WASHINGTON STATE PARKS & RECREATION COMMISSION

KEN BOUNDS, CHAIR

SOPHIA DANENBERG LAURIE CONNELLY

MICHAEL LATIMER MARK O. BROWN

ALI RAAD **HOLLY WILLIAMS**

DIANA DUPUIS, DIRECTOR



APPROVED FOR CONSTRUCTION

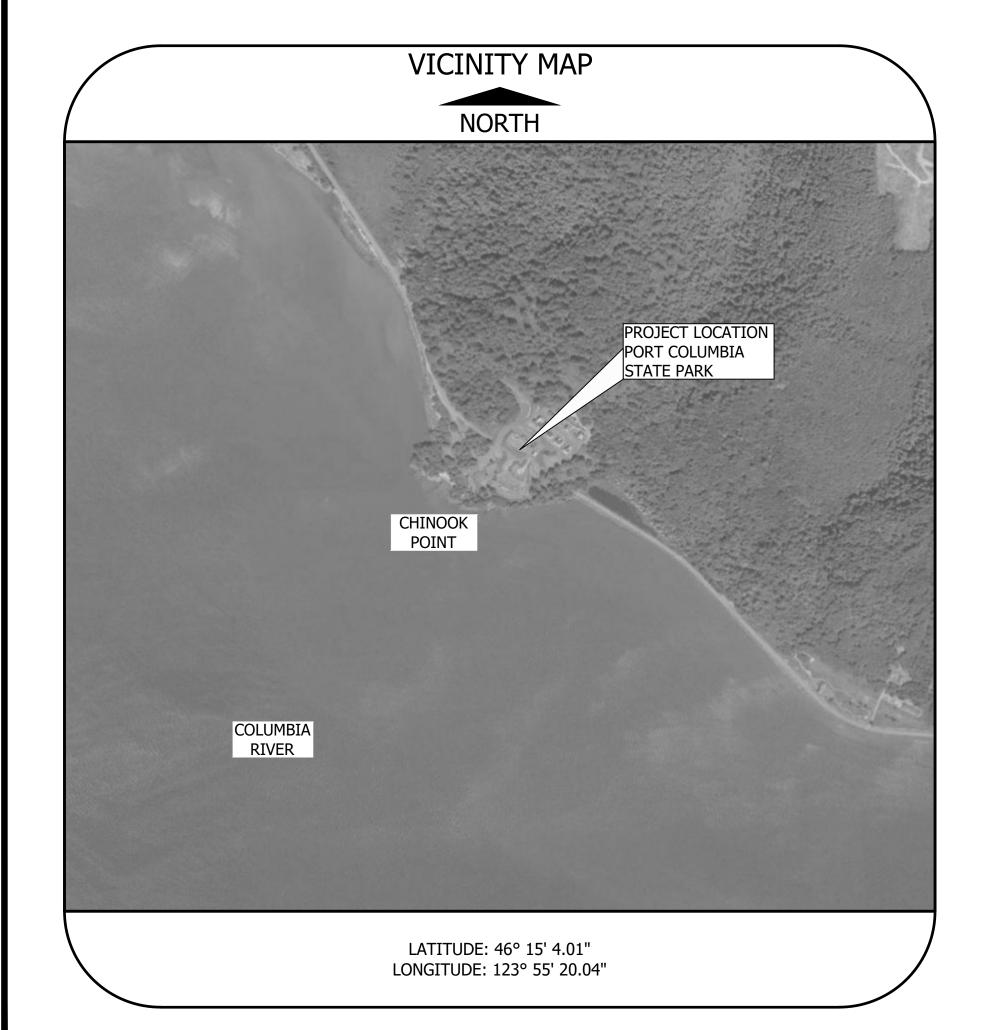
REGION MANAGER

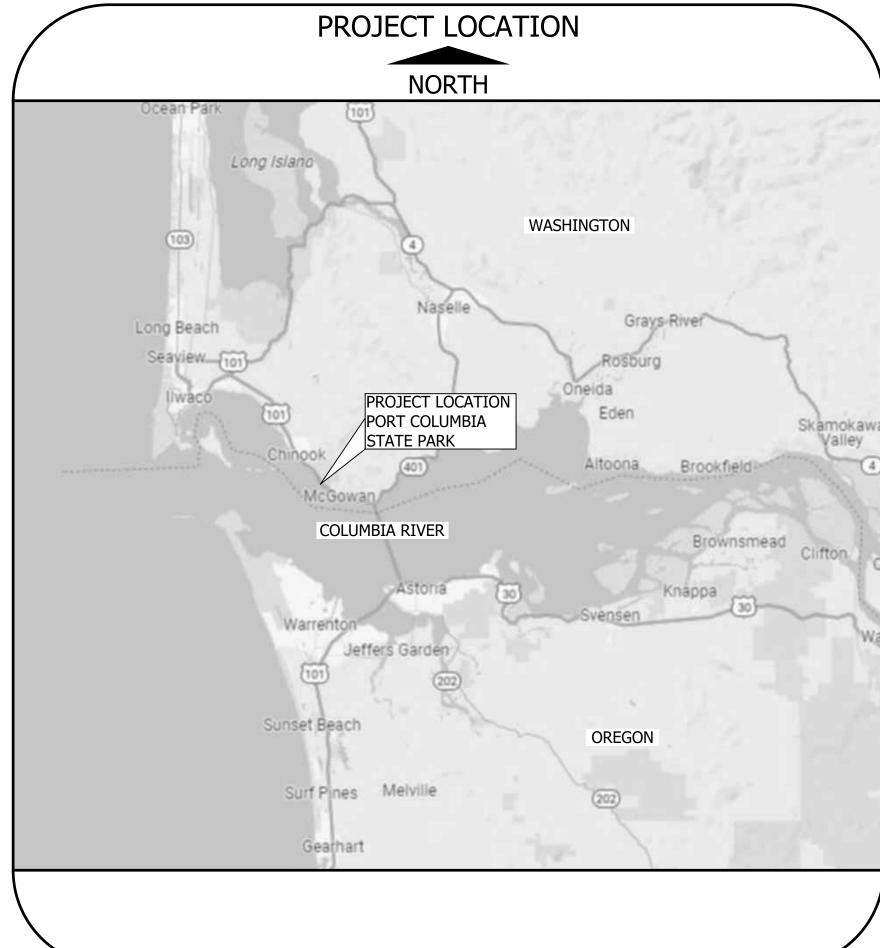
CAPITAL PROGRAM MANAGER

AREA MANAGER: JASON ARMSTRONG

FORT COLUMBIA STATE PARK

WATERFRONT REPAIRS





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PROJECT TEAM

OWNER: STATE OF WASHINGTON

PARKS AND RECREATION COMMISSION 1111 ISRAEL ROAD SOUTHWEST POST OFFICE BOX 42650 OLYMPIA, WASHINGTON 98504-2650 www.parks.wa.gov

OWNER'S REPRESENTATVE: WASHINGTON STATE PARKS AND RECREATION COMMISSION

11824 TILLEY RD S OLYMPIA, WA 98512

TODD FELTON

SW REGION MAINTENANCE MANAGER TELEPHONE: (360) 956-4809 TODD.FELTON@PARKS.WA.GOV

PROJECT ENGINEERING CONSULTANT

PROJECT LEAD:

moffatt & nichol

