATION WILL BE FOLLOWED BY WEED CONTROL UTILIZING A BROADLEAF HERBICIDE. THE SECOND APPLICATION OF SEED WILL CONSIST OF GRASSES AND FORBS.

TIMING: RIPARIAN PLANTING AREAS: THE SPRING FOLLOWING COMPLETION OF IN WATER WORK. UPLAND/SHRUB STEPPE PLANTING AREAS: SPRING OR FALL FOLLOWING CONSTRUCTION ACTIVITIES.

SURVIVAL PERFORMANCE STANDARD:
YEAR 1: 100% SURVIVAL RATE GUARANTEE
YEARS 2 THROUGH 3: 80% SURVIVAL RATE GUARANTEE

MONITORING: SEE MITIGATION PLANTING PLAN NARRATIVE

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

MITIGATION PLANTING PLAN OVERVIEW

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 19 OF 24 DATE: 11/16/12

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

SOUTH JETTY MITIGATION PLANTING PLAN 1

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 20 OF 24 DATE: 11/16/12

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W DATUM: NAVD88

ADJACENT PROPERTY OWNERS:

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

NORTH JETTY MITIGATION PLANTING PLAN 2

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

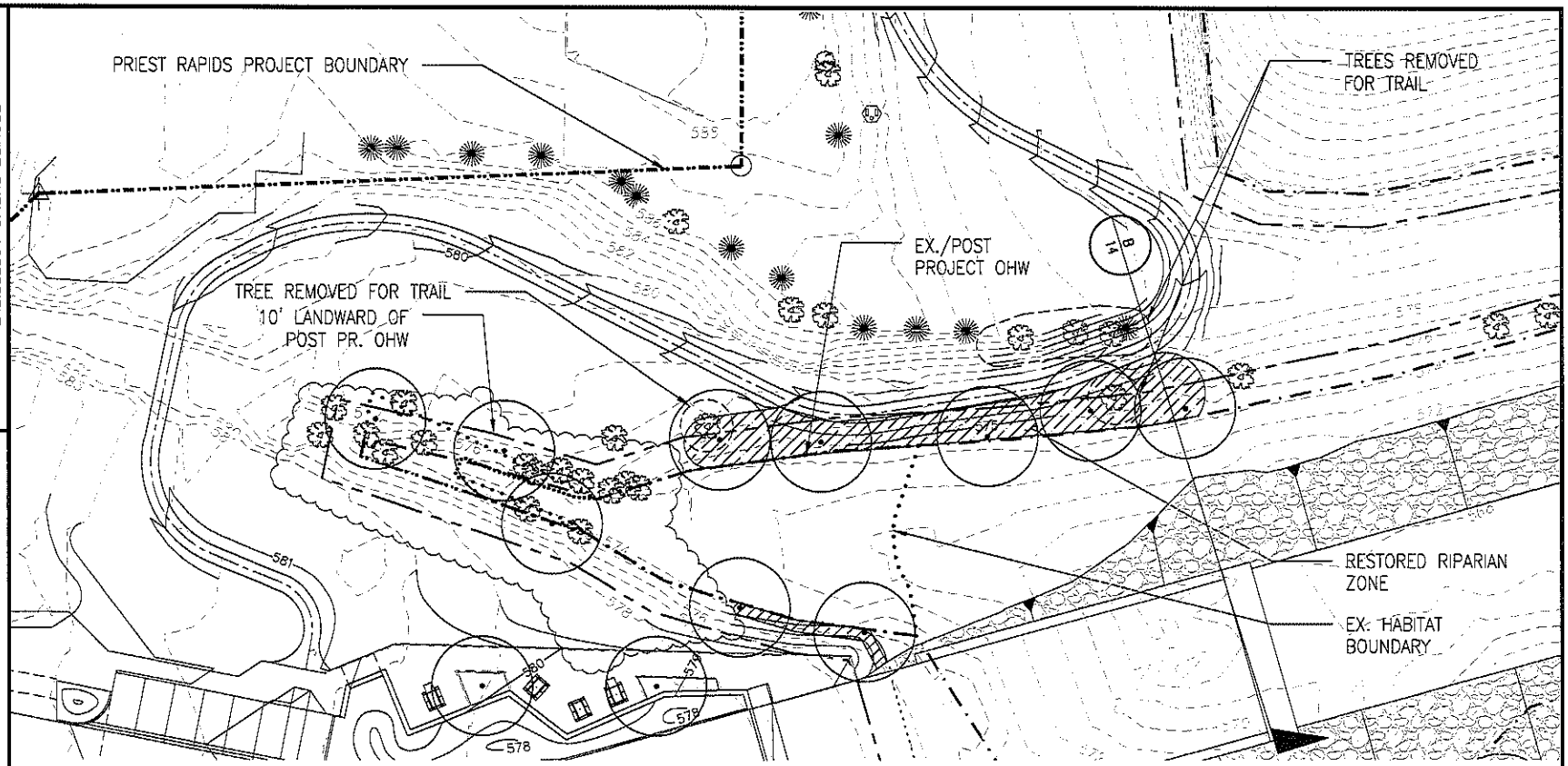
REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 21 OF 24 DATE: 11/16/12



