PORT OF TACOMA TACOMA, WASHINGTON PARCEL 86 PIPE REALIGNMENT PROJECT

PROJECT NO. 201146.01 CONTRACT NO. 071742

Thais Howard, PE

Director, Engineering

Kyle Smith, PE

Project Manager

END OF SECTION

The undersigned Engineer of Record hereby certifies that the Technical Specifications for the following portions of this project were written by me, or under my direct supervision, and that I am duly registered under the laws of the State of Washington, and hereby affix my Professional Seal and signature.

Those Sections prepared under my direct supervision and being certified by my seal and signature below are as follows:

SEAL & SIGNATURE	SECTION(S)
4885	02 40 00 Demolition
JAN III	02 96 00 Temporary Stormwater Reroute
OF WASHING	Requirements
	22 11 00 Piping, Valves and Accessories
Nathanlibard	31 23 19 Dewatering
Signed by Naman Word Data & Time Mar 40, 200 GB	31 23 33 Earthwork
54338	31 32 19 Geotextiles
CONTRACTOR OF CO	32 12 16 Paving and Surfacing
OVAL B	33 49 13 Precast Concrete Manholes
	33 49 20 Precast Concrete Utility Vaults

END OF SECTION

PROCUREMENT AND CONTRACTING REQUIREMENTS

DIVISION 00 -- PROCUREMENT AND CONTRACTING REQUIREMENTS

00 01 01 - Project Title Page

00 01 07 - Seals Page

00 01 10 - Table of Contents

00 01 15 - List of Drawing Sheets

00 11 13 - Advertisement for Bids

00 21 00 - Instructions to Bidders

00 26 00 - Substitution Procedures

00 31 26 - Existing Hazardous Material Information

00 41 00 - Bid Form

00 43 13 - Bid Security Form

00 45 13 - Responsibility Detail Form

00 52 00 - Agreement Form

00 61 13.13 - Performance Bond

00 61 13.16 - Payment Bond

00 72 00 - General Conditions

00 73 16 - Insurance Requirements

00 73 46 - Washington State Prevailing Wage Rates

00 73 63 - Security Requirements

SPECIFICATIONS

DIVISION 01 -- GENERAL REQUIREMENTS

01 10 00 - Summary

01 14 00 - Work Restrictions

01 20 00 - Price and Payment Procedures

01 26 00 - Change Management Procedures

01 29 73 - Schedule of Values

01 30 00 - Administrative Requirements

01 31 23 - Web-based Construction Management

01 32 16 - Construction Progress Schedule

01 33 00 - Submittal Procedures

01 33 00.10 - Submittal Log

01 35 29 - Health, Safety, and Emergency Response Procedures

- 01 35 43.13 Hazardous Materials Handling Procedure
- 01 35 43.19 Export Soil Management
- 01 35 47 Air and Noise Control Procedures
- 01 35 91 Historic/Cultural Treatment Resources
- 01 41 00 Regulatory Requirements
- 01 42 19 Reference Standards
- 01 45 00 Quality Control
- 01 50 00 Temporary Facilities and Controls
- 01 55 00 Vehicular Access and Parking
- 01 57 13 TESC and Project SWPPP
- 01 60 00 Product Requirements
- 01 70 00 Execution and Closeout Requirements
- 01 71 00 Examination and Preparation
- 01 74 16 Soil Characteristics and Waste Management
- 01 77 00 Closeout Procedures
- **DIVISION 02 -- EXISTING CONDITIONS**
 - 02 40 00 Demolition
 - 02 96 00 Temporary Stormwater Reroute Requirements
- **DIVISION 22 -- PLUMBING**
 - 22 11 00 Piping, Valves and Accessories
- **DIVISION 31 -- EARTHWORK**
 - 31 23 19 Dewatering
 - 31 23 33 Earthwork
 - 31 32 19 Geotextiles
- **DIVISION 32 -- EXTERIOR IMPROVEMENTS**
 - 32 12 16 Paving and Surfacing
- **DIVISION 33 -- UTILITIES**
 - 33 49 13 Precast Concrete Manholes
 - 33 49 20 Precast Concrete Utility Vaults

APPENDICES

- Appendix A US Army Corps CWA Section 404 and RHA Section 10
- Appendix B Shoreline Substantial Development Permit LU23-0046
- Appendix C WDFW Hydraulic Project Approval 2024-6-55+01

Appendix D - Site Development Permit SDEV24-0334

Appendix E - Port of Tacoma Construction SWPPP Short Form **END OF SECTION**

PART 1 - GENERAL

1.01 SUMMARY

A. Contract Drawings: The following drawings are a part of the Contract Documents:

Sheet No.	Drawing Title
1	G1 -Vicinity Map and Index of Drawings
2	G2 - Legend, Abbreviations and General Notes
3	C1 - TESC Notes and Details
4	C2 - Overall Site Plan
5	C3 - Storm Drain Plan and Profile
6	C4 - Stormwater Treatment Plan and Sections
7	C5 -Civil Details

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PARCEL 86 PIPE REALIGNMENT PROJECT

PROJECT NO. 201146.01 | CONTRACT NO. 071742

Scope of Work:

The Work required for this Project includes:

Parcel 86 at 3701 Taylor Way supports 3 heavy industrial users. The goal is to repair and re-establish the drainage, maintain compliance with our permits, improve tenant ability to comply with their industrial stormwater general permit, and improve water quality.

The project will include lowering of the existing Outfall 11193 to 10.00 feet and installing deeper pipes at or above the industry standard minimum pipe slope of 0.005 feet/feet. The selected alignment will route stormwater flows around the existing environmental cap, reduce overall pipe lengths, maintain existing low points, and reuse existing infrastructure, where feasible.

Piping will be sized to convey the 100-year, 24-hour storm with a minimum freeboard of 1.5 feet. One new stormwater vault will be installed and six existing catch basins will be replaced. One new, inline check valve will be installed at the outfall to reduce seawater intrusion into the conveyance system. The existing damaged storm drain pipe will be plugged and abandoned in place.

Bid Estimate:

Estimated cost range is \$300,000 to \$340,000, plus Washington State Sales Tax (WSST).

In accordance with RCW 39.04.320, fifteen (15) percent apprenticeship participation is required for certain projects estimated to cost one million (\$1,000,000) dollars or more. Bidders may contact the Department of Labor and Industries, Specialty Compliance Services Division, Apprenticeship Section, P.O. Box 44530, Olympia, WA 98504-4530, by phone (360) 902-5320, or e-mail at Apprentice@Ini.wa.gov, to obtain information on available apprenticeship programs.

Sealed Bid Date/ Time/Location: Bids will be received at the Front Reception Desk, Port

Administration Office, One Sitcum Plaza, Tacoma, Washington

98421 until **2:00 P.M. on December 3, 2024**, at which time they will be publicly opened and read aloud and the apparent low bid will be determined.

Pre-Bid

A pre-Bid conference and site visit have been set for:

November 14, 2024 at 10:30 AM.

Conference and

Site Tour:

The site visit will convene at the Port's Administrative building, located at One Sitcum Plaza. The following Personal Protective

Equipment is required for the site visit: sturdy shoes, reflective vest, gloves,

safety glasses, and hardhat.

Attendees will be required to sign a Release and Acceptance of Responsibility and Acknowledgement of Risks Form prior to entering the site and shall provide their own Personal Protection Equipment (PPE) as required above.

Bid Security: Each Bid must be accompanied by a Bid security in an amount

equal to five (5) percent of the Base Bid in a form allowed by the Instructions

to Bidders.

Contact Any questions to the Port may be submitted to the Procurement Information: Department through the Procurement and Question Submission

Portal (Portal link is accessible via this specific procurements website. See left side of page.). A direct link is also available here: Procurement and Question

Portal Link. No oral responses will be binding by the Port.

Instructions for utilizing the portal can be found here: Procurement and

Question Submission Portal Instructions

Questions will not be accepted after thirteen (13) days prior to the Bid Date.

Bidding Documents:

Plans, Specifications, Addenda, and Plan Holders List for this Project are available on-line through The Port of Tacoma's Website portoftacoma.com. Click on "Contracts," "Procurement," and then the Procurement Number 071742. Bidders must subscribe to the Holder's List on the right hand side of the screen in order to receive automatic email notification of future addenda and to be placed on the Holder's List.

Written questions about the meaning or intent of the Solicitation Documents shall only be submitted to the Procurement Department through the Procurement and Question Submission Portal (Portal link is accessible via this specific procurements website. See left side of page.). A direct link is also available here: Procurement and Question Portal Link.

Instructions for utilizing the portal can be found here: Procurement and Question Submission Portal Instructions

When viewing the details page for this procurement on the Port's Website firms have the option of subscribing to the Holder's List. Holder's Lists will be updated regularly and posted to the specific procurements page. Additional Instructions available in Section 00.21.00 - Instructions to Bidders.

Public Works
Training
Requirements:

Effective July 1, 2019, all businesses are required to have training before bidding on public works projects and prevailing wage under RCW 39.04.359 and RCW 39.12, or is on the list of exempt businesses maintained by the Department of Labor and Industries. The bidder must designate a person or persons to be trained on these requirements. The training will be provided by the Department of Labor and Industries or by a training provider whose curriculum is approved by the Department of Labor and Industries.

Please refer to Labor and Industries' web site (https://www.lni.wa.gov/TradesLicensing/PrevWage/Contractors/Training.asp? utm_medium=email&utm_source=govdelivery) for more information and training dates, requirements, and exemptions. Failure to attend this training could result in a determination of "not responsible" and the bidder not being awarded a public works contract.

END OF SECTION

PART 1 - SUMMARY

1.01 DEFINITIONS

All definitions set forth in the Agreement, the General Conditions of the Contract for Construction, and in other Contract Documents are applicable to the Bidding Documents.

- A. "Addenda" are written or graphic instruments issued prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications, or corrections. The contents of an Addendum are issued in no particular order and therefore should be carefully and completely reviewed.
- B. An "Apprentice" is a worker for whom an apprenticeship agreement has been registered and approved by the Washington State Apprenticeship and Training Council (RCW 49.04 and WAC 296-05).
- C. "Award" means the formal decision by the Port of Tacoma ("Port") notifying a Responsible Bidder with the lowest responsive Bid of the Port's acceptance of their Bid and intent to enter into a Contract with the Bidder.
- D. The "Award Requirements" include the statutory requirements as a condition precedent to Award.
- E. The "Base Bid" is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.
- F. A "Bid" is a complete and properly signed proposal to do the Work, submitted in accordance with the Bidding Documents, for the sums therein stipulated and supported by any data called for by the Bidding Documents.
- G. The "Bid Date" is the day and hour specified in the Bidding Documents, as may be changed through an Addendum, by which Bidders are required to submit Bids to the Port.
- H. The "Bid Form" is the form(s) included with the Bidding Documents, with Specification Section 00 41 00, through which a Bidder submits a Bid.
- I. A "Bidder" is a person or entity who submits a Bid.
- J. The "Bidding Documents" include the Advertisement or Invitation to Bid, Instructions to Bidders, the Bid Form, any other sample bidding and contract forms, including those provided by reference, the Bid security, and the proposed Contract Documents, including any Addenda issued prior to the Bid Date.
- K. The "Contract Documents" proposed for the Work consist of the Agreement, the General Conditions of the Contract (as well as any Supplemental, Special, or other conditions included in the Project Manual), the Drawings, the Specifications, and all Addenda issued prior to, and all modifications issued after, execution of the Contract.
- L. The "Schedule of Unit Prices" is a separate schedule on the Bid Form for Unit Pricing as an all-inclusive price per unit of measurement for materials, equipment, or services as described in the Bidding Documents or in the proposed Contract Documents for the optional use of the Port. Quantities are not predictions of amounts anticipated. The Port may, but is not obligated to, accept a Schedule of Unit Price if it accepts the Base Bid. The Schedule of Unit Prices are not factored into the evaluation of determining the low bid amount and are not included as part of the bid award amount.

00 21 00 - 1

Project No. 201146.01

Contract No. 071742

M. A "Sub-Bidder" is a person or entity of any tier who submits a bid or proposal to or through the Bidder for materials, equipment or labor for a portion of the Work.

1.02 BIDDER'S REPRESENTATIONS

By making its Bid, each Bidder represents that:

- A. BIDDING DOCUMENTS. The Bidder has read and understands the Bidding Documents, and its Bid is made in accordance with them.
- B. PRE-BID MEETING. The Bidder has attended pre-Bid meeting(s) required by the Bidding Documents. Attendance at a mandatory meeting or training session means that, in the sole opinion of the Port, a Project representative of a Bidder has attended all or substantially all of such meeting or session.
- C. BASIS. Its Bid is based upon the materials, systems, services, and equipment required by the Bidding Documents, and is made without exception.
- D. EXAMINATION. The Bidder has carefully examined and understands the Bidding Documents, the Contract Documents including, but not limited to, any liquidated damages, insurance provisions, and the Project site, including any existing buildings, it has familiarized itself with the local conditions under which the Work is to be performed, has correlated its observations with the requirements of the proposed Contract Documents, and it has satisfied itself as to the nature, location, character, quality, and quantity of the Work, the labor, materials, equipment, goods, supplies, work, services, and other items to be furnished, and all other requirements of the Contract Documents. The Bidder has also satisfied itself as to the conditions and other matters that may be encountered at the Project site or that may affect performance of the Work or the cost or difficulty thereof, including, but not limited to, those conditions and matters affecting transportation, access, disposal, handling and storage of materials, equipment and other items; availability and quality of labor, water, electric power, and utilities; availability and condition of roads; climatic conditions and seasons; physical conditions at the Project site and the surrounding locality; topography and ground surface conditions; and equipment and facilities needed preliminary to, and at all times during, the performance of the Work. The failure of the Bidder to fully acquaint itself with any applicable condition or matter shall not in any way relieve the Bidder from the responsibility for performing the Work in accordance with, and for the Contract Sum and within the Contract Time provided for in, the Contract Documents.
- E. PROJECT MANUAL. The Bidder has checked its copies of the Project Manual (if any) with the table of contents bound therein to ensure the Project Manual is complete.
- F. SEPARATE WORK. The Bidder has examined and coordinated all Drawings, Contract Documents, and Specifications with any other contracts to be awarded separately from, but in connection with, the Work being Bid upon, so that the Bidder is fully informed as to conditions affecting the Work under the Contract being Bid upon.
- G. LICENSE REQUIREMENTS. The Bidders and Sub-Bidders are registered and hold all licenses required by the laws of Washington, including a certificate of registration in compliance with RCW 18.27, for the performance of the Work specified in the Contract Documents.
- H. CERTIFICATION. The Bidder verifies under penalty of perjury that the Bidder has not have been determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of Chapters 49.46, 49.48, or 49.52 RCW within the three (3) year period immediately preceding the Bid Date.

I. NO EXCEPTIONS. Bids must be based upon the materials, systems, and equipment described and required by the Bidding Documents, without exception.

1.03 BIDDING DOCUMENTS

A. COPIES

- 1. Bidders may obtain complete sets of the Bidding Documents from The Port of Tacoma's Website www.portoftacoma.com. Click on "Contracts" then "Procurement."
- Complete Sets. Bidders shall use complete sets of Bidding Documents in preparing Bids and are solely responsible for obtaining updated information. The Port does not assume any responsibility for errors or misinterpretations resulting from the use of incomplete and/or superseded sets of Bidding Documents.
- 3. Conditions. The Port makes copies of the Bidding Documents available only for the purpose of obtaining Bids on the Work and does not confer a license or grant permission for any other use.
- 4. Legible Documents. To the extent any Drawings, Specifications, or other Bidding Documents are not legible, it is the Bidder's responsibility to obtain legible documents.

B. INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

- Format. The Contract Documents are divided into parts, divisions, and sections for convenient organization and reference. Generally, there has been no attempt to divide the Specification sections into Work performed by the various building trades, any Work by separate contractors, or any Work required for separate facilities in, or phases of the Project.
- Duty to Notify. Bidders shall promptly notify the Port in writing of any ambiguity, inconsistency, or error that they may discover upon examination of the Bidding Documents or of the site and local conditions.
- 3. Products and Installation. All Bidders shall thoroughly familiarize themselves with specified products and installation procedures and submit to the Port any objections (in writing) no later than seven (7) days prior to the Bid Date. The submittal of the Bid constitutes acceptance of products and procedures specified as sufficient, adequate, and satisfactory for completion of the Contract.
- 4. Written Request. Bidders requiring clarification or interpretation of the Bidding Documents shall make a written request to the Procurement Department through the Procurement and Question Submission Portal at least seven (7) days prior to the Bid Date (Portal link is accessible via this specific procurements website. See left side of page.) A direct link is also available here: Procurement and Question Portal Link. No oral responses will be binding by the Port.
- 5. Instructions for utilizing the portal can be found here: Procurement and Question Submission Portal Instructions.
- 6. Request to Modify Responsibility Criteria. No later than seven (7) days prior to the Bid Date, a potential Bidder may request in writing that the Port modify the Responsibility Criteria. The Port will evaluate the information submitted by the potential Bidder and respond before the Bid Date. If the evaluation results in a change of the Criteria, the Port will issue an Addendum identifying the new Criteria.