MOFFATT & NICHOL 600 UNIVERSITY ST. SUITE 610 SEATTLE, WA 98101 www.moffattnichol.com AARON PATTERSON CIVIL ENGINEER TELEPHONE: (206) 622-0222 apatterson@moffattnichol.com



CAD NO. D200-3718-2023	
	DATE
	APP.
	INT.
	REVISIONS
	NO.

ACTION	BY	DATE
DESIGNED	MB	11/20/2023
DRAWN	RC	11/20/2023
CHECKED (FIELD)	XXX	11/20/2023
CHECKED (HDQTS.)	XXX	11/20/2023



WASHINGTON STATE **PARKS** AND RECREATION COMMISSION

FORT COLUMBIA STATE PARK

WATERFRONT **REPAIRS**

PROJECT TEAM

SCALE

AS SHOWN

PARKS FILE#

SHEET 2 OF 6

SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS TO:

- 1. REMOVE WOODY DEBRIS AROUND THE EXISTING OUTFALL PIPE IN THE AREA SHOWN ON THE PLANS.
- 2. DISPOSE OF ALL DEBRIS OFF-SITE AT A PERMITTED FACILITY.
- 3. FABRICATE, DELIVER, AND INSTALL CONCRETE ANCHOR BLOCKS AS INDICATED ON THE PLANS.
- 4. MAINTAIN THE ALIGNMENT OF THE EXISTING OUTFALL PIPE DURING DEBRIS REMOVAL AND ANCHOR BLOCK INSTALLATION.