LEGEND

- BEACH FILL
- STREAMBED GRAVEL / SAND BACKFILL
- EX. OHW
- PRIEST RAPIDS PROJECT BOUNDARY
- 10' LANDWARD OF POST PR. OHW
- POST PROJECT OHW.
- EXISTING HABITAT BOUNDARY

PROPOSED RIPARIAN/SHORELINE PLANT LEGEND/SPECIES

LARGE DECIDUOUS TREE TYP.
10 – WITHIN 10' OF POST PROJECT OHW
2 – BEYOND 10' OF POST PROJECT OHW
(SEE SPECIES LIST ON SHEET 24)

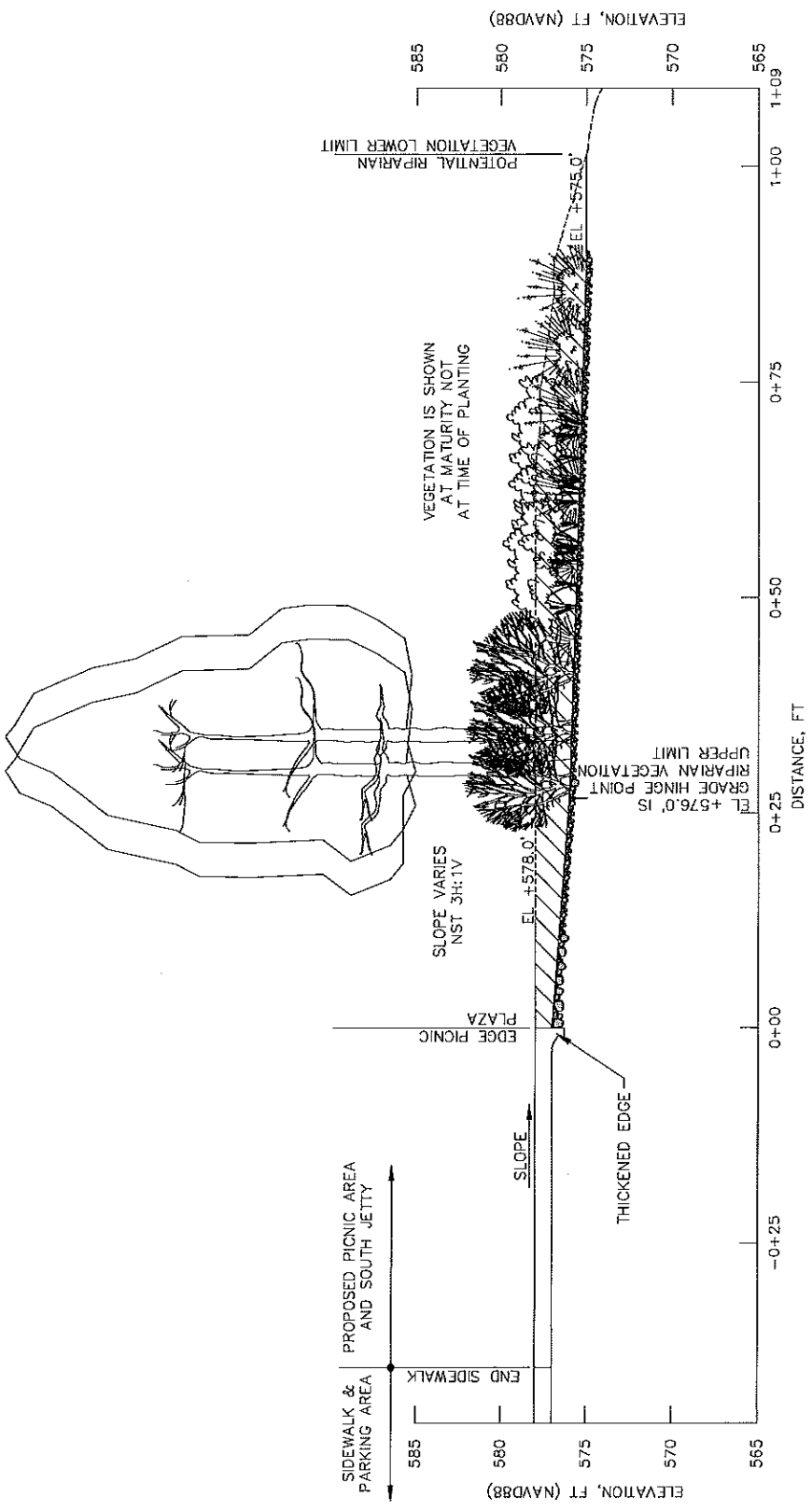
RESTORED RIPARIAN ZONE
1686 SQUARE FEET – WITHIN 10' OF POST PROJECT OHW
553 SQUARE FEET – BEYOND 10' OF POST PROJECT OHW
(SEE SPECIES LIST ON SHEET 24)

PLAN

SCALE IN FEET: 1" = 50'

0 1" 2"

DRAWING IS NOT TO SCALE
IF BAR IS NOT 2" LONG



SECTION

SCALE IN FEET: 1" = 20'

0 1" 2"