- 7. Addenda. The Bidder shall not rely on oral information provided at any pre-Bid meetings or during site visits. Verbal statements made by representatives of the Port are for informational purposes only. Any interpretation, correction, or change of the Bidding Documents will be made solely by written Addendum. Interpretations, corrections, or changes of the Bidding Documents made in any manner other than by written Addendum, including but not limited to, oral statements will not be binding, and Bidders shall not rely upon such statements, interpretations, corrections, or changes. The Port is not responsible for explanations or interpretations of the Bidding Documents other than in a written Addendum.
- 8. Site Visits. Any site visits are provided as a courtesy to potential Bidders to assist them in becoming familiar with the Project site conditions. However, only the Bidding Documents, including any issued Addenda, may be relied upon by Bidders.
- 9. Singular References. Reference in the singular to an article, device, or piece of equipment shall include as many of such articles, devices, or pieces as are indicated in the Contract Documents or as are required to complete the installation.
- 10. Utilities and Runs. The Bidder should assume that the exact locations of any underground or hidden utilities, underground fuel tanks, and plumbing and electrical runs may be somewhat different from any location indicated in the surveys or Contract Documents.

C. SUBSTITUTIONS

1. For substitutions during bidding, refer to Section 00 26 00 – Substitution Procedures.

D. ADDENDA

- 1. Distribution. All Addenda will be written and will be made available on the Port's website or any other source specified by the Port for the Project.
- 2. Copies. Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.
- 3. Verification and Acknowledgment of Receipt. Prior to submitting a Bid, each Bidder shall ascertain that it has received all Addenda issued. Each Bidder shall acknowledge its receipt and consideration of all Addenda in its Bid.

1.04 BIDDING PROCEDURE

A. FORM AND STYLE OF BIDS

- Form. Bids (including required attachments) shall be submitted on forms identical to the Bid Form included with the Bidding Documents. No oral, email, or telephonic responses or modifications will be considered.
- 2. Entries on the Bid Form. All blanks on the Bid Form shall be filled in by typewriter, printer, or manually in ink.
- 3. Figures. All sums shall be expressed in figures, not words. Portions of the Bid Form may require the addition or multiplication of component bids to a total or the identification of component amounts within a total. In case of discrepancy between unit prices listed and their sum(s), the unit prices listed shall govern (rather than the sum).
- 4. Initial Changes. Any interlineation, alteration, or erasure shall be initialed by an authorized representative of the Bidder.

- 5. Bid Breakdown. The Bid Form may contain, for the Port's accounting purposes only, a breakdown of some or all of the components included in the Base Bid.
 - a. For lump-sum Bids, the total Contract Sum shall be submitted.
 - b. For unit-price Bids, a price shall be submitted for each item of the Work, an extension thereof, and, if requested, the total Contract Sum.
- Schedule of Unit Prices. All Unit Prices under this schedule shall be bid. The Port reserves
 the right, but is not obligated, to reject any Bid on which all requested Schedule of Unit
 Prices are not Bid.
- 7. No Conditions. The Bidder shall make no conditions or stipulations on the Bid Form, nor qualify its Bid in any manner.
- 8. Identity of Bidder. The Bidder shall include in the specified location on the Bid Form, the legal name of the Bidder and, if requested, a description of the Bidder as a sole proprietor, a partnership, a joint venture, a corporation, or another described form of legal entity. The Bid shall be signed by the person or persons legally authorized to bind the Bidder to a contract. The Port verifies signature authority on the Labor and Industries website https://fortress.wa.gov/lni/bbip/Search.aspx under the contractor registration business owner information. If the business owner information is not current, the Bidder shall show proof of authority to sign at the request of the Port. A Bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder
- 9. Bid Amounts Do Not Include Sales Tax. The Work to be performed constitutes a "retail sale" as this term is defined in RCW 82.04.050. Thus, the Base Bid amount shall include in the sum stated all taxes imposed by law, EXCEPT WASHINGTON STATE AND LOCAL SALES TAX due on the Base Bid. The engaged Contractor will pay retail sales tax on all consumables used during the performance of the Work and on all items that are not incorporated into the final Work; this tax shall be included in the Base Bid price and in any other prices set forth on the Bid Form. The Port will pay state and local retail sales tax due on each progress payment and final payment to the engaged Contractor for transmittal by the Contractor to the Washington State Department of Revenue or to the applicable local government.

B. BID SECURITY

1. Purpose and Procedure. Each Bid shall be accompanied by Bid security payable to the Port in the form required by the Bidding Documents and equal to five (5) percent of the Base Bid only (i.e., not including any Alternates or Unit Prices). The Bid security constitutes a pledge by the Bidder to the Port that the Bidder will enter into the Contract with the Port in the form provided, in a timely manner, and on the terms stated in its Bid, and will furnish in a timely manner, the payment and performance bonds, certificates of insurance, and all other documents required in the Contract Documents. Should the Bidder fail or refuse to enter into the Contract or fail to furnish such documents, the amount of the Bid security shall be forfeited to the Port as liquidated damages, not as a penalty. By submitting a Bid, each Bidder represents and agrees that the Bid security, if forfeited, is a reasonable prediction on the Bid Date of future damages to the Port. Failure of the Bidder to provide Bid Security as required shall render the bid non-responsive.

- 2. Form. The Bid security shall be in the form of a certified or bank cashier's check payable to the Port or a Bid bond executed by a bonding company reasonably acceptable to the Port, licensed in the State of Washington, registered with the Washington State Insurance Commissioner, possess an A.M. Best rating of "A-," Fiscal Size Category (FSC) six (6) or better, and be authorized by the U.S. Department of the Treasury. The Bid security shall be signed by the person or persons legally authorized to bind the Bidder. Bid bonds shall be submitted using the form included with the Bidding Documents.
- 3. Retaining Bid Security. The Port will have the right to retain the Bid security of Bidders to whom an Award is being considered until the earliest of either: (a) mutual execution of the Contract, and the Port's receipt of payment and performance bonds, (b) the specified time has elapsed so that Bids may be withdrawn, or (c) when all Bids have been rejected.
- 4. Return of Bid Security. Within sixty (60) days after the Bid Date, the Port will release or return Bid securities to Bidders whose Bids are not to be further considered in awarding the Contract. Bid securities of the three apparent low Bidders will be held until the Contract has been finally executed, after which all un-forfeited Bid securities will be returned. Bid security may be returned in the form provided or by separate payment.

C. SUBMISSION OF BIDS

- 1. Procedure. The Bid, the Bid security, and other documents required to be submitted with the Bid, shall be enclosed in a sealed envelope identified with the Project name and number and the Bidder's name and address. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face of the mailing envelope.
 - a. If a Bid is mailed, it shall be addressed to the Port of Tacoma, Contracts Department, 1 Sitcum Plaza, Tacoma, WA 98421.
 - b. If a Bid is delivered, it shall be delivered to the Front Reception Desk, Port of Tacoma,1 Sitcum Plaza, Tacoma, WA 98421.
 - The time stamp clock at the Front Reception Desk at 1 Sitcum Plaza is the Port's official clock.
- Deposit. Bids shall be deposited at the designated location prior to the Bid Date indicated in the Advertisement or Invitation to Bid, or any extension thereof made by Addendum. Bids received after the Bid Date and time specified shall be returned without consideration at the discretion of the Port, or rejected at the time of receipt.
- 3. Delivery. The Bidder assumes full responsibility for timely delivery at the location designated for receipt of Bids.
- 4. Form. Oral, facsimile, telephonic, electronic, or email Bids are invalid and will not be considered.

D. MODIFICATION OR WITHDRAWAL OF BID

 After the Bid Date. A Bid may not be modified, withdrawn, or canceled by the Bidder during a ninety (90) day period following the Bid Date, and each Bidder so agrees by virtue of submitting its Bid.

- 2. Before the Bid Date. Prior to the Bid Date, any Bid submitted may be modified or withdrawn only by notice to the party receiving Bids at the place designated for receipt of Bids. The notice shall be in writing, with the signature of the Bidder, and shall be worded so as not to reveal the amount of the original Bid. Email notice will not be accepted. It shall be the Bidder's sole responsibility to verify that the notice has been received by the Port in time to be withdrawn before the Bid opening.
- 3. Resubmittal. Withdrawn Bids may be resubmitted up to the time designated for the receipt of Bids, provided that they are then fully in conformance with these Instructions to Bidders.
- 4. Bid Security with Resubmission. Bid security shall be in an amount sufficient for the Bid as modified or resubmitted.

E. COMMUNICATIONS

1. Communications from a Bidder related to these Instructions to Bidders must be in writing to the Procurement Department through the Procurement and Question Submission Portal (Portal link is accessible via this specific procurements website. See left side of page.). A direct link is also available here: Procurement and Question Portal Link. Communications, including but not limited to, notices and requests by Sub-Bidders shall be made through the Bidder and not directly by a Sub-Bidder to the Port. No oral responses will be binding by the Port.

Instructions for utilizing the portal can be found here: Procurement and Question Submission Portal Instructions.

1.05 CONSIDERATION OF BIDS

- A. OPENING OF BIDS. Unless stated otherwise in the Advertisement or Invitation to Bid or an Addendum, the properly identified Bids received on time will be opened publicly and will be read aloud. An abstract of the Base Bids and any Alternate Bids will promptly (and generally within twenty-four (24) hours) be made available to Bidders and other interested parties.
- B. REJECTION OF BIDS. The Port shall have the right, but not the obligation, to reject any or all Bids for any reason, or for no reason, to reject a Bid not accompanied by the required Bid security, or to reject a Bid which is in any way incomplete or irregular.
- C. BIDDING MISTAKES. The Port will not be obligated to consider notice of claimed Bid mistakes received more than twenty-four (24) hours after the Bid Date. In accordance with Washington law, a low Bidder that claims error and fails to enter into the Contract is prohibited from Bidding on the Project if a subsequent call for Bids is made for the Project.

D. ACCEPTANCE OF BID (AWARD)

- 1. Intent to Accept. The Port intends, but is not bound, to Award a Contract to the Responsible Bidder with the lowest responsive Bid, provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Port has the right to waive any informality or irregularity in any Bid(s) received and to accept the Bid which, in its judgment, is in its own best interests.
- 2. Requirements for Award. Before the Award, the lowest responsive Bidder must be deemed Responsible by the Port and must satisfy all Award Requirements.

E. BID PROTEST PROCEDURES

- 1. Procedure. A Bidder protesting, for any reason, the Bidding Documents, a Bidding procedure, the Port's objection to a Bidder or a person or entity proposed by the Bidder, including but not limited to, a finding of non-Responsibility, the Award of the Contract or any other aspect arising from, or relating in any way to, the Bidding, shall cause a written protest to be filed with the Port within two (2) business days of the event giving rise to the protest. (Intermediate Saturdays, Sundays, and legal holidays are not counted as business days.) The written protest shall include the name of the protesting Bidder, the bid solicitation number and title under which the protest is submitted, a detailed description of the specific factual and legal grounds for the protest, copies of all supporting documents, evidence that the apparent low bidder has been given notice of the protest, and the specific relief requested. The written protest shall be sent by email to procurement@portoftacoma.com.
- 2. Consideration. Upon receipt of the written protest, the Port will consider the protest. The Port may, within three (3) business days of the Port's receipt of the protest, provide any other affected Bidder(s) the opportunity to respond in writing to the protest. If the protest is not resolved by mutual agreement of the protesting Bidder and the Port, the Contracts Director of the Port, or his or her designee, will review the issues and promptly furnish a final and binding written decision to the protesting Bidder, and any other affected Bidder(s), within six (6) business days of the Port's receipt of the protest. (If more than one (1) protest is filed, the Port's decision will be provided within six (6) business days of the Port's receipt of the last protest.) If no reply is received from the Port during the six (6) business-day period, the protest will be deemed rejected.
- Waiver. Failure to comply with these protest procedures will render a protest waived.
- 4. Condition Precedent. Timely and proper compliance with, and exhaustion of, these protest procedures shall be a condition precedent to any otherwise permissible judicial consideration of a protest.

1.06 POST BID INFORMATION

A. THE LOWEST RESPONSIVE BIDDER SHALL:

- 1. Responsibility Detail Form. Within 24 hours of the Low Responsive Bidder Selection Notification, the apparent low Bidder shall submit to the Port the Responsibility Detail Form and other required documents (Section 00 45 13) executed by an authorized company officer. As requested from the Port, the low responsive Bidder shall provide written confirmation that the person signing the Bid on behalf of the Bidder was duly authorized at the time of bid, a detailed breakdown of the Bid in a form acceptable to the Port, and other information required by the Port.
- 2. The apparent low Bidder shall submit to the Port upon request:
 - a. Additional information regarding the use of the Bidder's own forces and the use of subcontractors and suppliers;
 - b. The names of the persons or entities (including a designation of the Work to be performed with the Bidder's own forces, and the names of those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the Work (i.e., either a listed Sub-Bidder or a Sub-Bidder performing Work valued at least ten (10) percent of the Base Bid), consistent with the listing required with the Bid; and

- c. The proprietary names and the suppliers of the principal items or systems of materials and equipment proposed for the Work.
- 3. Failure to provide any of the above information in a timely manner will constitute an event of breach permitting forfeiture of the Bid security.
- 4. Bidder Responsibility. The Bidder will be required to establish, to the satisfaction of the Port, the reliability and responsibility of itself and the persons or entities proposed to furnish and perform the Work described in the Bidding Documents. If requested, the Bidder shall meet with the Port to discuss the Bid, including any pricing, the Bid components, and any assumptions made by the Bidder.
- 5. Objection. Prior to an Award of the Contract, the Port will notify the Bidder in writing if the Port, after due investigation, has reasonable objection to the Bidder or a person or entity proposed by the Bidder. Upon receiving such objection, the Bidder may, at Bidder's option: (a) withdraw their Bid, (b) submit an acceptable substitute person or entity with no change in the Contract Time and no adjustment in the Base Bid or any Alternate Bid, even if there is a cost to the Bidder occasioned by such substitution, or (c) file a protest in accordance with the Bidding Documents.
- 6. Change. Persons and entities proposed by the Bidder to whom the Port has made no reasonable objection must be used on the Work for which they were proposed and shall not be changed, except with the written consent of the Port.
- 7. Right to Terminate. The Bidder's representations concerning its qualifications will be construed as a covenant under the Contract. If a Bidder makes a material misrepresentation on a Qualification Statement, the Port has the right to terminate the Contract for cause and may then pursue any remedies that exist under the Contract or that are otherwise available.
- B. INFORMATION FROM OTHER BIDDERS: All other Bidders designated by the Port as under consideration for Award of a Contract shall also provide a properly executed Qualification Statement, if so requested by the Port.

1.07 PERFORMANCE BOND, LABOR AND MATERIAL PAYMENT BOND, AND INSURANCE

- A. BOND REQUIREMENTS. Within ten (10) days after the Port's Notice of Award of the Contract, the successful Bidder shall obtain and furnish statutory bonds pursuant to RCW 39.08 covering the faithful performance of the Contract and the payment of all obligations arising thereunder in the form and amount prescribed in the Contract Documents. Bonds shall be written for one hundred (100) percent of the contract award amount, plus Washington State Sales Tax and Change Orders. The cost of such bonds shall be included in the Base Bid.
 - 1. On contracts of one hundred fifty thousand dollars (\$150,000) or less, at the option of the Contractor or the General Contractor/Construction Manager as defined in RCW 39.10.210, the Port may, in lieu of the bond, retain ten (10) percent of the contract amount for a period of thirty days after date of final acceptance, or until receipt of all necessary releases from the department of revenue, the employment security department, and the department of labor and industries and settlement of any liens filed under RCW 60.28, whichever is later. The recovery of unpaid wages and benefits must be the first priority for any actions filed against retainage held by a state agency or authorized local government.
 - 2. On contracts of one hundred fifty thousand dollars (\$150,000) or less, the Port may accept a full payment and performance bond from an individual surety or sureties.