CONTRACTOR SHOULD EXPECT TO COMPLETE ALL WORK FROM THE WATER. COORDINATE WITH WASHINGTON STATE PARKS FOR ACCESS TO THE SITE.

GENERAL

- 5. THESE NOTES CONTAIN GENERAL INFORMATION AND ARE NOT ALL INCLUSIVE. CONTRACTOR SHALL VERIFY INFORMATION GIVEN HERE WITH SPECIFICATIONS AND OTHER DOCUMENTS AND BRING ANY CONFLICTS TO THE ATTENTION OF THE PROJECT ENGINEER BEFORE BEGINNING AFFECTED WORK. THE PROJECT ENGINEER WILL RESOLVE ANY SUCH CONFLICT(S).
- 6. IN THE EVENT OF CONFLICTING REQUIREMENTS BETWEEN THE CONTRACT DRAWINGS, GENERAL NOTES, AND SPECIFICATIONS, THE MORE STRINGENT SHALL CONTROL AS DETERMINED BY THE PROJECT ENGINEER.
- 7. ALL FEDERAL, STATE, AND LOCAL SAFETY REGULATIONS ARE TO BE STRICTLY FOLLOWED. METHODS OF DEMOLITION, CONSTRUCTION, AND ERECTION OF MATERIALS ARE THE CONTRACTOR'S RESPONSIBILITY.
- 8. THE CONTRACTOR SHALL REVIEW AND BECOME FAMILIAR WITH THE STATE PARKS-OBTAINED PERMITS. THE CONTRACTOR SHALL OBTAIN ALL OTHER FEDERAL, STATE, OR LOCAL DEPARTMENT REQUIRED PERMITS AFFECTED BY THE WORK NOT PREVIOUSLY OBTAINED BY STATE PARKS.
- 9. THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL PROTECTION STANDARDS, PERMITS, LAWS, AND REGULATIONS.
- 10. THE CONTRACTOR SHALL PLACE CONSTRUCTION DEBRIS CONTROL DEVICES AS NECESSARY TO PREVENT DEBRIS FROM ENTERING THE WATER, AND AIRBORNE MATERIALS FROM LEAVING THE IMMEDIATE VICINITY OF THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF ANY MATERIALS DEPOSITED OUTSIDE AND WITHIN THE WORK AREA.
- 11. THE CONTRACTOR SHALL DISPOSE OF ALL HAZARDOUS / NON HAZARDOUS AND REGULATED/ NON REGULATED DEBRIS OFF THE PROJECT SITE IN A PERMITTED LANDFILL.
- 12. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS FOR COMPATIBILITY BEFORE PROCEEDING WITH CONSTRUCTION OR MATERIAL PROCUREMENT. ANY DISCREPANCIES IN DIMENSIONS OR CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER BEFORE PROCEEDING. THE CONTRACTOR SHALL NOT BEGIN CONSTRUCTION UNTIL THE DISCREPANCY HAS BEEN RESOLVED BY THE PROJECT ENGINEER.
- 13. LOCATIONS OF EXISTING STRUCTURES SHOWN ON THE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING DISCREPANCIES WITH THE PROJECT ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL REVIEW AND BECOME FAMILIAR WITH THE RECORD DRAWINGS, AND VERIFY DIMENSIONS IN THE FIELD.
- 14. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE PROJECT ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.
- 15. CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT ALL EXISTING SURFACES OR STRUCTURES THAT WILL REMAIN.
- 16. DO NOT SCALE DRAWINGS.
- 17. DRAWINGS ARE FOR USE ON THIS PROJECT ONLY; DO NOT REUSE WITHOUT PRIOR WRITTEN APPROVAL FROM MOFFATT & NICHOL.
- 18. THE DRAWINGS DO NOT INDICATE THE MEANS, METHOD(S), OR SEQUENCE OF CONSTRUCTION, EXCEPT AS MAY BE SPECIFICALLY NOTED. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY PROGRAMS, MEANS, METHODS, AND PROCEDURES OF OPERATION FOR THE CONSTRUCTION OF THE DESIGN SHOWN ON THESE DRAWINGS.
- 19. DESIGN IS BASED ON AS-BUILT INFORMATION PROVIDED BY THE OWNER AND LIMITED SITE OBSERVATIONS. LOCATIONS AND DIMENSIONS SHOWN ARE APPROXIMATE. SURVEYS AND GEOTECHNICAL REPORT ARE NOT AVAILABLE FOR THE SITE. ALL INFORMATION SHOWN ON THESE DRAWINGS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF THE WORK.
- 20. WORK BARGE SPUDS MUST NOT BE DRIVEN INTO EELGRASS ZONES.