DRAWING IS NOT TO SCALE IF BAR IS NOT 2" LONG

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

SOUTH JETTY PLANTING SECTION 1

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

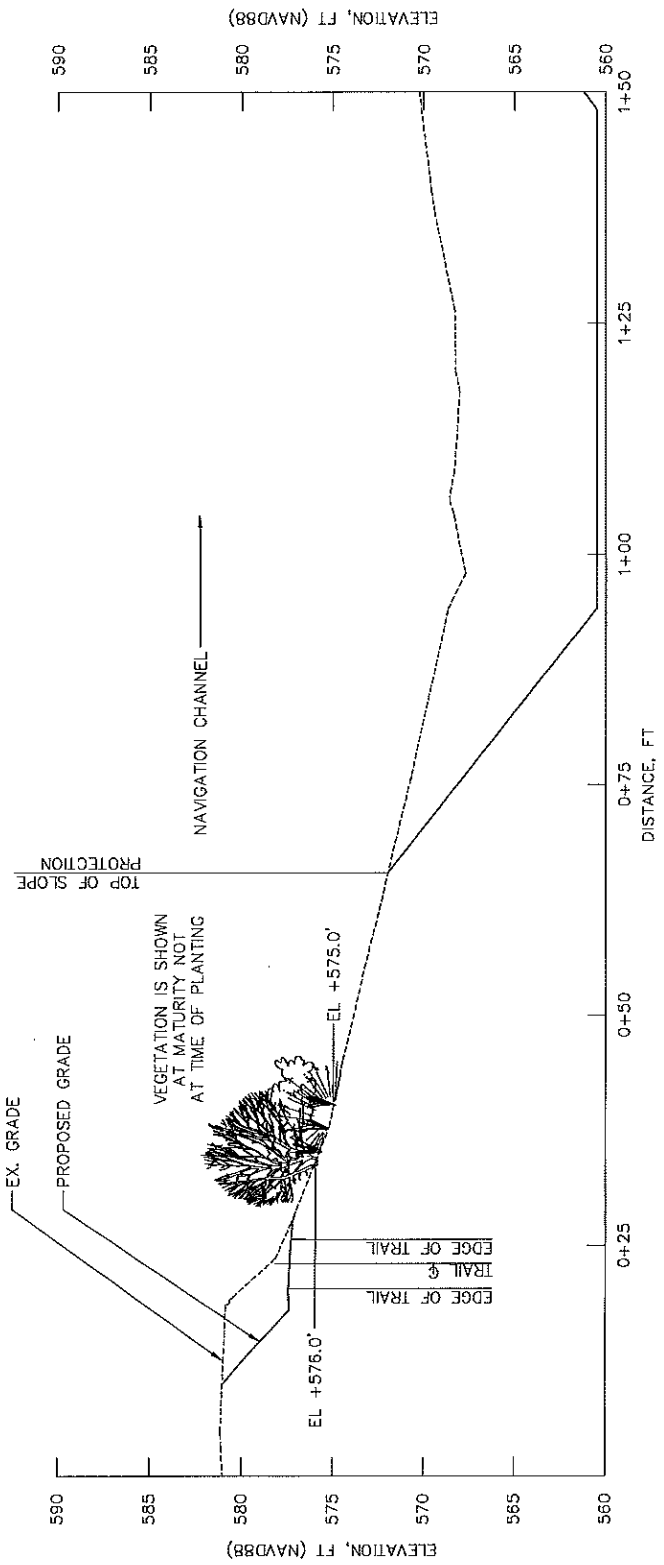
REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 22 OF 24 DATE: 11/16/12



SECTION

SCALE IN FEET: 1" = 20'

0 1" 2"

DRAWING IS NOT TO SCALE IF BAR IS NOT 2" LONG

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

NORTH JETTY PLANTING SECTION 2

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 23 OF 24 DATE: 11/16/12

PURPOSE: PROVIDE PUBLIC ACCESSIBLE RECREATIONAL FACILITIES: BOAT RAMP, PARKING, TRAIL AND NAVIGATION CHANNEL.

LOCATION: 46° 56' 28.44"N, 119° 59' 3.78"W DATUM: NAVD88

ADJACENT PROPERTY OWNERS:
1. STOCKDALE INC.
2. KITTITAS COUNTY (PUBLIC WORKS)
3. GRANT COUNTY PUD #2
4. STATE OF WASHINGTON