- B. TIME OF DELIVERY AND FORM OF BONDS. The successful Bidder shall deliver an original copy of the required bonds to the Port, 1 Sitcum Plaza, Tacoma, WA 98421, within the time specified in the Contract Documents.
- C. INSURANCE. The successful Bidder shall deliver a certificate of insurance from the Bidder's insurance company that meets or exceeds all requirements of the Contract Documents.
- D. GOVERNMENTAL REQUIREMENTS. Notwithstanding anything in the Bidding or Contract Documents to the contrary, the Bidder shall provide all bonding, insurance, and permit documentation as required by governmental authorities having jurisdiction for any portions of the Project.

1.08 FORM OF AGREEMENT

- A. FORM TO BE USED. The Contract for the Work will be written on the form(s) contained in the Bidding Documents, including any General, Supplemental, or Special Conditions, and the other Contract Documents included with the project manual.
- B. CONFLICTS. In case of conflict between the provisions of these Instructions and any other Bidding Document, these Instructions shall govern. In case of conflict between the provisions of the Bidding Documents and the Contract Documents, the Contract Documents shall govern.
- C. CONTRACT DELIVERY. Within ten (10) days after Notice of Award, the Bidder shall submit a signed Contract to the Port in the form tendered to the Bidder and without modification.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes administrative and procedural requirements for substitutions.

1.02 DEFINITIONS/CLARIFICATIONS

- A. Substitutions. Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
- B. The Contract Documents include performance specifications for products and equipment which meet Project requirements. In those cases where a representative item or manufacturer is named in the specification, it is provided for the sole purpose of identifying a product meeting the required functional performance, and where the words "or equal" are used, a substitution request as further described, is not required.
- C. Where non-competitive or sole source products or manufacturers are explicitly specified with the words "or approved equal," or "Engineer approved equal," or "as approved by the Engineer" are used, they shall be taken to mean "or approved equal." In these cases a substitution request as further described in this Section, is required.

1.03 SUBMITTALS

- A. Substitution Request Form. Use copy of form located at the end of this Section.
- B. Pre-Bid Substitution Requests. Submit one (1) PDF of the Substitution Request Form along with all supporting documentation for consideration of each request. Identify product, fabrication, or installation method to be replaced. Include Drawing numbers and titles. Substitution requests prior to the Bid Date may originate directly from a prime Bidder, or from a prospective Sub-Bidder.
 - 1. Documentation. Show compliance with requirements for substitutions with the following, as applicable:
 - a. Statement indicating why specified product, fabrication, or installation cannot be provided.
 - b. Coordination information, including a list of changes or modifications needed to other parts of the Work that will be necessary to accommodate proposed substitution.
 - c. Product Data, including drawings and descriptions of products, fabrication, and installation procedures.
 - d. Samples, where applicable or requested.
 - e. Certificates and qualification data, where applicable or requested.
 - f. Research reports evidencing compliance with building code in effect for the Project.
 - 2. Engineer's Action. Engineer will review substitution requests if received through the Procurement and Question Submission Portal at least seven (7) days prior to the Bid Date (Portal link is accessible via this specific procurements website. See left side of page.) A direct link is also available here:Procurement and Question Portal Link. No oral responses will be binding by the Port.
 - Forms of Acceptance. Substitution requests will be formally accepted via written addendum prior to the Bid Date. Bidders shall not rely upon approvals made in any other manner.

- b. Use product originally specified if Engineer does not issue a decision on use of a proposed substitution within time allocated.
- The Port's decision of approval or disapproval of a proposed substitution shall be final.
 Instructions for utilizing the portal can be found here: Procurement and Question Submission Portal Instructions
- C. Post-Award Substitution Requests must be submitted by the Contractor and not a Subcontractor nor Supplier.
 - 1. Documentation. Show compliance with requirements for substitutions with the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
 - b. Coordination information, including a list of changes or modifications needed to other parts of the Work that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable specification Section. Significant qualities may include, but are not limited to, attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects with project names and addresses. Also provide names and addresses of the applicable architect, engineer, and owner.
 - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - i. Research reports evidencing compliance with building code in effect for the Project.
 - j. Comparison of the approved Baseline Project Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
 - k. Cost information, including a proposal of change, if any, in the Contract Sum.
 - I. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
 - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

- 2. Engineer's Action. If necessary, Engineer will request additional information or documentation for evaluation within seven (7) calendar days of receipt of a request for substitution. Engineer will notify Contractor through Port of acceptance or rejection of proposed substitution within fifteen (15) calendar days of receipt of request, or seven (7) calendar days of receipt of additional information or documentation, whichever is later.
 - a. Forms of Acceptance. Change Order or Minor Change in Work.
 - b. Use product originally specified if Engineer does not issue a decision on use of a proposed substitution within time allocated.
- 3. Substitutions for Cause. Submit requests for substitution immediately upon discovery of need for change, but not later than fourteen (14) days prior to date required for preparation and review of related submittals.
 - Conditions. Engineer will consider Contractor's request for substitution when the following conditions are satisfied:
 - 1) Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - 2) Requested substitution will not adversely affect the Baseline Project Schedule.
 - 3) Requested substitution has received necessary approvals of authorities having jurisdiction.
 - 4) Requested substitution is compatible with other portions of the Work.
 - 5) Requested substitution has been coordinated with other portions of the Work.
 - 6) Requested substitution provides specified warranty.
 - 7) If requested substitution involves more than one (1) contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- 4. Substitutions for Convenience. Engineer will consider Contractor's requests for substitution if received within fourteen (14) days after the Notice of Award.
 - Conditions. Engineer will consider Contractor's request for substitution when the following conditions are satisfied:
 - Requested substitution offers Port a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities-Port must assume. Port's additional responsibilities may include compensation to Engineer for redesign and evaluation services, increased cost of other construction by Port, and similar considerations.
 - 2) Requested substitution does not require extensive revisions to the Contract Documents.
 - 3) Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - 4) Requested substitution will not adversely affect the Baseline Project Schedule.
 - Requested substitution has received necessary approvals of authorities having jurisdiction.

- 6) Requested substitution is compatible with other portions of the Work.
- 7) Requested substitution has been coordinated with other portions of the Work.
- 8) Requested substitution provides specified warranty.
- 9) If requested substitution involves more than one (1) contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

D. Substitutions will not be considered when:

- Indicated or implied on shop drawings or product data submittals without formal request submitted in accordance with this Section.
- 2. Acceptance will require substantial revision of Contract Documents or other items of the Work.
- 3. Submittal for substitution request does not include point-by-point comparison of proposed substitution with specified product.

1.04 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

PROJECT TITLE: Parcel 86 Pipe Realignment Project		
SUBMITTED BY:PRIME/SUB/SUPPLIER:		
Specification Title:	Section No.:	
Description:	Paragraph:	
Proposed Substitution:		
Trade Name: Mo		
Manufacturer:		
Address: Pho	one No.:	
Installer:		
Address: Pho		
Differences between proposed substitution and specified p		
☐ Point-by-Point comparative data attached - REQUIRED		
Similar Installation:		
Project: A/E:		
Address:		
Owner: Date		
Proposed substitution affects other parts of Work: ☐ No [· —	
Supporting Data Attached:		
□ Drawings □ Product Data □ Samples □ Tests □ R	Reports □ Other:	
Applicable to Substitution Requests During Construction:		
Proposed to Port for accepting substitution: \$		
Proposed substitution changes Contract Time: No Y		
The Undersigned certifies:		

• Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.

- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay Baseline Project Schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Signed By:	Firm:	
	Email:	
A/E's REVIEW AND REC	OMMENDATION	
☐ Approved Substituti	on	
☐ Approved Substitution as Noted		
☐ Reject Substitution	- Use specified materials.	
☐ Substitution Reques	st received too late - Use specified materials.	
	Date:	
ENGINEER'S REVIEW A	ND ACTION	
☐ Substitution Approvious during construction, po	ed - Make submittals in accordance with this Specification Section. If epare Change Order.	
• •	ed as Noted - Make submittals in accordance with this Specification struction, prepare Change Order.	
☐ Substitution Rejecte	ed - Use specified materials.	
☐ Substitution Reques	st received too late - Use specified materials.	
Signed by:	Date:	

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This Section provides the notification required for disclosure of asbestos, lead-containing or other hazardous materials.

1.02 HAZARDOUS MATERIALS NOTICE

A. The Port is reasonably certain that asbestos and lead will not be disturbed by the project. If the Contractor encounters material suspected of containing lead or asbestos which will interfere with the execution of the work, the Contractor shall stop work and notify the Engineer.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

Project No. 201146.01 00 31 26 - 1

Contract No. 071742

BIDDER'S NAME:	

PROJECT TITLE: PARCEL 86 PIPE REALIGNMENT PROJECT

The undersigned Bidder declares that it has read the Contract Documents (including documents provided by reference), understands the conditions under which the Work will be performed, has examined the Project site, and has determined for itself all situations affecting the Work herein Bid upon. Bidder proposes and agrees, if this Bid is accepted, to provide at Bidder's own expense, all labor, machinery, tools, materials, etc., including all Work incidental to, or described or implied as incidental to such items, according to the Contract Documents, and that the Bidder will complete the Work within the time stated, and that Bidder will accept in full the lump sum or unit price(s) set forth below:

ITEM NO.	DESCRIPTION OF ITEM	QTY	UOM	UNIT PRICE	EXTENDED PRICE (QTY. x UNIT PRICE)
1	Mobilization	1	LS		
2	Project Administration	1	LS		
3	General Requirements	1	LS		
4	TESC Measures	1	LS		
5	Demolition and Excavation	1	LS		
6	Storm Drain Piping	1	LS		
7	Paving Replacement	1	LS		
	<u> </u>				
8	Asphalt	90	TN		
9	CSTC	30	TN		
10	CSBC	70 TN			
11	Pipe Bedding	160 TN			
12	Structural Backfill	200	TN		
13	Catch Basins and Structures	1	LS		
14	Trench Safety Systems	1	LS		
15	Contaminated Soil Disposal Allowance	1	LS	\$20,000	\$20,000
17	Unforseen Conditions Contingency	1 1 1 1 1 \$ 1 \$25,000 1 \$2		\$25,000	

TOTAL BID AMOUNT	
10.3% WASHINGTON STATE SALES TAX (WSST) ON BASE BID	
SUBTOTAL	
BID TOTAL (WITH WSST)	

Note: Show prices in figures only.

Evaluation of Bids. In accordance with the provisions of the Contract Documents, Bids will be evaluated to determine the lowest Base Bid Subtotal offered by a responsible Bidder submitting a responsive Bid.

Schedule of Unit Prices. The unit prices are proposed to apply only in the event of additions to, or deletions from, the work required and ordered. All prices shall include complete installation without Washington State Sales Tax. The bidder shall propose a price for each item; failure to propose a price for each item may render the bid non-responsive. The Port reserves the right to accept or reject the unit prices proposed.

Trench Excavation Safety Provision. If the bid amount contains work which requires trenching exceeding a depth of four (4) feet, all costs for trench safety shall be included in the Base Bid and indicated below for adequate trench safety systems in compliance with RCW 39.04 and WAC 296-155-650. Bidder shall include a lump sum amount, excluding Washington State Sales Tax. If trench excavation safety provisions do not pertain to the Work, the Bidder should enter "N.A." or "Not Applicable" in the blank below.

Trench Excavation Safety:	(Total in Written Figures Only)
Principal Subcontractors/Suppliers. Bidder shall list	• •
to whom the Bidder proposes to subcontract the potential work.	ortions of the work listed below, or name itself for

Work to be Performed	License Number	Name of Firm
HVAC (Heating, Ventilation and		
Air Conditioning) Work		
Plumbing Work		
Electrical Work		
Structural Steel Installation		
Rebar Installation		

Non-Collusion Representation. The Bidder declares under penalty of perjury that the Bid submitted is genuine and not a sham or collusive bid, or made in the interest or on behalf of any person or firm not therein named; and further represents that the Bidder has not directly or indirectly induced or solicited any other bidder to submit a sham bid, or encouraged any other person or corporation to refrain from bidding; and that the Bidder has not in any manner sought by collusion to secure to the Bidder an advantage over any other bidder or bidders.

RCW 39.04.350 Certification. The Bidder represents and certifies, under penalty of perjury, that within the three- (3-) year period immediately preceding the Bid Date, the Bidder has not been determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries, nor through a civil judgment entered by a court of limited or general jurisdiction, to have willfully violated, as defined in RCW 49.48.082, any provision of Chapters 49.46, 49.48, nor 49.52 RCW.

Addenda. Bidder acknowledges receipt and acceptance of all Addenda through No. ____ (Identify Last Addenda By Number)

Bid Security. A certified check, cashier's check, or other obligation of a bank, or a bid bond in substantially the form set forth in Section 00 43 13, Bid Security Form for at least five (5) percent of the Base Bid Subtotal, shall be submitted with this Bid.

Apprenticeship Requirements. For Bids greater than one million (\$1,000,000) dollars, the apprentice labor hours required for this project are fifteen (15) percent of the total labor hours. The Bidder agrees to utilize this level of apprentice participation.

Name of Firm	Date
Signature	By Title
Mailing Address	City, State Zip Code
Telephone Number	Email Address
WA State Contractor's License No.	Employment Security Department No.

Identification of Bidder as a sole proprietor, a partnership, a joint venture, a corporation, or another described form of legal entity

END OF SECTION

KNOW ALL MEN BY THESE PRESENTS:	
That we,	, as Principal, and , as Surety, are held and firmly bound unto
the PORT OF TACOMA as Obligee, in the penal sum of Dollars, for the payment of which the Principal and Surety administrators, successors and assigned, jointly and several periods and several periods.	y bind themselves, their heirs, executors,
The condition of this obligation is such that if the Obligee made by the Principal therefor, and the Principal shall du Obligee in accordance with the terms of said proposal or faithful performance thereof, with Surety or Sureties appr case of failure to do so, pay and forfeit to the Obligee the	according to the terms of the proposal or bid ly make and enter into a contract with the bid and award and shall give bond for the oved by the Obligee; or, if the principal shall, in
call for bids, then this obligation shall be null and void; oth effect and the Surety shall forthwith pay and forfeit to the the amount of this bond.	nerwise it shall be and remain in full force and
SIGNED, SEALED AND DATED THIS DAY (DF, 20
BYPRINCIPAL	_
BYSURETY	_
	_

Note: Bidder may submit Surety's bid bond form, provided it is similar in substance, made out in the name of the Port of Tacoma, and that the agent's name and address appear as specified. Bonds containing riders limiting responsibility for toxic waste or limiting the term of responsibility will be rejected.

END OF SECTION

Project No. 201146.01 Contract No. 071742

AGENT AND ADDRESS

THIS IS NOT TO BE SUBMITTED WITH A BID.

THE LOW RESPONSIVE BIDDER SHALL BE REQUIRED TO COMPLETE THIS RESPONSIBILITY DETAIL FORM AS SPECIFIED IN SECTION 00 21 00 - INSTRUCTIONS TO BIDDERS. THIS COMPLETED RESPONSIBILITY DETAIL FORM SHALL BE SUBMITTED ELECTRONICALLY (PDF) VIA EMAIL TO THE CONTACT(S) IDENTIFIED IN THE LOW RESPONSIVE BIDDER SELECTION NOTIFICATION.