CODES AND STANDARDS

ALL WORK SHALL CONFORM TO THE MINIMUM REQUIREMENTS OF THE FOLLOWING CODES AND STANDARDS. CODES AND STANDARDS SHALL BE THE LATEST EDITION AVAILABLE AS OF THE DATE OF THE INVITATION TO BID, UNLESS OTHERWISE SPECIFIED.

- 1. THE INTERNATIONAL BUILDING CODE (IBC), 2021 EDITION.
- 2. WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, 2022
- 3. AMERICAN CONCRETE INSTITUTE (ACI), BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY, ACI 318-14, 2014.

- 4. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, 2016 EDITION.
- 5. AMERICAN WELDING SOCIETY (AWS), STRUCTURAL WELDING CODE STEEL, AWS D1.1, 2015.
- 6. AISC 360-16 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS

STEEL

- 1. MISCELLANEOUS STEEL SHAPES SHALL CONFORM TO ASTM A36.
- 2. BOLTS SHALL CONFORM TO ASTM A307.
- 3. NUTS SHALL BE ASTM A563.
- 4. STEEL ITEMS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.

REINFORCED CONCRETE

- 1. ALL CONCRETE WORK SHALL BE PREFORMED IN ACCORDANCE WITH ACI 301, UON.
- 2. ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE.
- 3. ALL DETAILING, FABRICATION, AND ERECTION OF REINFORCING STEEL SHALL CONFORM TO THE ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES: ACI 315 AND ACI SP-66.
- 4. REINFORCING STEEL
- A. ALL REINFORCING STEEL SHALL BE DEFORMED STEEL BARS CONFORMING TO ASTM A615, GRADE 60.
- 5. PRECAST CONCRETE

		MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS
Α	ECOLOGY BLOCKS	3000 PSI

6. CONCRETE ANCHORS

- A. EPOXY OR ADHESIVE-TYPE ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. SPECIAL INSPECTION IS REQUIRED FOR ADHESIVE ANCHORS.
- B. ACCEPTABLE ADHESIVE IS HILTI HIT-HY-100.
- C. EXPANSION ANCHORS ARE NOT ACCEPTABLE.

TIDAL WATER LEVELS (MLLW)

MEAN HIGHER HIGH WATER	+ 8.61 FT
MEAN HIGH WATER	+ 7.94 FT
MEAN LOW WATER	+ 4.55 FT
MEAN TIDE LEVEL	+ 4.51 FT
MEAN SEA LEVEL	+ 4.31 FT
MEAN LOW WATER	+ 1.17 FT
MEAN LOWER LOW WATER	+ 0.00 FT

ABBREVIATIONS:

FOOT/FEE
INCH
DIA

APPROX APPROXIMATE

ASTM AMERICAN SOCIETY FOR TESTING & MATERIALS

CENTERLINE

CJP COMPLETE JOINT PENETRATION

ELEV ELEVATION
EQ EQUAL, EQUALLY
EXIST EXISTING

FT

I. INCH/INCHES

MHHW MEAN HIGHER HIGH WATER
ML MUDLINE
MLLW MEAN LOWER LOW WATER

FEET/FOOT

NAVD NORTH AMERICAN VERTICAL DATUM

No., # NUMBER

OHWM ORDINARY HIGH WATER MARK

SPECS SPECIFICATIONS
SS STAINLESS STEEL
STL STEEL

TYP TYPICAL w/ WITH

OF WASHING ON STERED TO SOLVE ON STONAL ENGINEERING OF WASHING ON SOLVE ON

BY DATE

MB 11/20/2023

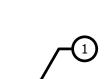
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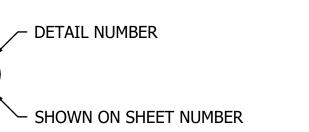
CROSS-REFERENCE LEGEND:



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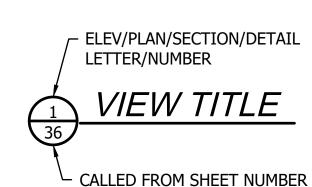
SHOWN ON SHEET NUMBER

2 PART SECTION CALLOUT



2 PART DETAIL CALLOUT

SHEET NOTE CALLOUT



DETAIL NUMBER

VIEW TITLE

*NOTE: LETTER INDICATES ELEVATION OR SECTION; NUMBER INDICATES PLAN OR DETAIL. DASH (-) INDICATES SECTION/DETAIL IS FROM SAME SHEET.

WASHINGTON STATE

PARKS AND

DESIGNED

CHECKED (FIELD)

CHECKED (HDQTS.)

DRAWN

RECREATION COMMISSION

FORT COLUMBIA
STATE PARK

WATERFRONT REPAIRS

GENERAL NOTES, ABBREVIATIONS, LEGEND

SCALE

AS SHOWN

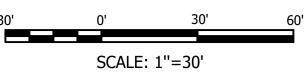
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SHEET 3 OF 6



NOTES:

1. PROJECT AREA IS NOT ACCESSIBLE FROM UPLAND AREAS.
ACCESS PROJECT AREA WITH WATER BASED EQUIPMENT.



SHEET 4 OF 6

SCALE

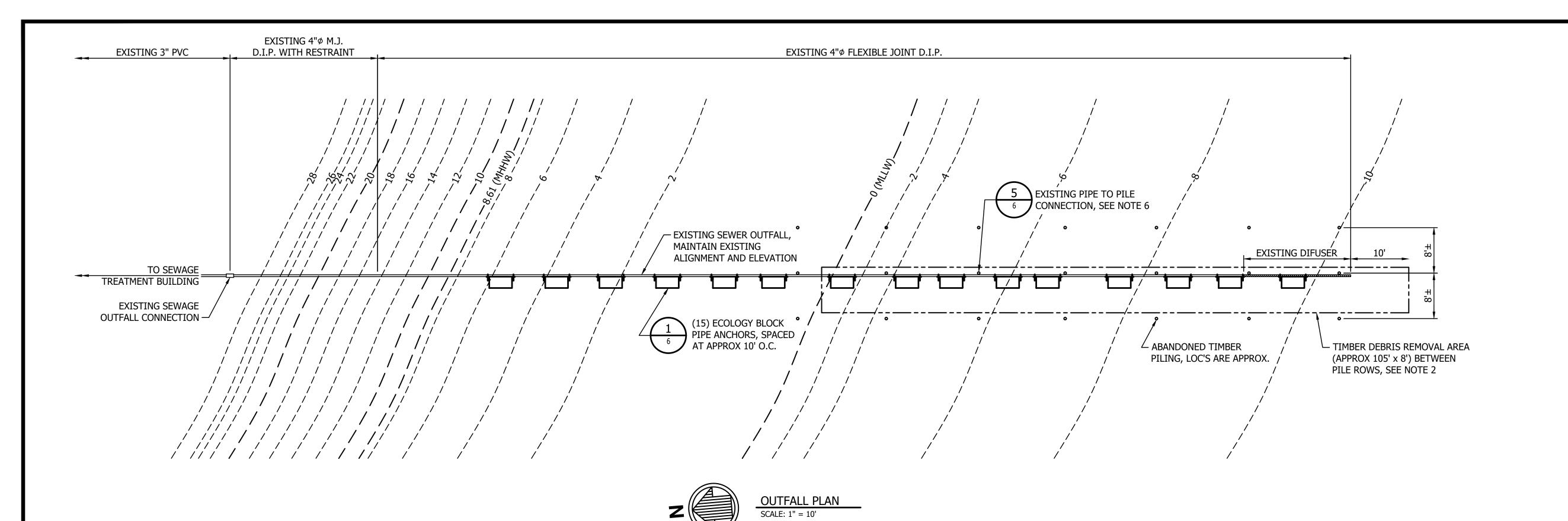
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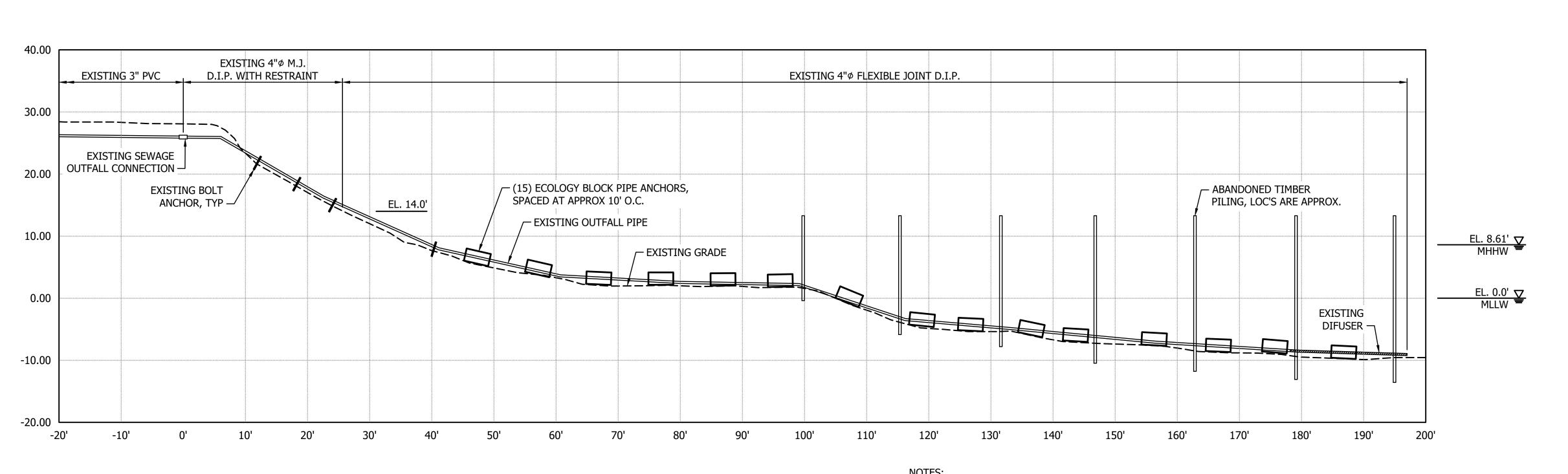