KITTITAS COUNTY RECREATIONAL FACILITY IMPROVEMENT PROJECT

MITIGATION PLANTING PLAN SPECIES AND SEED LIST

APPLICATION BY: GRANT COUNTY PUD

PROPOSED: DREDGING, SHORELINE IMPROVEMENTS, FLOATING DOCKS, AND BOAT RAMP

REFERENCE NUMBER: NWS-2012-944

IN: COLUMBIA RIVER

AT: VANTAGE, WA

COUNTY: KITTITAS STATE: WASHINGTON

SHEET 24 OF 24 DATE: 11/16/12

RIPARIAN PLANT SCHEDULE

Riparian Species List

Abbr.	Scientific Name	Common Name	Size	Condition
RESTORATION AREA PLANTS				
LARGE DECIDUOUS TREES				
POTR	Populus trichocarpa	Black Cottonwood	2.5" Cal.	B&B
PONO	Populus deltoides	Noreaster Cottonwood	2.5" Cal.	B&B
PORO	Populus deltoides	Robusta Cottonwood	2.5" Cal.	B&B
SMALL DECIDUOUS TREES				
PRVI	Prunus virginiana	Chokecherry	2.5" Cal.	B&B
LARGE DECIDUOUS SHRUBS				
AMAL	Amelanchier alnifolia	Serviceberry	5 Gal.	Container
PRAM	Prunus americana	Native Plum	5 Gal.	Container
SACA	Sambucus Caerulea	Elderberry	5 Gal.	Container
SAEX	Salix exigua	Sandbar Willow	1 Gal.	Container
SALA	Salix lasiandra	Pacific Willow	1 Gal.	Container
SALA	Salix scouleriana	Scouler's Willow	1 Gal.	Container
SMALL DECIDUOUS SHRUBS				
RONU	Rosa nutkana	Nootka Rose	3 Gal.	Container
ROWO	Rosa woodsii	Wood's Rose	3 Gal.	Container
SPDO	Spiraea douglasii	Douglas Spiraea	3 Gal.	Container

UPLAND PLANT SCHEDULE

Upland Species List

Abbr.	Scientific Name	Common Name	Size	Condition
RESTORATION AREA PLANTS				
SMALL DECIDUOUS SHRUBS				
ARPC	Artemisia tridentata	Big Sagebrush	5 Gal.	Container
BASA	Balsamorhiza sagittata	Arrowleaf Balsamroot	40ci	Plug
CHNA	Chrysothamnus nauseosus	Rubber Rabbitbrush	3 Gal.	Container
CHVI	Chrysothamnus viscidiflorus	Low Green Rabbitbrush	3 Gal.	Container
LUSE	Lupinus sericeus	Silky Lupine	10ci.	Plug
PESP	Penstemon speciosus	Showy Penstemon	10ci.	Plug
PUTR	Purshia tridentata	Antelope Bitterbrush	5 Gal.	Container

TYPE 1 – SEED MIX

First Application

Grasses — LBS Per ACRE: 15

Species	Common	Biotype	%	Lbs
Psuedoroegnaria spicata	Bluebunch Wheatgrass	Wahluke	25	3.75
Elymus lanceolatus	Streambank Wheatgrass	Schwendimar	30	4.5
Oryzopsis hymenoides	Indian Ricegrass	Nezpar	25	3.75
Poa secunda	Sandberg Bluegrass	Frenchman Hills	15	2.25
Sporobolus cryptandrus	Sand Dropseed	Pasco	5	0.75
		TOTAL	100	15

Second Application

Grasses — LBS Per ACRE: 15

Species	Common	Biotype	%	Lbs
Psuedoroegnaria spicata	Bluebunch Wheatgrass	Wahluke	45	6.75
Elymus lanceolatus	Streambank Wheatgrass	Schwendimar	30	4.5
Poa secunda	Sandberg Bluegrass	Frenchman Hills	15	2.25
Sporobolus cryptandrus	Sand Dropseed	Pasco	10	1.5
		TOTAL	100	15

Forbs — LBS Per ACRE: 4

Species	Common	Biotype	%	Lbs
Artemisia tridentate	Big Sagebrush	Columbia Basin	6	0.24
Balsamorhiza sagittata	Arrowleaf Balsamroot	Vantage	18	0.72
Eriogonum compositum	Arrowleaf Buckwheat	Kittitas	25	1
Lomatium macrocarpum	Largefruit Desert Parsley	Vantage	19	0.76
Lupinus sericius	Silky Lupine	Columbia Basin	20	0.8
Purshia tridentata	Antelope Bitterbrush	Columbia Basin	12	0.48
		TOTAL	100	4

Note: Second Seeding to occur after weed management applications in first growing season.