BIDDE	R'S COMPA	NY NAME:
For	r the below M	andatory Bidder Responsibility Criteria, please mark the appropriate choice.
1.01 MAND	ATORY BIDD	DER RESPONSIBILITY CRITERIA
39.	.04.350(1). Th	meet the following mandatory responsibility criteria as described in RCW ne Bidder shall be rejected as not responsible if any answer to questions 1 or any answer to questions 6 through 8 is "Yes."
1.	Does the Bi	dder have a Certificate of Registration in compliance with RCW 18.27?
	□ Yes	□ No
2.	Does the Bi	dder have a current Washington State Unified Business Identifier number?
	□ Yes	□ No
3.		idder have Industrial Insurance Coverage for the Bidder's employees working in State as required in RCW 51?
	□ Yes	□ No
4.	Does the Bi 50?	idder have an Employment Security Department number as required in RCW
	* Attach lett	er dated within six (6) months of Bid Date.
	https://fortre	letter electronically by clicking on the following link ess.wa.gov/esd/twt/pwcinternet/ or by emailing a request to c@esd.wa.gov.
	□ Yes	□ No
5.	Does the Bi	idder have a Washington State Excise Tax Registration number as required in
	□ Yes	□ No
6.		der been disqualified from bidding on any public works project under RCW or 39.12.065(3)?
	□ Yes	□ No
7.		der violated RCW 39.04.370 more than one (1) time as determined by the State Department of Labor and Industries?
	□ Yes	□ No

	8.		ever been found to b of RCW 39.04.320?	e out of compliance with Apprenticeship Utilization
		□ Yes	□ No	
	9.	any provision o		have willfully violated, as defined in RCW 49.48.082, 48, or 49.52 RCW within the three- (3-) year period his bid solicitation?
		□ Yes	□ No	
	10.			ng required by RCW 39.04.350, or is the Bidder on the d by the Department of Labor and Industries?
		□ Yes	□ No	
HERE a proceed	nd co	ntact the Contra	act Administrator. The	ny answer to questions 6 through 8 is "Yes" - STOP e Bidder is not responsible for this Work. Otherwise eted form documentation to confirm
F	_!!		ah a ak a u fill a u t tha a a	
				ppropriate item. Based upon the answer provided rmation or seek further explanation. As needed,
•		•	on for any explanation	•
1.02 CC	NTR	ACT AND REG	ULATORY HISTORY	
A.	The Port will evaluate whether the Bidder's contract and regulatory history demonstrates an acceptable record of past project performance and consistent responsibility. The Bidder shall answer the following questions. The Bidder may be rejected as not responsible if any answer to questions 1 through 5 below is "Yes."			
	1.	Has the Bidder had a contract terminated for cause or default in the last five (5) years?		
		☐ Yes, If YES,	explain below.	□ No
	2.	respond to an a		take over all, or a portion of, a project to cure or aterial breach of contract on the part of the Bidder on ve (5) years?
		☐ Yes, If YES,	explain below.	□ No
	3.			ders been in bankruptcy, reorganization, and/or oject in the last five (5) years?
		☐ Yes, If YES,	explain below.	□ No

4.	,	ating on any public works project in the last five (5)		
	☐ Yes, If YES, explain below.	□ No		
5.	Are the Bidder and major Sub-Bidders currently a party to a formal dispute resolution process with the Port (i.e., a pending mediation, arbitration, or litigation)?			
	☐ Yes, If YES, explain below.	□ No		
CID	ENT/INJURY EXPERIENCE			

1.03 ACC

- A. The Port will evaluate the Bidder's accident/injury Experience Modification Factor ("EMF") from the Washington State Department of Labor and Industries to assess whether the Bidder has an acceptable safety record preventing personal injuries on projects.
- B. List the Bidder's accident/injury EMF for the last five (5) years. An experience factor is calculated annually by the Washington State Department of Labor and Industries.

Year	Effective Year	Experience Factor
1		
2		
3		
4		
5		

If the Bidder has received an EMF of greater than 1.0 for any year, explain the cause(s) of the designation and what remedial steps were taken to correct the EMF. The Bidder may be rejected as not responsible if the Bidder's EMF is greater than 1.0 and sufficient remedial steps have not been implemented.

1.04 WORK PERFORMED BY BIDDER

A. The Bidder shall state the amount of the Work, as an equivalent to the Base Bid, excluding taxes, insurance, and bonding, the Bidder will execute with its own forces.

%

1.05 ADDITIONAL CONTRACTOR INFORMATION

- A. As part of completing this Responsibility Detail Form, submit the following information with the completed Responsibility Detail Form:
 - Bidder's recent job resume, including a list of similar projects performed and contact information for the similar project owner(s), a brief description of work, start and end dates, and contract amount.
 - Resumes of Bidder's proposed project manager and job superintendent.

- B. The Bidder's failure to provide the required project information may result in a determination of the Bidder being declared non-responsible by the Port.
- C. The Bidder shall submit this completed, **SIGNED** Responsibility Detail Form electronically (PDF), with all requested backup documentation, via email to the contact(s) noted on the Low Responsive Bidder Selection Notification.
- D. The Bidder and its subcontractors to verify that its subcontractors at each tier meet the responsibility criteria as required by RCW 39.06.020 and 39.04.350.
 - Bidder shall verify major subcontractors meet the responsibility criteria required. Fill out one Port of Tacoma Public Works Project Bidder Evaluation Checklist for Subcontractors for each major subcontractor and submit to the Port with this form. Backup documentation is not required to be submitted.

PROJECT: Parcel 86 Pipe Realignment Project

PROJECT NO.: <u>201146.01</u> CONTRACT NO.: 071742

Responsibility Certification Form

The Low responsive Bidder shall complete the Responsibility Detail Form, attach all documentation, and submit to the Port within twenty-four (24) hours following receipt of the Low Responsive Bidder Selection Notification. All forms shall be submitted electronically (PDF) via email to the contact(s) listed on the Selection Notice. Note, the same project may be used to demonstrate experience across multiple categories if applicable.

By completing and signing this Responsibility Detail Form, the Bidder is certifying that the information contained within the Form, the backup documentation, and any additional information requested by the Port is true and complete. The Bidder's failure to disclose the required information or the submittal of false or misleading information may result in the rejection of the Bidder's Bid, revocation of award, or contract termination.

The information provided herein is true and complete.		
Signature of Authorized Representative	 Date	
Print Name and Title		_

Project No. 201146.01 00 45 13 - 4

Contract No. 071742

PORT OF TACOMA PUBLIC WORKS PROJECT BIDDER EVALUATION CHECKLIST FOR SUBCONTRACTORS

PROJECT TITLE: Parcel 86 Pipe Realignment Project
BIDDER:
CONTRACT AND PROJECT NUMBER: 071742/ 201146.01

This checklist shall be completed by the Bidder and its subcontractors to verify that its subcontractors at each tier meet the responsibility criteria as required by RCW 39.06.020 and RCW 39.04.350.

This checklist should be submitted to the Port of Tacoma Contracts Administrator within twenty-four (24) hours of request.

Document verification information or backup data is <u>not</u> to be submitted to the Port, this information should remain on file with the Contractor and be presented to the Port if requested at a later date.

Ite	ltem	Initials/
m		Comment
No.		S
1.	At the time of Bid submittal, have a certificate of registration in compliance with RCW 18.27: Check the L&I site https://fortress.wa.gov/lni/bbip/.	
	Verify that a subcontractor has an electrical contractor license, if required by RCW 19.28, or an elevator contractor license, if required by RCW 70.87.	
2.	While reviewing registration information above, also check contractor's Employer Liability Certificate to verify workers' comp (industrial insurance) premium status – current account.	
	Complete a "Submit Contractor Tracking Request" to be notified if the contractor fails to pay workers' comp premiums or renew their contractor registration or if their electrical contractor license is suspended or revoked within one year.	
3.	State excise tax registration number (Department of Revenue). (contractor's Washington State Unified Business Identifier and tax registration number) http://dor.wa.gov/content/doingbusiness/registermybusiness/brd/.	
4.	Not disqualified from bidding on any public works contract under RCW 39.06.010 or RCW 39.12.065(3).	
	Check the Department of Labor and Industries http://www.lni.wa.gov/TradesLicensing/PrevWage/AwardingAgencies/DebarredContractors/.	
5.	Verify subcontractors are registered with the Washington State Employment Security Department (ESD) and have an account number. Request a letter to be sent from the subcontractor electronically by clicking on the following link https://fortress.wa.gov/esd/twt/pwcinternet/ or by emailing a request to publicworks@esd.wa.gov. Include ESD#, UBI#, and business name in the email.	

Ite	Item	Initials/
m		Comment
No.		s
	Certificate of Coverage letter issued/dated within the last six (6) months.	
	Document if subcontractor confirms in writing, under penalty of perjury, that it has no	
	employees and this requirement does not apply.	

END OF SECTION

Project No. 201146.01 00 45 13 - 6

Contract No. 071742

THIS AGREEMENT is made and entered into by and between the PORT OF TACOMA, a State of Washington municipal corporation, hereinafter designated as the "Port," and:

The "Contractor" is:		(Legal Name)
		(Address)
		(Address 2)
		(Phone No.)
The "Project" is:	Parcel 86 Pipe Realignment Pr	roject (Title)
	201146.01 071742	(Project/Contract No.)
	3701 Taylor Way	(Project Address)
	Project Location Address 2	(Project Address 2)
The "Engineer" is:	Thais Howard, PE	(Engineer)
	Director of Engineering	(Title)
	thoward@portoftacoma.com	(Email)
	(253) 888-4718	(Phone No.)
The "Contractor's Representative" is:		(Representative)
		(Title)
		(Email)
		(Phone No.)
BACKGROUND AND	REPRESENTATIONS:	
The Port publicly solicition the da		ts. The Contractor submitted a Bid to the Port

The Contractor represents that it has the personnel, experience, qualifications, capabilities, and means to accomplish the Work in strict accordance with the Contract Documents, within the Contract Time and for the Contract Price, and that it and its Subcontractors satisfy the responsibility criteria set forth in the Contract Documents, including any supplemental responsibility criteria.

The Contractor further represents that it has carefully examined, and is fully familiar with, all provisions of the Contract Documents, including any Addenda, that it has fully satisfied itself as to the nature, location, difficulty, character, quality, and quantity of the Work required by the Contract Documents and the conditions and other matters that may be encountered at or near the Project site(s), or that may affect performance of the Work or the cost or difficulty thereof, including all applicable safety and site responsibilities, and that it understands and can satisfy all scheduling and coordination requirements and interim milestones.

AGREEMENT:

The Port and the Contractor agree as follows:

1.0 CONTRACTOR TO FULLY PERFORM THE WORK

The Contractor shall fully execute and complete the entire Work for the Project described in the Contract Documents, except to the extent specifically indicated in the Agreement, the General Conditions of the Contract (as well as any Supplemental, Special, or other conditions included in the Project Manual), the Drawings, the Specifications, and all Addenda issued prior to, and all modifications issued after, execution of the Contract.

2.0 DATE OF COMMENCEMENT

The date of commencement of the Work, which is the date from which the Contract Time is measured, shall be fixed as the date of execution of the Contract.

3.0 CONTRACT TIME AND LIQUIDATED DAMAGES

The Contractor shall achieve all interim milestones as set forth in the Contract Documents and Substantial Completion of the entire Work not later than 271 calendar days from execution of the Contract, subject to adjustments of this Contract Time as provided in the Contract Documents. The Contractor shall achieve Final Completion of the entire Work within 30 calendar days of the date on which Substantial Completion is achieved.

Provisions for liquidated damages as a reasonable estimate of future loss, as of the date of this Agreement, are included in the Contract Documents. The parties agree that the stated liquidated damages are reasonable and not penalties individually nor cumulatively.

The liquidated damages for failure to achieve Substantial Completion by the required date shall be \$25 per calendar day. After the required Final Completion date, the liquidated damages for failure to achieve Final Completion shall be \$15 per calendar day.

Liquidated damages assessed by the Port will be deducted from monies due to the Contractor, or from monies that will become due to the Contractor. The liquidated damages, as specified and calculated herein, shall be levied, cumulatively if applicable, for each and every calendar day that Substantial Completion and/or Final Completion of the Work is delayed beyond the required completion dates, or the completion dates modified by the Port for extensions of the Contract Time.

4.0 CONTRACT PRICE				
current funds for the Contractor's performance	, the Port shall pay the Contractor in of the Contract, the Contract Price of s (\$), subject to additions and			
deductions as provided in the Contract Docume Contract Price, but will be due and paid by the I	ents. State and local sales tax is not included in the Port with each progress payment.			
6.0 INSURANCE AND BONDS				
The Contractor shall purchase and maintain ins Documents.	surance and provide bonds as set forth in the Contract			
This Agreement is entered into as of the day and year first written above:				
CONTRACTOR	PORT OF TACOMA			
By:	By:			
Title:	Title:			
Date:	Execution Date:			

END OF SECTION

PERFORMANCE	BOND #
CONTRACTOR (NAME AND ADDRESS)	SURETY (NAME AND PRINCIPLE PLACE OF BUSINESS)
OWNER (NAME AND ADDRESS)	AGENT OR BROKER (FOR INFORMATION ONLY)
PORT OF TACOMA	
P.O. BOX 1837	
TACOMA, WA 98401-1837	
KNOW ALL MEN BY THESE PRESENTS:	
That	_ as Principal, hereinafter called Contractor, and as Surety, hereinafter called Surety, are held and firmly
bound unto the Port of Tacoma as Obligee, he	reinafter called the Port, in the amount of Dollars (\$) for the
payment whereof Contractor and Surety bind to representatives, successors, and assigns, joint	hemselves, their executors, administrators, legal

WHEREAS:

Contractor shall execute an agreement with the Port for Parcel 86 Pipe Realignment Project, Project No. 201146.01/Contract No. 071742, a copy of which Contract is by reference made a part hereof (the term "Contract" as used herein to include the aforesaid agreement together with all the Contract Documents, addenda, modifications, all alterations, additions thereto, deletions therefrom, and any other document or provision incorporated into the Contract) and is hereinafter referred to as the Contract.

This bond is executed and issued pursuant to the provisions of RCW 39.08.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise, it shall remain in full force and effect.

FURTHER:

- A. Surety hereby waives notice of any alterations, change orders, modifications, or extensions of time made by the Port.
- B. Surety recognizes that the Contract includes provisions for additions, deletions, and modifications to the Work and/or Contract Time and the amounts payable to the Contractor. Subject to the limitations contained in (A) above, Surety agrees that no such addition, deletion, or modification, or any combination thereof, shall avoid or impair Surety's obligation hereunder.
- C. Whenever Contractor has been declared by the Port to be in default, and the Port has given Surety notice of the Port's determination of such default, Surety shall promptly (in no event more than fifteen (15) days following receipt of such notice) advise the Port of its intended action to:
 - 1. Remedy the default within fifteen (15) days following its advice to the Port as set forth above, or

- Assume within fifteen (15) days, following its advice to the Port as set forth above, completion of the Contract in accordance with the Contract Documents and become entitled to payment of the balance of the Contract Sum, or
- Pay the Port upon completion of the Contract, in cash, the cost of completion together with all other reasonable costs and expenses incurred by the Port as a result of the Contractor's default, including but not limited to, those reasonable costs and expenses incurred by the Port in its efforts to mitigate its losses, which may include, but are not limited to, attorney's fees and efforts to complete the Work prior to the Surety exercising the options available to it as set forth herein.
- D. If the Port shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgment, shall pay all costs and attorney's fees incurred by the Port in enforcement of its rights hereunder. Venue for any action arising out of, or in connection with, this bond shall be in Pierce County, Washington.
- E. No right or action shall accrue on this bond to, or for the use of, any person or corporation other than the Port of Tacoma.

Signed and Sealed the	day of	, 20
•	itation of not less than th	have an A.M. Best Rating of "A-, FSC (6)" or ne Contract Sum, and be authorized to transac
SURETY	CONT	TRACTOR
Signature	Signa	ture
Printed Name and Title	Printed	d Name and Title
Power of Attorney attached.	END OF SEC	CTION

Project No. 201146.01 00 61 13.13 - 2

Contract No. 071742

LABOR AND MATERIAL PA	YMENT BOND #
CONTRACTOR (NAME AND ADDRESS)	SURETY (NAME AND PRINCIPLE PLACE OF BUSINESS)
OWNER (NAME AND ADDRESS)	AGENT OR BROKER (FOR INFORMATION ONLY)
PORT OF TACOMA	- ,
P.O. BOX 1837	
TACOMA, WA 98401-1837	
KNOW ALL MEN BY THESE PRESENTS:	
That	as Principal, hereinafter called
Contractor, and	as Surety, hereinafter
called Surety, are held and firmly bound unto the	as Surety, hereinafter e Port of Tacoma as Obligee, hereinafter called the Port
and all others entitled to recovery hereunder, in	the amount of
	Dollars (\$) for the paymer
whereof Contractor and Surety bind themselves successors, and assigns, jointly and severally, fi	, their executors, administrators, legal representatives, irmly by these presents.

WHEREAS:

Contractor shall execute an agreement with the Port for Parcel 86 Pipe Realignment Project, Project No. 201146.01/Contract No. 071742, a copy of which Contract is by reference made a part hereof (the term "Contract" as used herein to include the aforesaid agreement together with all the Contract Documents, addenda, modifications, alterations, additions thereto, deletions therefrom, and any other document or provision incorporated into the Contract) and is hereinafter referred to as the Contract.

This bond is executed pursuant to the provisions of RCW 39.08.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Contractor shall promptly make payment to all claimants, as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract and shall indemnify and save the Port harmless from all cost and damage by reason of Contractor's default, then this obligation shall be null and void; otherwise, it shall remain in full force and effect, subject to the following conditions.