REPAIRS

SITE PLAN

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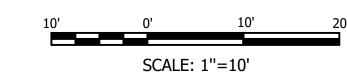


OUTFALL PROFILE

NOTES:

1. PROTECT EXISTING OUTFALL PIPE IN PLACE DURING DEBRIS REMOVAL AND ANCHOR BLOCK INSTALLATION.

- 2. REMOVE TIMBER DEBRIS WITHIN THE LIMITS SHOWN TO FACILITATE INSTALLATION OF ECOLOGY BLOCK PIPE ANCHORS. REMOVE DEBRIS TO ALLOW ECOLOGY BLOCK ANCHORS TO BEAR ON EXISTING SUBSTRATE.
- 3. PROJECT AREA IS NOT ACCESSIBLE FROM UPLAND AREAS. ACCESS PROJECT AREA WITH WATER BASED EQUIPMENT
- 4. MAINTAIN OUTFALL PIPE ALIGNMENT BY PLACING ANCHOR BLOCKS AS CLOSE TO THE EXISTING OUTFALL PIPE AS POSSIBLE PRIOR TO ATTACHING U-BOLTS.
- 5. CONTRACTOR MAY ADJUST ANCHOR BLOCK LOCATIONS AS REQUIRED TO AVOID CONFLICTS WITH EXISTING PILES.
- 6. EXISTING SEWER OUTFALL SECURED TO EXISTING TIMBER PILING. ADJUST LOCATION OF ECOLOGY BLOCK PIPE ANCHORS TO MAINTAIN EXISTING CONNECTIONS TO PILES.