- 5.01 Surety hereby waives notice of any alterations, change orders, modifications, or extensions of time made by the Port.
- 5.02 Surety recognizes that the Contract includes provisions for additions, deletions, and modifications to the Work and/or Contract Time and the amounts payable to the Contractor. Subject to the limitations contained in (A) above, Surety agrees that no such addition, deletion, or modification, or any combination thereof, shall avoid or impair Surety's obligation hereunder.

- 5.03 Surety hereby agrees that every person protected under the provisions of RCW 39.08.010 who has not been paid as provided under the Contract, and pursuant to RCW 39.08.010, less any amounts withheld pursuant to statute, and less retainage withheld pursuant to RCW 60.28, after the expiration of a period of thirty (30) days after the date on which the completion of the Contract in accordance with RCW 39.08, may sue on this bond, prosecute the suit to final judgment as may be due claimant, and have execution thereon including recovery of reasonable costs and attorney's fees as provided by RCW 39.08. The Port shall not be liable for the payment of any costs or expenses of any such suit.
- 5.04 No suit or action shall be commenced hereunder by any claimant unless claimant shall have given the written notices to the Port, and where required, the Contractor, in accordance with RCW 39.08.030.
- 5.05 The amount of this bond shall be reduced by, and to the extent of, any payment or payments made in good faith hereunder, inclusive of the payment by Surety of claims which may be properly filed in accordance with RCW 39.08 whether or not suit is commenced under and against this bond.
- 5.06 If any Claimant shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgment and attorney fees as provided by RCW 39.08.030, shall also pay such costs and attorney fees as may be incurred by the Port as a result of such suit. Venue for any action arising out of, or in connection with, this bond shall be in Pierce County, Washington.

1.Signed and Sealed the2.	day of	, 20	
3. IMPORTANT: Surety companies higher, have an underwriting limitate business in the State of Washington	ation of not less than the C		
a. SURETY	CONTRA	ACTOR	
4.			
a.Signature	Signature	9	
5.			
a.Printed Name and Title	Printed N	lame and Title	
b.Power of Attorney attached.			

END OF SECTION

			AGE
ARTIC	CLE	1 - THE CONTRACT DOCUMENTS	3
1.	.01	GENERAL	3
1.	.02	DEFINITIONS	
1.	.03	INTENT OF THE CONTRACT DOCUMENTS	4
1.	.04	CORRELATION OF THE CONTRACT DOCUMENTS	4
1.	.05	OWNERSHIP OF THE CONTRACT DOCUMENTS	5
ARTIC	CLE	2 - PORT OF TACOMA	
2	.01	AUTHORITY OF THE ENGINEER	5
2	.02	ADMINISTRATION OF THE CONTRACT	5
2	.03	INFORMATION PROVIDED BY THE PORT	6
2	.04	CONTRACTOR REVIEW OF PROJECT INFORMATION	6
2	.05	PORT'S RIGHT TO REJECT, STOP, AND/OR CARRY-OUT THE WORK	6
2	.06	SEPARATE CONTRACTORS	7
2	.07	OFFICERS AND EMPLOYEES OF THE PORT	7
ARTI	CLE	3 - CONTRACTOR'S RESPONSIBILITIES	7
3	.01	DUTY TO PERFORM THE ENTIRE WORK	7
_	.02	OBSERVED ERRORS, INCONSISTENCIES, OMISSIONS OR VARIANCES IN THE	
		RACT DOCUMENTS	
	.03	SUPERVISION AND RESPONSIBILITY FOR SUBCONTRACTORS	
_	.04	MATERIALS AND EQUIPMENT	
_	.05	CONTRACTOR WARRANTIES	_
_	.06	REQUIRED WAGES	
_	.07	STATE AND LOCAL TAXES	
	.08	PERMITS, LICENSES, FEES, AND ROYALTIES	
	.09	SAFETY	
_	.10	CORRECTION OF WORK	
_	.11	UNCOVERING OF WORK	
_	.12	RELOCATION OF UTILITIES	
3	.13	LABOR	
3	.14	INDEMNIFICATION	··· ·—
_		WAIVER OF CONSEQUENTIAL DAMAGES	
		4 - SUBCONTRACTORS AND SUPPLIERS	_
	.01	RESPONSIBILITY FOR ACTIONS OF SUBCONTRACTORS AND SUPPLIERS	
	.02	AWARD OF CONTRACTS TO SUBCONTRACTORS AND SUPPLIERS	
	.03	SUBCONTRACTOR AND SUPPLIER RELATIONS	
ARTI	CLE	5 - WORKFORCE AND NON-DISCRIMINATION REQUIREMENTS	
5	.01	COMPLIANCE WITH NON-DISCRIMINATION LAWS	
5	.02	MWBE, VETERAN-OWNED, AND SMALL BUSINESS ENTERPRISE PARTICIPATION	
	.03	APPRENTICESHIP PARTICIPATION	_
ARTI	CLE	6 - CONTRACT TIME AND COMPLETION	
	.01	CONTRACT TIME	
6	.02	PROGRESS AND COMPLETION	
6	.03	SUBSTANTIAL COMPLETION	17

6.04	COMPLETION OF PUNCH LIST	17
6.05	FINAL COMPLETION	
6.06	FINAL ACCEPTANCE	
6.07	PORT'S RIGHT TO USE THE PREMISES	
ARTICLE	7 - PAYMENT	
7.01	ALL PAYMENTS SUBJECT TO APPLICABLE LAWS AND SCHEDULE OF VALUES	
7.02	APPLICATIONS FOR PAYMENT	19
7.03	PROGRESS PAYMENTS	19
7.04	PAYMENT BY CONTRACTOR TO SUBCONTRACTORS	19
7.05	FINAL PAYMENT	19
7.06	RETAINAGE	20
7.07	DISPUTED AMOUNTS	21
7.08	EFFECT OF PAYMENT	21
7.09	LIENS	21
ARTICLE	8 - CHANGES IN THE WORK	21
8.01	CHANGES IN THE WORK	21
8.02	CHANGES IN THE CONTRACT SUM	23
8.03	CHANGES IN THE CONTRACT TIME	26
8.04	RESERVATION OF RIGHTS	27
8.05	UNIT PRICES	27
ARTICLE	9 - SUSPENSION AND TERMINATION OF CONTRACT	27
9.01	PORT'S RIGHT TO SUSPEND WORK	27
9.02	TERMINATION OF CONTRACT FOR CAUSE BY THE PORT	28
9.03	TERMINATION OF CONTRACT FOR CONVENIENCE BY THE PORT	28
9.04	TERMINATION OF CONTRACT BY THE CONTRACTOR	28
9.05	SUBCONTRACT ASSIGNMENT UPON TERMINATION	29
ARTICLE	10 - BONDS	29
10.01	CONTRACTOR PERFORMANCE AND PAYMENT BONDS	29
ARTICLE	11 - DISPUTE RESOLUTION	30
11.01	NOTICE OF PROTEST AND CLAIM	30
11.02	MEDIATION	31
11.03	LITIGATION	32
ARTICLE	12 - MISCELLANEOUS	
12.01	GENERAL	
12.02		
12.03		
12.04		
12.05		
12.06		
12.07		
12.08		
12.09	STATUTES	34

ARTICLE 1 - THE CONTRACT DOCUMENTS

6.01 GENERAL

- A. Contract Documents form the Contract. The Contract Documents are enumerated in the Agreement between the Port and Contractor ("Agreement"). Together, the Contract Documents form the Contract. The Contract represents the entire integrated agreement between the parties and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only in writing and only as set forth in the Contract Documents.
- B. Headings only for convenience. The titles or headings of the sections, divisions, parts, articles, paragraphs, and subparagraphs of the Contract Documents are intended only for convenience.

6.02 DEFINITIONS

- A. "Contract Documents" proposed for the Work consist of the Agreement, the General Conditions of the Contract (as well as any Supplemental, Special, or other conditions included in the Project Manual), the Drawings, the Specifications, and all Addenda issued prior to, and all modifications issued after, execution of the Contract.
- B. "Contractor" means the person or entity contracting to perform the Work under these Contract Documents. The term Contractor includes the Contractor's authorized representative for purposes of identifying obligations and responsibilities under the Contract Documents, including the ability to receive notice and direction from the Port.
- C. "Day" means a calendar day unless otherwise specifically designated.
- D. "Drawings" are the graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work, including plans, elevations, sections, details, and diagrams.
- E. "Engineer" is the Port employee generally tasked with administering the Project on the Port's behalf and the person with overall responsibility for managing, for the Port, the Project scope, budget, and schedule. To the extent empowered, the Engineer may delegate to others at the Port (such as a Project Manager or Inspector) the responsibility for performing delegated responsibilities of the Engineer's under this Contract.
- F. "Port" means the Port of Tacoma. The Port will designate in writing a representative (usually the Engineer) who shall have the authority to act on the Port's behalf related to the Project. The "Port" does not include staff, maintenance, or safety workers, or other Port employees or consultants that may contact the Contractor or be present at the Project site.
- G. "Project" is identified in the Agreement and is the total construction to be performed by or through the Port, of which the Work performed under the Contract Documents may be only a part.
- H. "Specifications" are those portions of the Contract Documents that specify the written requirements for materials, equipment, systems, standards, and workmanship for the Work and for the performance of related services.
- 1. "Subcontractor" means a person or entity that contracts directly with the Contractor to perform any Work under the Contract Documents. "Subcontractor of any tier" includes Subcontractors as well as any other person or entity, including suppliers, that contracts with a Subcontractor or a lower-tier Subcontractor (also referred to as "Sub-subcontractors") to perform any of the Work.

J. "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all labor, tools, equipment, materials, services, and incidentals necessary to complete all obligations under the Contract Documents. The Work may constitute only a part of the Project, and may interface and need to be coordinated with the work of others.

6.03 INTENT OF THE CONTRACT DOCUMENTS.

- A. Intent of Contract Documents. The intent of the Contract Documents is to describe the complete Work and to include all items and information necessary for the proper execution and completion of the Work by the Contractor.
- B. Contract Documents are complementary. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor is required to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.
- C. No third party contract rights. The Contract Documents shall not create a contractual relationship of any kind (1) between the Port and a Subcontractor of any tier (although the Port does not waive any third-party beneficiary rights it may otherwise have as to Subcontractors of any tier), (2) between the Contractor and the Engineer or other Port employees or consultants, or (3) between any persons or entities other than the Port and Contractor.

6.04 CORRELATION OF THE CONTRACT DOCUMENTS

- A. Precedence. In the event of a conflict or discrepancy between or among the Contract Documents, the conflict or discrepancy will be resolved by the following order of precedence: with an addendum or Change Order having precedence over an earlier document, and computed dimensions having precedence over scaled dimensions, and large scale drawings take precedence over small scale drawings:
 - 1.The signed Agreement
 - a. Supplemental Conditions
 - b.Division 00 General Conditions
 - c.Division 01 General Requirements of Specifications
 - d.All other Specifications, including all remaining divisions, material and system schedules and attachments, and Drawings
 - e.All other sections in Division 00 not specifically identified herein by Section
- B. Inconsistency between or among Contract Documents. If there is any inconsistency between the Drawings, schedules, or Specifications, or any attachments, the Contractor will make an inquiry to the Engineer to determine how to proceed, and, unless otherwise directed, the Contractor will provide the better quality or greater quantity of any work or materials, as reasonably interpreted by the Port, at no change in the Contract Sum or Contract Time. Thus, if Work is shown on Drawings, but not contained in Specifications or schedules, or contained in Specifications or schedules, but not shown on the Drawings, the Work as shown or contained will be provided at no change in the Contract Sum or Contract Time, according to Specifications or Drawings to be issued by the Port.

- C. Inconsistency with law. In the event of a conflict between the Contract Documents and applicable laws, codes, ordinances, regulations, or orders of governmental authorities having jurisdiction over the Work, or in the event of any conflict between such laws, the most stringent requirements govern.
- D. Organization of Contract Documents. The organization of the Specifications and Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of the Work to be performed. The Port assumes no responsibility for the division and proper coordination of Work between particular Subcontractors.
- E. Bid quantities are estimates only. Any "bid quantities" set forth in the Contract Documents are estimates only. The Port does not warrant that the actual amount of Work will correspond to any estimates. The basis of payment will be the actual quantities performed in accordance with the Contract Documents.

6.05 OWNERSHIP OF THE CONTRACT DOCUMENTS

A. Port owns all Contract Documents. All Drawings, Specifications, and other Contract Documents furnished to the Contractor are Port property, and the Port retains all intellectual property rights, including copyrights. The Contract Documents are to be used only with respect to the Project.

ARTICLE 2 - PORT OF TACOMA

7.01 AUTHORITY OF THE ENGINEER

- A. Engineer will be Port's representative. The Engineer or the Engineer's designee will be the Port's representative during the Project and will administer the Project on the Port's behalf.
- B. Engineer may enforce all obligations. The Engineer has the authority to enforce all requirements imposed on the Contractor by the Contract Documents.
- C. Only Engineer is agent of Port. Other than the Engineer, no other Port employee or consultant is an agent of the Port, and none are authorized to agree on behalf of the Port to changes in the Contract Sum or Contract Time, nor to waive provisions of the Contract Documents, nor to direct the Contractor to take actions that change the Contract Sum or Contract Time, nor to accept notice of protests or claims on behalf of the Port.

7.02 ADMINISTRATION OF THE CONTRACT

- A. Port will administer Contract. The Port will provide administration of the Contract through the Engineer or the Engineer's designee. All communications with the Port or its consultants related to the Contract will be through the designated representative.
- B. Port not responsible for means and methods. The Port is not responsible for, and will have no control or charge of, the means, methods, techniques, sequences, or procedures of construction, or for safety precautions or programs incidental thereto, because these are the sole responsibility of the Contractor. If the Port makes any suggestion of means, methods, techniques, sequences, or procedures, the Contractor will exercise its independent judgment in deciding whether to adopt the suggestion, except as otherwise provided in the Contract Documents.
- C. Port not responsible for acts or omissions of Contractor or Subcontractors. The Port is not responsible for, and will have no control or charge of, the acts or omissions of the Contractor, Subcontractors of any tier, suppliers, or any of their agents or employees, or any other persons performing a portion of the Work.

- D. Port not responsible for the Work. The Port is not responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The presence of the Engineer or others at the Project site at any time does not relieve the Contractor from its responsibility for non-conforming Work.
- E. Port will have access to the Work. The Port and its representatives will at all times have access to the Work in progress, and the Contractor will provide proper facilities for such access and for inspection.

Project No. 201146.01 00 72 00 - 6

Contract No. 071742

7.03 INFORMATION PROVIDED BY THE PORT

- A. Port to furnish information with reasonable promptness. The Port shall furnish information and services required of the Port by the Contract Documents with reasonable promptness.
- B. Subsurface investigation. The Port may have undertaken a limited investigation of the soil and other subsurface conditions at the Project site for design purposes only. The results of these investigations will be available for the convenience of the Contractor, but they are not Contract Documents. There is no warranty or guarantee, express or implied, that the conditions indicated are representative of those existing at the site or that unforeseen developments may not occur. The Contractor is solely responsible for interpreting the information.

7.04 CONTRACTOR REVIEW OF PROJECT INFORMATION

- A. Contractor to familiarize itself with site and conditions of Work. Prior to executing the Contract, the Contractor shall visit the site, become generally familiar with local conditions under which the Work is to be performed, and correlate personal observations with the requirements of the Contract Documents and all information provided with the Bid Documents. By signing the Contract, the Contractor confirms that the Contract Sum is reasonable compensation for the Work; that the Contract Time is adequate; that it has carefully examined the Contract Documents and the Project site; and that it has satisfied itself as to the nature, location, and character of the Work, the labor, materials, equipment, and other items required and all other requirements of the Contract Documents. The Contractor's failure fully to acquaint itself with any such condition does not relieve the Contractor from the responsibility for performing the Work in accordance with the Contract Documents, within the Contract Time, and for the Contract Sum.
- B. Contractor to review Contract Documents. Because the Contract Documents are complementary, the Contractor will, before starting each portion of the Work, carefully study and compare the various Drawings, Specifications, and other Contract Documents, as well as all information furnished by the Port.
- C. Contractor to confirm field conditions. Before starting each portion of the Work, the Contractor shall take field measurements of and verify any existing conditions, including all Work in place, and all general reference points; shall observe any conditions at the site affecting the Contractor; and shall carefully compare field measurements, conditions and other information known to the Contractor with the Contract Documents.

7.05 PORT'S RIGHT TO REJECT. STOP. AND/OR CARRY-OUT THE WORK

- A. Port may reject Work. The Port has the authority, but not the obligation, to reject work, materials, and equipment that is defective or that otherwise does not conform to the Contract Documents, and to decide questions concerning the Contract Documents. However, the failure to so reject, or the presence of the Port at the site, shall not be construed as assurance that the Work is acceptable or being completed in compliance with the Contract Documents.
- B. Port may stop Work. If the Contractor fails to correct Work that does not comply with the requirements of the Contract Documents, or repeatedly or materially fails to properly carry out the Work, the Port may issue an order to stop all or a portion of the Work until the cause for the order has been eliminated. The Port's right to stop the Work shall not impose a duty on the Port to exercise this right for the benefit of the Contractor or any third party.

C. Port may carry-out Work. If the Contractor fails to perform the Work properly, fails to perform any provision of this Contract, or fails to maintain the Baseline Project Schedule, or if the Port reasonably concludes that the Work will not be completed in the specified manner or within the Contract Time, then the Port may, after three (3) days' written notice to the Contractor and without prejudice to any other remedy the Port may have, perform itself or have performed any or all of the Work and may deduct the cost thereof from any payment then or later due the Contractor.

7.06 SEPARATE CONTRACTORS

- A. Port may engage separate contractors or perform work with its own forces. The Port may contract with other contractors ("Separate Contractor") in connection with the Project or perform work with its own forces. The Contractor shall coordinate and cooperate with any Port forces or Separate Contractors, as applicable. The Contractor shall provide reasonable opportunity for the introduction and storage of materials and the execution of work by others.
- B. Contractor to inspect work of others. If any part of the Contractor's Work depends on the work of the Port or any Separate Contractor, the Contractor shall inspect and promptly report to the Port, in writing, any defects that impact the Contractor. Failure of the Contractor to so inspect and report defects in writing shall constitute an acceptance by Contractor of the work of the Port or Separate Contractor.
- C. Contractor to resolve claims of others. Should the Contractor, or any of its Subcontractors of any tier, cause damage of any kind, including but not limited to delay, to any Separate Contractor, the Contractor shall promptly, and using its best efforts, settle or otherwise resolve the dispute with the Separate Contractor. The Contractor shall also promptly remedy damage caused to completed or partially completed construction.

7.07 OFFICERS AND EMPLOYEES OF THE PORT

A. No personal liability. Officers, employees, and representatives of the Port, including the Commissioners, acting within the scope of their employment, shall not be personally liable to Contractor for any acts or omissions arising out of the Project.

ARTICLE 3 - CONTRACTOR'S RESPONSIBILITIES

8.01 DUTY TO PERFORM THE ENTIRE WORK

- A. Contractor must perform entire Work in accordance with Contract Documents. The Contractor shall perform the entire Work required by the Contract in accordance with the Contract Documents. Unless otherwise specifically provided, the Contractor shall provide and pay for all labor, tools, equipment, materials, electricity, power, water, other utilities, transportation, and other facilities necessary for the execution and completion of the Work.
- B. Contractor shall be independent contractor. The Contractor shall be, and operate as, an independent contractor in the performance of the Work. The Contractor is not authorized to enter into any agreements or undertakings for, or on behalf of, the Port and is not an agent or employee of the Port.
- 8.02 OBSERVED ERRORS, INCONSISTENCIES, OMISSIONS, OR VARIANCES IN THE CONTRACT DOCUMENTS

- A. Contractor to notify Port of any discrepancy. The Contractor's obligations to review and carefully study the Contract Documents and field conditions are for the purpose of facilitating coordination and construction. If the Contractor at any time observes that the Contract Documents, including Drawings and Specifications, vary from the conditions of the Project site, are in error, or omit any necessary detail, the Contractor shall promptly notify the Engineer in writing through a Request for Information. Any Work done after such observation, until authorized by the Engineer, shall be at Contractor's risk. The Contractor shall also promptly report to the Engineer any observed error, inconsistency, omission, or variance with applicable laws through a Request for Information. If the Contractor fails either to carefully study and compare the Contract Documents, or to promptly report any observed error, inconsistency, omission, or variance, the Contractor shall assume full responsibility and shall bear all costs, liabilities, and damages attributable to the error, inconsistency, omission, or variance.
- B. Requests for Information. The Contractor shall submit Requests for Information concerning the Contract Documents by following the procedure and using such form as the Port may require. The Contractor shall minimize Requests for Information by thoroughly studying the Contract Documents and reviewing all Subcontractor requests. The Contractor shall allow adequate time in its planning and scheduling for a response from the Port to a Request for Information.
- C. Port may provide information to supplement Drawings and Specifications. Minor items of work or detail that are omitted from the Drawings and Specifications, but inferable from the information presented and normally provided by accepted good practice, shall be provided and/or performed by the Contractor as part of the Contract Sum and within the Contract Time. Similarly, the Engineer may furnish to the Contractor additional Drawings and clarifications, consistent with the Contract Documents, as necessary to detail and illustrate the Work. The Contractor shall conform its Work to such additional Drawings and clarifications at no increase in the Contract Sum or Contract Time.

8.03 SUPERVISION AND RESPONSIBILITY FOR SUBCONTRACTORS

- A. Contractor responsible for Work and workers. The Contractor shall have complete control of the means, methods, techniques, sequences, or procedures related to the Work, and for all safety precautions or programs. The Contractor shall have complete control over, and responsibility for, all personnel performing the Work. The Contractor is also responsible for the acts and omissions of the Contractor's principals, employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors of any tier.
- B. Contractor to supervise the Work. The Contractor shall continuously supervise and direct the Work using competent and skilled personnel and the Contractor's best skill and attention.
- C. Contractor to enforce discipline and good order. The Contractor shall enforce strict discipline and good order among all workers on the Project, and shall not employ any unfit person or anyone not skilled in the work to which they are assigned. Incompetent, careless, or negligent workers shall immediately be removed from the Work. The Port may, but is not obligated to, require the Contractor to remove from the Work, at no change in the Contract Sum or Contract Time, anyone whom the Port considers objectionable.

8.04 MATERIALS AND EQUIPMENT

- A. Material and equipment to be new. All materials and equipment to be incorporated into the Work shall be new, unless specifically provided otherwise in the Contract Documents. The Contractor shall, if required in writing by the Port, furnish satisfactory evidence regarding the kind and quality of any materials, identify the source, and warrant compliance with the Contract Documents. The Contractor shall ensure that all materials and equipment are protected, kept dry, and stored under cover in a manner to protect such materials and equipment.
- B. Material and equipment shall conform to manufacturer instructions. All materials and equipment shall conform, and shall be applied, installed, used, maintained, and conditioned in accordance with the instructions of the applicable manufacturer, fabricator, or processor, unless otherwise specifically provided by the Engineer.

8.05 CONTRACTOR WARRANTIES

- A. Work will be of good quality and performed in workmanlike manner. In addition to any specific warranties set forth in the Contract Documents, the Contractor warrants that the Work, including all materials and equipment furnished under the Contract, will be of good quality and new, will be performed in a skillful and workmanlike manner, and will conform to the requirements of the Contract Documents. Any Work not conforming to this warranty, including unapproved or unauthorized substitutions, shall be considered defective.
- B. Work will be free from defects. The Contractor warrants that the Work will be free from defects for a period of one (1) year from the date of Substantial Completion of the Project.
- C. Contractor to collect and deliver warranties to Port. The Contractor shall collect and deliver to the Port any written warranties required by the Contract Documents. These warranties shall be obtained and enforced by the Contractor for the benefit of the Port without the necessity of separate assignment. These warranties shall extend to the Port all rights, claims, benefits, and interests that the Contractor may have under express or implied warranties or guarantees against a Subcontractor of any tier, supplier, or manufacturer for defective or non-conforming Work. Warranty provisions that purport to limit or alter the Port's rights under the Contract Documents, or the laws of the State of Washington, are null and void.
- D. General requirements. The Contractor is not relieved of its general warranty obligations by the specification of a particular product or procedure in the Contract Documents. Warranties in the Contract Documents shall survive completion, acceptance, and final payment.

8.06 REQUIRED WAGES

- A. Contractor will pay required wages. The Contractor shall pay (and shall ensure that all Subcontractors of any tier pay) all prevailing wages and other wages (such as Davis-Bacon Act wages) applicable to the Project. See Specification Section 00 73 46.
- B. The Contractor shall defend (at Contractor's sole cost, with legal counsel approved by Port), indemnify, and hold the Port harmless from all liabilities, obligations, claims, demands, damages, disbursements, lawsuits, losses, fines, penalties, costs, and expenses, whether direct or indirect, and including, but not limited to, attorneys' fees and consultants' fees and other costs and expenses of litigation, from any violation or alleged violation by the Contractor or any Subcontractor of any tier of RCW 39.12 ("Prevailing Wages on Public Works") or Chapter 51 RCW ("Industrial Insurance").

8.07 STATE AND LOCAL TAXES

- A. Contractor will pay taxes on consumables. The Contractor will pay the retail sales tax on all consumables used during performance of the Work and on all items that are not incorporated into the final Work; this tax shall be included in the Contract Sum.
- B. Port will pay taxes on the Contract Sum. The Port will pay state and local retail sales tax on the Contract Sum with each progress payment, and on final payment, for transmittal by the Contractor to the Washington State Department of Revenue or to the applicable local taxing authority. Rule 170: WAC 458-20-170.
- C. Direct all tax questions to the Department of Revenue. The Contractor should direct all questions concerning taxes on any portion of the Work to the State of Washington Department of Revenue or to the local taxing authority.
- D. State Sales Tax Rule 171: WAC 458-20-171. For work performed related to building, repairing, or improving streets, roads, etc., which are owned by a municipal corporation, or political subdivision of the state, or by the United States, and which are used, primarily, for foot or vehicular traffic, the Contractor shall include Washington State Retail Sales Taxes in the various schedule prices, or other contract amounts, including those that the Contractor pays on the purchase of materials, equipment, or supplies used or consumed in doing the Work.
 - 1.The bid form will indicate which bid items are subject to Rule 171. Any such identification by the Port is not binding upon the Department of Revenue.

Project No. 201146.01 00 72 00 - 11

Contract No. 071742

8.08 PERMITS, LICENSES, FEES, AND ROYALTIES

- A. Contractor to provide and pay for permits unless otherwise specified. Unless otherwise specified, the Contractor shall procure and pay for all permits, licenses, and governmental inspection fees necessary or incidental to the performance of the Work. All costs related to these permits, licenses, and inspections shall be included in the Contract Sum. Any action taken by the Port to assist the Contractor in obtaining permits or licenses shall not relieve the Contractor of its sole responsibility to obtain and pay for permits, licenses, and inspections as part of the Contract Sum.
- B. Contractor's obligations when permit must be in Port's name. When applicable law or agency requires a permit to be issued to a public agency, the Port will support the Contractor's request for the permit and accept the permit in the Port's name, if:
 - 1. The Contractor takes all necessary steps required for the permit to be issued;
 - 2. The permit applies to Work performed in connection with the Project; and
 - 3. The Contractor agrees in writing to abide by all requirements of the permit and to defend and hold harmless the Port from any liability in connection with the permit.
- C. Contractor to pay royalties. The Contractor shall pay all royalties and license fees required for the Work unless otherwise specified in the Contract Documents.

8.09 SAFETY

- A. Contractor solely responsible for safety. The Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work and the performance of the Contract.
- B. Port not responsible for safety. The Port may identify safety concerns to the Contractor; however, no action or inaction of the Port or any third party relating to safety will: (1) relieve the Contractor of its sole and complete responsibility for safety and sole liability for any consequences, (2) impose any obligation on the Port or a third party to inspect or review the Contractor's safety program or precautions, (3) impose any continuing obligation on the Port or a third party to ensure the Contractor performs the Work safely, or (4) affect the Contractor's responsibility for the protection of property, workers, and the general public.
- C. Contractor to maintain a safe Work site. The Project site may be occupied during performance of the Work. The safety of these site occupants is of paramount importance to the Port. The Contractor shall maintain the Work site and perform the Work in a safe manner and in accordance with the Washington Industrial Safety and Health Act (WISHA) and all other applicable safety laws, rules, and regulations. This requirement shall apply continuously and not be limited to working hours.
- D. Contractor to protect Work site and adjacent property until Final Completion. The Contractor shall continuously protect the Work and adjacent property from damage. At all times until Final Completion, the Contractor shall be responsible for, and protect from damage, weather, deterioration, theft, and vandalism, the Work and all materials, equipment, tools, and other items incorporated or to be incorporated in the Work, and shall repair any damage, injury, or loss.

8.10 CORRECTION OF WORK

- A. Contractor to correct defective Work. The Contractor shall, at no cost to the Port, promptly correct Work that is defective or that otherwise fails to conform to the requirements of the Contract Documents. Such Work shall be corrected, whether before or after Substantial Completion, and even if it was previously inspected or observed by the Port.
- B. One-year correction period. The Contractor shall correct all defects in the Work appearing within one (1) year of Substantial Completion or within any longer period prescribed by law or by the Contract Documents. The Contractor shall initiate remedial action within fourteen (14) days of receipt of notice from the Port and shall complete remedial work within a reasonable time. Work corrected by the Contractor shall be subject to the provisions of this Section 3.10 for an additional one-year period following the Port's acceptance of the corrected Work.
- C. Contractor responsible for defects and failures to correct. The Contractor shall be responsible for any expenses incurred by the Port resulting from defects in the Work. If the Contractor refuses or neglects to correct the defects, or does not timely accomplish corrections, the Port may correct the Work and charge the Contractor the cost of the corrections. If damage or loss of service may result from a delay in correction, the corrections may be made by the Port and reimbursed by the Contractor.
- D. Port may accept defective work. The Port may, at its sole option, elect to retain defective or nonconforming Work. In such a case, the Port shall reduce the Contract Sum by a reasonable amount to account for the defect or non-conformance.
- E. No period of limitation established. Nothing contained in this Section 3.10 establishes a period of limitation with respect to any obligations under the Contract Documents or law. The establishment of the one (1) year correction period relates only to the specific obligation of the Contractor to correct defective or non-conforming Work.

8.11 UNCOVERING OF WORK

- A. Contractor to uncover work covered prior to inspection. If any portion of the Work is covered prior to inspection and approval, the Contractor shall, at its expense, uncover or remove the Work for inspection by the Port or others, and replace the Work to the standard required by the Contract Documents.
- B. Contractor to uncover work at Port's request. After initial inspection and observation, the Port may order a reexamination of Work, and the Work must be uncovered by the Contractor. If the uncovered Work complies with the Contract Documents, the Port shall pay the cost of reexamination and replacement. If the Work is found not to comply with the Contract Documents, the Contractor shall pay the cost of replacement, unless the Contractor demonstrates that it did not cause the defect in the Work.

8.12 RELOCATION OF UTILITIES

A. Contractor should assume underground utilities are in approximate locations. The Contractor should assume that the locations of any underground or hidden utilities, underground tanks, and plumbing or electrical runs indicated in surveys or the Contract Documents are shown in approximate locations. The accuracy of this information is not guaranteed by the Port and shall be verified by the Contractor. The Contractor shall comply with RCW 19.122.030 and utilize a utility locator service to locate utilities on Port property. The Contractor shall bear the risk of loss if any of its Work directly or indirectly damages or interrupts any utility service or causes or contributes to damages of any nature.

- B. Utility relocation or removal. Where relocation or removal of utilities is necessary or required, it shall be performed at the Contractor's sole expense, unless the Contract Documents specify otherwise. If a utility owner is identified as being responsible for relocating or removing utilities, the work will be accomplished at the utility owner's convenience, either during, or in advance of, construction. Unless otherwise specified, it shall be the Contractor's sole responsibility to coordinate, schedule, and pay for work performed by a utility owner.
- C. Contractor to notify Port of unknown utilities. If the Contractor discovers the presence of any unknown utilities, it shall immediately notify the Engineer in writing.

8.13 LABOR

- A. Contractor responsible for labor peace. The Contractor is responsible for labor peace relating to the Work and shall cooperate in maintaining Project-wide labor harmony. The Contractor shall use its best efforts as an experienced contractor to adopt and implement policies and practices designed to avoid work stoppages, slowdowns, disputes, or strikes.
- B. Contractor to minimize impact of labor disputes. The Contractor will take all necessary steps to prevent labor disputes from disrupting or otherwise interfering with access to Port property. If a labor dispute disrupts the progress of the Work or interferes with access, the Contractor shall promptly and expeditiously take all necessary action to eliminate or minimize the disruption or interference.