SHEET 5 OF 6

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WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION

FORT COLUMBIA STATE PARK

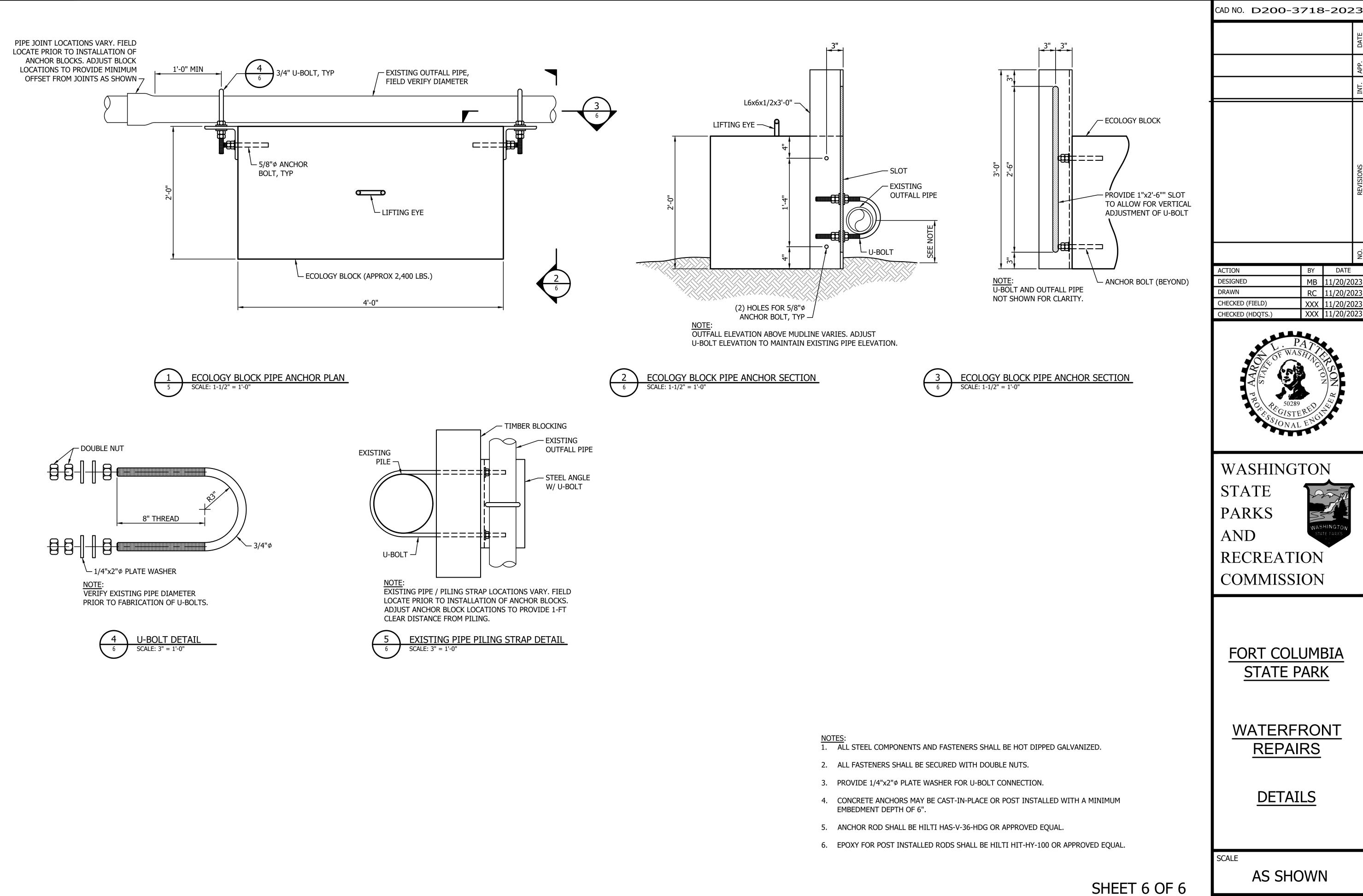
WATERFRONT REPAIRS

OUTFALL PLAN AND PROFILE

SCALE

AS SHOWN

PARKS FILE#



RC 11/20/2023

PARKS FILE#