8.14 INDEMNIFICATION

- A. Duty to defend, indemnify, and hold harmless. To the fullest extent permitted by law and subject to this Section 3.14, the Contractor shall defend (at the Contractor's sole cost, with legal counsel approved by Port), indemnify, and hold harmless the Port and the Northwest Seaport Alliance, including their respective Commissions, officers, managers, and employees, the Engineer, any consultants, and the agents and employees, successors and assigns of any of them (the "Indemnified Parties") from and against claims, damages, lawsuits, losses (including loss of use), disbursements, liabilities, obligations, fines, penalties, costs, and expenses, whether direct and indirect or consequential, including but not limited to, consultants' fees, and attorneys' fees incurred on such claims and in proving the right to indemnification ("Claims"), arising out of, or resulting from, the acts or omissions of the Contractor, a Subcontractor of any tier, their agents, and anyone directly or indirectly employed by any of them or anyone for whose acts they may be liable (individually and collectively, the "Indemnitor").
- B. Duty to defend, indemnify, and hold harmless for sole negligence. The Contractor will fully defend, indemnify, and hold harmless the Indemnified Parties for the sole negligence or willful misconduct of the Indemnitor.
- C. Duty to defend, indemnify, and hold harmless for concurrent negligence. Where Claims arise from the concurrent negligence of (1) the Port; and (2) the Indemnitor, the Contractor's obligations to indemnify and defend the Indemnified Parties under this Section 3.14 shall be effective only to the extent of the Indemnitor's negligence.

- D. Duty to indemnify not limited by workers' compensation or similar employee benefit acts. In claims against any of the Indemnified Parties by an employee of the Contractor, a Subcontractor of any tier, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under this Section 3.14 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable under workers' compensation acts, disability benefit acts, or other employee benefit acts. After mutual negotiation of the parties, the Contractor waives immunity as to the Indemnified Parties under Title 51 RCW, "Industrial Insurance."
- E. Intellectual property indemnification. The Contractor will be liable for and shall defend (at the Contractor's sole cost, with legal counsel approved by Port), indemnify, and hold the Indemnified Parties harmless for Claims for infringement by the Contractor of copyrights or patent rights arising out of, or relating to, the Project.
- F. Labor peace indemnification. If the Contractor fails to satisfy its labor peace obligations under the Contract, the Contractor will be liable for and shall defend (at the Contractor's sole cost, with legal counsel approved by Port), indemnify, and hold harmless the Indemnified Parties for Claims brought against the Port by third parties (including but not limited to lessees, tenants, contractors, customers, licensees, and invitees of the Port) for injunctive relief or monetary loss.
- G. Cyber risk indemnification. Contractor shall defend, indemnify, and hold harmless the Indemnified Parties from and against any liability, expense, fines, penalties, cost, demand, or other obligation, resulting from or out of any cyber-related risk that includes theft, loss or misuse of data, release of private information as result of a network breach, penetration, compromise, or loss of IT systems control.
- H. Joinder. The Contractor agrees to being added by the Port as a party to any arbitration or litigation with third parties in which the Port alleges indemnification or seeks contribution from the Indemnitor. The Contractor shall cause each of its Subcontractors of any tier to similarly stipulate in their subcontracts; in the event any does not, the Contractor shall be liable in place of such Subcontractor(s) of any tier.
- Other. To the extent that any portion of this Section 3.14 is stricken by a court or arbitrator for any reason, all remaining provisions shall retain their vitality and effect. The obligations of the Contractor under this Section 3.14 shall not be construed to negate, abridge, or otherwise reduce any other right or obligations of indemnity which would otherwise exist. To the extent the wording of this Section 3.14 would reduce or eliminate an available insurance coverage, it shall be considered modified to the extent necessary so that the insurance coverage is not affected. This Section 3.14 shall survive completion, acceptance, final payment, and termination of the Contract.

8.15 WAIVER OF CONSEQUENTIAL DAMAGES

A. Mutual waiver of consequential damages. The Contractor and Port waive claims against each other for consequential damages arising out of, or relating to, this Contract. This mutual waiver includes, but is not limited to: (1) damages incurred by the Port for rental expenses, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons, and (2) damages incurred by the Contractor for principal and home office overhead and expenses including, but not limited to, the compensation of personnel stationed there, for losses of financing, business, and reputation, for losses on other projects, for loss of profit, and for interest or financing costs. This mutual waiver includes, but is not limited to, all consequential damages due to either party's termination.

B. Limitation. Nothing contained in this Section 3.15; however, shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents, to preclude damages specified in the Agreement, or to affect the Contractor's obligation to indemnify the Port for direct, indirect, or consequential damages alleged by a third party.

ARTICLE 4 - SUBCONTRACTORS AND SUPPLIERS

9.01 RESPONSIBILITY FOR ACTIONS OF SUBCONTRACTORS AND SUPPLIERS.

A. Contractor responsible for Subcontractors. The Contractor is fully responsible to the Port for the acts and omissions of its Subcontractors of any tier and all persons either directly or indirectly employed by the Contractor or its Subcontractors.

9.02 AWARD OF CONTRACTS TO SUBCONTRACTORS AND SUPPLIERS

- A. Contractor to provide proposed Subcontractor information. The Contractor, within ten (10) days after the Port's notice of award of the Contract, shall provide the Engineer with the names of the persons or entities proposed to perform each of the principal portions of the Work (i.e., either a Subcontractor listed in a bid or proposal or a Subcontractor performing Work valued at least ten percent (10%) of the Contract Sum) and the proprietary names, and the suppliers of, the principal items or systems of materials and equipment proposed for the Work. No progress payment will become due until after this information has been furnished.
- B. Port to respond promptly with objections. The Port may respond promptly to the Contractor in writing stating: (1) whether the Port has reasonable objection to any proposed person or entity, or (2) whether the Port requires additional time for review. If the Port makes a reasonable objection, the Contractor shall replace the Subcontractor with no increase to the Contract Sum or Contract Time. Such a replacement shall not relieve the Contractor of its responsibility for the performance of the Work and compliance with all of the requirements of the Contract within the Contract Sum and Contract Time.
- C. Reasonable objection defined. "Reasonable objection" as used in this Section 4.02 includes, but is not limited to: (1) a proposed Subcontractor of any tier different from the entity listed with the bid, (2) lack of "responsibility" of the proposed Subcontractor, as defined by Washington law and the Bidding Documents, or lack of qualification or responsibility of the proposed Subcontractor based on the Contract or Bidding Documents, or (3) failure of the Subcontractor to perform satisfactorily in the Port's opinion (such as causing a material delay or submitting a claim that the Port considers inappropriate) on one or more projects for the Port within five (5) years of the bid date.
- D. No substitution allowed without permission. The Contractor shall not substitute a Subcontractor, person, or organization without the Engineer's written consent.

9.03 SUBCONTRACTOR AND SUPPLIER RELATIONS

A. Contractor to schedule, supervise, and coordinate Subcontractors. The Contractor shall schedule, supervise, and coordinate the operations of all Subcontractors of any tier, including suppliers. The Contractor shall ensure that appropriate Subcontractors coordinate the Work of lower-tier Subcontractors.

- B. Subcontractors to be bound to Contract Documents. By appropriate agreement, the Contractor shall require each Subcontractor and supplier to be bound to the terms of the Contract Documents and to assume toward the Contractor, to the extent of their Work, all of the obligations that the Contractor assumes toward the Port under the Contract Documents. Each subcontract shall preserve and protect the rights of the Port and shall allow to the Subcontractor, unless specifically provided in the subcontract, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Port. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with lower-tier Subcontractors.
- C. Contractor to correct deficiencies in Subcontractor performance. When a portion of the Work subcontracted by the Contractor is not being prosecuted in accordance with the Contract Documents, or if such subcontracted Work is otherwise being performed in an unsatisfactory manner in the Port's opinion, the Contractor shall, on its own initiative or upon the written request of the Port, take immediate steps to correct the deficiency or remove the non-performing party from the Project. The Contractor shall replace inadequately performing Subcontractors upon request of the Port at no change in the Contract Sum or Contract Time.
- D. Contractor to provide subcontracts. Upon request, the Contractor will provide the Port copies of written agreements between the Contractor and any Subcontractor.

Project No. 201146.01 00 72 00 - 17

Contract No. 071742

ARTICLE 5 - WORKFORCE AND NON-DISCRIMINATION REQUIREMENTS

10.01 COMPLIANCE WITH NON-DISCRIMINATION LAWS

A. Contractor to comply with non-discrimination laws. The Contractor shall fully comply with all applicable laws, regulations, and ordinances pertaining to non-discrimination.

10.02 MWBE, VETERAN-OWNED, AND SMALL BUSINESS ENTERPRISE PARTICIPATION.

A. In accordance with the legislative findings and policies set forth in RCW 39.19, the Port encourages participation in all of its contracts by MWBE firms certified by the Office of Minority and Women's Business Enterprises (OMWBE). Participation may be either on a direct basis in response to this invitation or as a subcontractor to a Bidder. However, unless required by federal statutes, regulations, grants, or contract terms referenced in the Contract Documents, no preference will be included in the evaluation of Bids, no minimum level of MWBE participation shall be required as a condition for receiving an award, and Bids will not be rejected or considered non-responsive on that basis. Any affirmative action requirements set forth in federal regulations or statutes included or referenced in the Contract Documents will apply.

The Port encourages participation in all of its contracts by Veteran-owned businesses (defined in RCW 43.60.010) and located at http://www.dva.wa.gov/program/certified-veteran--and-servicemember-owned-businesses and Small, Mini, and Micro businesses (defined in RCW 39.26.010)

10.03 APPRENTICESHIP PARTICIPATION

- A. In accordance with RCW 39.04.320, fifteen (15) percent Apprenticeship Participation is required for all projects estimated to cost one million (\$1,000,000) dollars or more.
- B. Apprentice participation, under this contract, may be counted towards the required percentage (%) only if the apprentices are from an apprenticeship program registered and approved by the Washington State Apprenticeship and Training Council (RCW 49.04 and WAC 296-05).
- C. Bidders may contact the Department of Labor and Industries, Specialty Compliance Services Division, Apprenticeship Section, P.O. Box 44530, Olympia, WA 98504-4530 by phone at (360) 902-5320, or e-mail at Apprentice@Ini.wa.gov, to obtain information on available apprenticeship programs.
- D. For each project that has apprentice requirements, the contractor shall submit a "Statement of Apprentice and Journeyman Participation" on forms provided by the Port of Tacoma, with every request for project payment. The Contractor shall submit consolidated and cumulative data collected by the Contractor and collected from all subcontractors by the Contractor. The data to be collected and submitted includes the following:
 - 1. Contractor name and address
 - 2.Contract number
 - 3.Project name
 - 4.Contract value
 - 5. Reporting period "Beginning Date" through "End Date"
 - 6. Name and registration number of each apprentice by contractor
 - 7. Total number of apprentices and labor hours worked by them, categorized by trade or craft.

- 8. Total number of journeymen and labor hours worked by them, categorized by trade or craft
- 9. Cumulative combined total of apprentice and journeymen labor hours
- 10. Total percentage of apprentice hours worked
- E. No changes to the required percentage (%) of apprentice participation shall be allowed without written approval of the Port. In any request for the change, the Contractor shall clearly demonstrate a good faith effort to comply with the requirements for apprentice participation.

ARTICLE 6 - CONTRACT TIME AND COMPLETION

11.01 CONTRACT TIME

- A. Contract Time is measured from Contract execution. Unless otherwise provided in the Agreement, the Contract Time is the period of time, including authorized adjustments, specified in the Contract Documents from the date the Contract is executed to the date Substantial Completion of the Work is achieved.
- B. Commencement of the Work. The Contractor shall begin Work in accordance with the notice of award and the notice to proceed and shall complete all Work within the Contract Time. When the Contractor's signed Agreement, required insurance certificate with endorsements, bonds, and other submittals required by the notice of award have been accepted by the Port, the Port will execute the Contract and, following receipt of other required pre-work submittals, will issue a notice to proceed to allow the Contractor to mobilize and commence physical Work at the Project site, as further described in these contract documents. No Work at the Project site may commence until the Port issues a notice to proceed.
- C. Contractor shall achieve specified completion dates. The Contractor shall achieve Substantial Completion within the Contract Time and shall achieve Final Completion within the time period thereafter stated in the Contract Documents.
- D. Time is of the essence. Time limits stated in the Contract Documents, including any interim milestones, are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

11.02 PROGRESS AND COMPLETION

- A. Contractor to maintain schedule. The Contractor's sequence and method of operations, application of effort, and work force shall at all times be created and implemented to ensure the orderly, expeditious, and timely completion of the Work and performance of the Contract. The Contractor shall furnish sufficient forces and shall work such hours, including extra shifts, overtime operations, and weekend and holiday work as may be necessary to ensure completion of the Work within the Contract Time and the approved Baseline Project Schedule.
- B. Contractor to take necessary steps to meet schedule. If the Contractor fails substantially to perform in a timely manner in accordance with the Contract Documents and, through the fault of the Contractor or Subcontractor(s) of any tier, fails to meet the Baseline Project Schedule, the Contractor shall take such steps as may be necessary to immediately improve its progress by increasing the number of workers, shifts, overtime operations, or days of work, or by other means and methods, all without additional cost to the Port. If the Contractor believes that any action or inaction of the Port constitutes acceleration, the Contractor shall immediately notify the Port in writing and shall not accelerate the Work until the Port either directs the acceleration in writing or denies the constructive acceleration.

C. Liquidated damages not exclusive. Any provisions in the Contract Documents for liquidated damages shall not preclude other damages due to breaches of Contract of the Contractor.

11.03 SUBSTANTIAL COMPLETION

- A. Substantial Completion defined. Substantial Completion is the stage in the progress of the Work, or portion or phase thereof, when the Work or designated portion is sufficiently complete in accordance with the Contract Documents so that the Port can fully occupy or utilize the Work, or the designated portion thereof, for its intended use, all requirements in the Contract Documents for Substantial Completion have been achieved, and all required documentation has been properly submitted to the Port in accordance with the Contract Documents. All Work, other than incidental corrective or punch list Work and final cleaning, must be completed. The fact that the Port may occupy the Work or a designated portion thereof does not indicate that Substantial Completion has occurred or that the Work is acceptable in whole or in part.
- B. Work not Substantially Complete unless Final Completion attainable. The Work is not Substantially Complete unless the Port reasonably judges that the Work can achieve Final Completion within the period of time specified in the Contract Documents.
- C. Notice of Substantial Completion. When the Work or designated portion has achieved Substantial Completion, the Port will provide a notice to establish the date of Substantial Completion. The notice shall establish responsibilities of the Port and Contractor for security, maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time within which the Contractor shall finish all remaining Work. If the notice of Substantial Completion does not so state, all responsibility for the foregoing items shall remain with the Contractor until Final Completion.

11.04 COMPLETION OF PUNCH LIST

A. Contractor shall complete punch list items prior to Final Completion. The Contractor shall cause punch list items to be completed prior to Final Completion. If, after Substantial Completion, the Contractor does not expeditiously proceed to correct punch list items or if the Port considers that the punch list items, are unlikely to be completed prior to the date established for Final Completion (or such other period of time as is specified in the Contract Documents), the Port may, upon seven (7) days' written notice to the Contractor, take over and perform some or all of the punch list items. The Port may also take over and complete any portion of the Work at any time following Substantial Completion and deduct the actual cost of performing the Work (including direct and indirect costs) from the Contract Sum. The Port's rights under this Section 6.04 are not obligations and shall not relieve the Contractor of its responsibilities under any other provisions of the Contract Documents.

11.05 FINAL COMPLETION

- A. Final Completion. Upon receipt of written notice from the Contractor that all punch list items and other Contract requirements are completed, the Contractor will notify the Port, and the Port will perform a final inspection. If the Port determines that some or all of the punch list items have not been addressed, the Contractor shall be responsible to the Port for all costs, including re-inspection fees, for any subsequent reviews to determine completion of the punch list. When the Port determines that all punch list items have been satisfactorily addressed, that the Work is acceptable under the Contract Documents, and that the Work has fully been performed, the Port will promptly notify the Contractor of Final Completion.
- B. Contractor responsible for costs if Final Completion is not timely achieved. In addition to any liquidated damages, the Contractor is liable for, and the Port may deduct from any amounts due the Contractor, all costs incurred by the Port for services performed after the contractual date of Final Completion, whether or not those services would have been performed prior to that date had Final Completion been timely achieved.

- C. Final Completion submittals. The Port is not obligated to accept the Project as complete until the Contractor has submitted all required submittals to the Port.
- D. Contractor responsible for the Work until Final Completion. The Contractor shall assume the sole risk of loss and responsibility for all Work under the Contract, and all materials to be incorporated in the Work, whether in storage or at the Project site, until Final Completion. Damage from any cause to either permanent or temporary Work, utilities, materials, equipment, existing structures, the site, or other property owned by the Port or others, shall be repaired by the Contractor to the reasonable satisfaction of the Port at no change in the Contract Sum.

11.06 FINAL ACCEPTANCE

- A. Final Acceptance. Final Acceptance is the formal action of the Port accepting the Project as complete. Public notification of Final Acceptance will be posted on the Port's external website (http://www.portoftacoma.com/final-acceptance).
- B. Final Acceptance not an acceptance of defective Work. Final Acceptance shall not constitute acceptance by the Port of unauthorized or defective Work, and the Port shall not be prevented from requiring the Contractor to remove, replace, repair, or dispose of unauthorized or defective Work or recovering damages due to the same.
- C. Completion of Work under RCW 60.28. Pursuant to RCW 60.28, "Lien for Labor, Materials, Taxes on Public Works," completion of the Contract Work shall occur upon Final Acceptance.

11.07 PORT'S RIGHT TO USE THE PREMISES

- A. Port has right to use and occupy Work. The Port reserves the right to occupy or use any part of the Work before or after Substantial Completion of some or all of the Work without relieving the Contractor of any of its obligations under the Contract. Such occupancy or use shall not constitute acceptance by the Port of any of the Work, and shall not cause any insurance to be canceled or lapse.
- B. No compensation due if Port elects to use and occupy Work. No additional compensation shall be due to the Contractor as a result of the Port's use or occupancy of the Work or a designated portion.

ARTICLE 7 - PAYMENT

12.01 ALL PAYMENTS SUBJECT TO APPLICABLE LAWS AND SCHEDULE OF VALUES

- A. Payment of the Contract Sum. The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Port to the Contractor for performance of the Work under the Contract Documents. Payments made to the Contractor are subject to all laws applicable to the Port and the Contractor. Payment of the Contract Sum constitutes full compensation to the Contractor for performance of the Work, including all risk, loss, damages, or expense of whatever character arising out of the nature or prosecution of the Work. The Port is not obligated to pay for extra work or materials furnished without prior written approval of the Port.
- B. Schedule of Values. All payments will be based upon an approved Schedule of Values. Prior to submitting its first Application for Payment, the Contractor shall submit a Schedule of Values to the Port allocating the entire Contract Sum to the various portions of the Work. The Schedule of Values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Port may require. This schedule, unless objected to by the Port, shall be used as a basis for reviewing the Contractor's applications for payment.

12.02 APPLICATIONS FOR PAYMENT

A. Applications for Payment. Progress payments will be made monthly for Work duly certified, approved by the Engineer, and performed (based on the Schedule of Values and actual quantities of Work performed) during the calendar month preceding the Application for Payment. These amounts are paid in trust to the Contractor for distribution to Subcontractors to the extent, and in accordance with, the approved Application for Payment.

12.03 PROGRESS PAYMENTS

- A. Progress payments. Following receipt of a complete Application for Payment, the Engineer will either authorize payment or indicate in writing to the Contractor the specific reasons why the payment request is being denied, in whole or in part, and the remedial action the Contractor must take to receive the withheld amount. After a complete Application for Payment has been received and approved by the Port, payment will be made within thirty (30) days. Any payments made by, or through, or following receipt of, payment from third parties will be made in accordance with the third party's policies and procedures.
- B. Port may withhold payment. The Port may withhold payment in whole or in part as provided in the Contract Documents or to the extent reasonably necessary to protect the Port from loss or potential loss for which the Contractor is responsible, including loss resulting from the Contractor's acts and omissions.

12.04 PAYMENT BY CONTRACTOR TO SUBCONTRACTORS

- A. Payment to Subcontractors. With each Application for Payment, the Contractor shall provide a list of Subcontractors to be paid by the Contractor. No payment request shall include amounts the Contractor does not intend to pay to a Subcontractor because of a dispute or other reason. If, however, after submitting an Application for Payment, but before paying a Subcontractor, the Contractor discovers that part or all of a payment otherwise due to the Subcontractor is subject to withholding from the Subcontractor under the subcontract (such as for unsatisfactory performance or non-payment of lower-tier Subcontractors), the Contractor may withhold the amount as allowed under the subcontract, but it shall give the Subcontractor and the Port written notice of the remedial actions that must be taken and pay the Subcontractor within eight (8) working days after the Subcontractor satisfactorily completes the remedial action identified in the notice.
- B. Payment certification to be provided upon request. The Contractor shall provide, with each Application for Payment, a certification signed by Contractor attesting that all payments by the Contractor to Subcontractors from the last Application for Payment were made within ten (10) days of the Contractor's receipt of payment. The certification will also attest that the Contractor will make payment to Subcontractors for the current Application for Payment within ten (10) days of receipt of payment from the Port.

12.05 FINAL PAYMENT

A. Final payment. Final applications for payment are due within seven (7) days following Final Completion. Final payment of the unpaid balance of the Contract Sum, except retainage, will be made following Final Completion and within thirty (30) days of the Contractor's submission of an approved final Application for Payment.

- 3. Releases required for final payment. The final payment shall not become due until the Contractor delivers to the Port a complete release of all liens arising out of the Contract, as well as an affidavit stating that, to the best of Contractor's knowledge, its release includes all labor and materials for which a lien could be filed. If a Subcontractor of any tier refuses to furnish a release or waiver required by the Port, the Port may (a) retain in the fund, account, or escrow funds in such amount as to defray the cost of foreclosing the liens of such claims and to pay attorneys' fees, the total of which shall be no less than 150% of the claimed amount, or (b) accept a bond from the Contractor, satisfactory to the Port, to indemnify the Port against the lien. If any such lien remains unsatisfied after all payments from the retainage are made, the Contractor shall refund to the Port all moneys that the Port may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.
- C. Contractor to hold Port harmless from liens. The Contractor shall defend (at the Contractor's sole cost, with legal counsel approved by Port), indemnify, and hold harmless the Port from any liens, claims, demands, lawsuits, losses, damages, disbursements, liabilities, obligations, fines, penalties, costs, and expenses, whether direct or indirect, including but not limited to, attorneys' fees and consultants' fees and other costs and expenses, except to the extent a lien has been filed because of the failure of the Port to make a contractually required payment.

12.06 RETAINAGE

- A. Retainage to be withheld. In accordance with RCW 60.28, a sum equal to five percent (5%) of each approved Application for Payment shall be retained. Prior to submitting its first Application for Payment, the Contractor shall exercise one of the options listed below:
 - 1.Retained percentages will be retained by the Port in a fund; or
 - 2.Deposited by the Port in an interest-bearing account or escrow account in a bank, mutual savings bank, or savings and loan association designated by the Contractor, not subject to withdrawal until after the final acceptance of said improvement or work as completed, or until agreed to by both parties; provided that interest on such account shall be paid to the Contractor. Contractor to complete and submit Port provided Retainage Escrow Agreement (Section 00 61 23.13); or
 - 3.If the Contractor provides a bond in place of retainage, it shall be in an amount equal to 5% of the Contract Sum plus Change Orders. The retainage bond shall be based on the form furnished in Section 00 61 23 or otherwise acceptable to the Port and duly completed and signed by a licensed surety or sureties registered with the Washington State Insurance Commissioner and on the currently authorized insurance list published by the Washington State Insurance Commissioner. The surety or sureties must be rated at least "A-, FSC(6)" or higher by A.M. Best Rating Guide and be authorized by the Federal Department of the Treasury. Attorneys-in-fact who sign the retainage bond must file with each bond a certified and effective Power of Attorney statement.
- B. Contractor may withhold retainage from Subcontractors. The Contractor or a Subcontractor may withhold not more than five percent (5%) retainage from the monies earned by any Subcontractor or lower-tier Subcontractor, provided that the Contractor pays interest to the Subcontractor at the same interest rate it receives from its reserved funds. If requested by the Port, the Contractor shall specify the amount of retainage and interest due a Subcontractor.

C. Release of retainage. Retainage will be withheld and applied by the Port in a manner required by RCW 60.28 and released in accordance with the Contract Documents and statutory requirements. Release of the retainage will be processed in the ordinary course of business within sixty (60) days following Final Acceptance of the Work by the Port provided that no notice of lien has been given as provided in RCW 60.28, that no claims have been brought to the attention of the Port, that the Port has no claims under this Contract, and that release of retention has been duly authorized by the State. The following items must also be obtained prior to release of retainage: pursuant to RCW 60.28, a certificate from the Department of Revenue; pursuant to RCW 50.24, a certificate from the Department of Employment Security; and appropriate information from the Department of Labor and Industries including approved affidavits of wages paid for the Contractor and each subcontractor.

12.07 DISPUTED AMOUNTS

A. Disputed amounts. If the Contractor believes it is entitled to payment for Work performed during the prior calendar month in addition to the agreed-upon amount, the Contractor may submit to the Port, along with the approved Application for Payment, a separate written payment request specifying the exact additional amount claimed to be due, the category in the Schedule of Values to which the payment would apply, the specific Work for which additional payment is sought, and an explanation of why the Contractor believes additional payment is due.

12.08 EFFECT OF PAYMENT

- A. Payment does not relieve Contractor of obligations. Payment to the Contractor of progress payments or final payment does not relieve the Contractor from its responsibility for the Work or its responsibility to repair, replace, or otherwise make good defective Work, materials, or equipment. Likewise, the making of a payment does not constitute a waiver of the Port's right to reject defective or non-conforming Work, materials, or equipment (even though they are covered by the payment), nor is it a waiver of any other rights of the Port.
- B. Acceptance of final payment waives claims. Acceptance of final payment by the Contractor, a Subcontractor of any tier, or a supplier shall constitute a waiver of claims except those previously made in writing and identified as unsettled in Contractor's final Application for Payment.
- C. Execution of Change Order waives claims. The execution of a Change Order shall constitute a waiver of claims by the Contractor arising out of the Work to be performed or deleted pursuant to the Change Order, except as specifically described in the Change Order.

12.09 LIENS

A. Contractor to discharge liens. The Contractor shall promptly pay (and secure the discharge of any liens asserted by) all persons properly furnishing labor, equipment, materials, or other items in connection with the performance of the Work including, but not limited to, any Subcontractors of any tier.

ARTICLE 8 - CHANGES IN THE WORK

13.01 CHANGES IN THE WORK

- A. Changes in the Work authorized. Without invalidating the Contract and without notice to the Contractor's surety, the Port may authorize changes in the Work after execution of the Contract, including changes in the Contract Sum or Contract Time. Changes shall occur solely by Change Order, Unilateral Change Directive, or Minor Change in Work. All changes in the Work are effective immediately, and the Contractor shall proceed promptly to perform the change, unless otherwise provided in the Change Order or Directive.
- B. Changes in the Work Defined.
 - 1.A Change Order is a written instrument signed by the Port and Contractor stating their agreement to a change in the Work and the adjustment, if any, in the Contract Sum and/or Contract Time.
 - 2.A Unilateral Change Directive is a written instrument issued by the Port to transmit new or revised Drawings, issue additions or modifications to the Contract, furnish other direction and documents adjustment, if any, to the Contract Sum and/or Contract Time. A Unilateral Change Directive is signed only by the Port, without requiring the consent or signature of the Contractor.
 - 3.A Minor Change in the Work is a written order from the Port directing a change that does not involve an adjustment to the Contract Sum or the Contract Time.
- C. Request for Proposal: At any time, the Port may issue a Proposal Request directing the Contractor to propose a change to the Contract Sum and/or Contract Time, if any, based on a proposed change in the Work. The Contractor shall submit a responsive Change Order proposal as soon as possible, and no later than fourteen (14) days after receipt, in which the Contractor specifies in good faith the extent to which the Contract Sum and/or Contract Time would change. All cost components shall be limited to the manner described in Section 8.02(B). If the Contractor fails to timely respond to a Proposal Request, the Port may issue the change as a Unilateral Change Directive.
 - 1.Fixed price method is default for Contractor Change Order proposal. When the Port has requested that the Contractor submit a Change Order proposal, the Port may specify the basis on which the Contract Sum will be adjusted by the Contractor. The Engineer's preference, unless otherwise indicated, is for changes in the Work to be priced using Lump Sums or Unit Prices or on a time and material (Force Account) basis if unit pricing or lump sums cannot be negotiated or determined. In all instances, however, proposed changes shall include a not-to-exceed price for the change and shall be itemized for evaluation purposes in accordance with Section 8.02(B), as requested by the Engineer.
 - 2.The Port may accept or reject the Contractor's Change Order proposal, request further documentation, or negotiate acceptable terms with the Contractor. If The Port and Contractor reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, such agreement shall be incorporated in a Change Order.
 - 3.The Change Order shall constitute full payment and final settlement of all claims for time and for direct, indirect, and consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity, related to any Work either covered or affected by the Change Order, or related to the events giving rise to the request for equitable adjustment. The Port may reject a proposal, in which case the Port may either not effectuate the change or issue a Unilateral Change Directive. The Port will not make payment to the Contractor for any work until that work has been incorporated into an executed Change Order.

- D. Unforeseen Conditions: If the Contractor encounters conditions at the site that are: (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or any soils reports made available by the Port to the Contractor, or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall immediately provide oral notice to the Engineer before conditions are disturbed, followed within 24 hours by an initial written notice. The Contractor shall submit a detailed proposal no later than seven (7) days following discovery of differing site conditions. The Engineer will promptly investigate these conditions and, if the Engineer determines that they differ materially and cause an increase or decrease in the Contractor's cost or time required for performance of any part of the Work, will establish a change in the Contract Sum or Contract Time, or both, consistent with the requirements of the Contract Documents. If the Contractor disputes the Engineer's determination, the Contractor may proceed as provided in the dispute resolution procedure (Article 11). No increase to the Contract Sum or the Contract Time shall be allowed if the Contractor does not comply with the contractual requirements or if the Contractor knew, or reasonably should have known, of the concealed conditions prior to executing the Contract.
- E. Proceed Immediately: Pending agreement on the terms of the Change Order or upon determination of a differing site condition as defined in 8.01(D), the Engineer may direct Contractor to proceed immediately with the change in the Work. Contractor shall not proceed with any change in the Work until it has obtained the Engineer's written approval and documentation of the following:
 - 1.The scope of work
 - 2.An agreed upon maximum not-to-exceed amount
 - 3. The method of final cost determination
 - 4. Estimated time to complete the changed work
 - 5.As a change in the Work is performed, unless the parties have signed a written Change Order to establish the cost of the change, the Contractor shall maintain an itemized accounting of all costs related to the change based on the categories in Section 8.02(B) and provide such data to the Port upon request. This includes, without limitation, invoices, including freight and express bills, and other support for all material, equipment, Subcontractor, and other charges related to the change and, for material furnished from the Contractor's own inventory, a sworn affidavit certifying the actual cost of such material. Failure to provide data to the Port within seven (7) days of a request constitutes a waiver of any claim. The Port may furnish any material or equipment to the Contractor that it deems advisable, and the Contractor shall have no claim for any costs or fee on such material or equipment.
- F. Procedure for Unilateral Change Directive. Whether or not the Port has rejected a Contractor's proposal, the Port may issue a Unilateral Change Directive and the Contractor shall promptly proceed with the specified Work. If the Contractor disagrees with a Unilateral Change Directive, the Contractor shall advise the Port in writing through a Change Order proposal within seven (7) days of receipt. The Contractor's Change Order proposal shall reasonably specify the reasons for any disagreement and the adjustment it proposes. Without this timely Change Order proposal, the Contractor shall conclusively be deemed to have accepted the Port's proposal.

G. Payment pending final determination of Force Account work. Pending final determination of the total cost of Force Account Work, and provided that the Work to be performed under Force Account is complete and any reservations of rights have been signed by the Port, the Contractor may request payment for amounts not in dispute in the next Application for Payment accompanied by documentation indicating the parties' agreement. Work done on a Force Account basis must be approved in writing on a daily basis by the Engineer or the Engineer's designee and invoices shall be submitted with an Application for Payment within sixty (60) days of performance of the Work.

13.02 CHANGES IN THE CONTRACT SUM

- A. Port to Decide How Changes are Measured. The Port may elect, in its sole discretion, how changes in the Work will be measured for payment. Change in the Work may be priced on a lump sum basis, through Unit Prices, as Force Account, or by another method documented in the executed Change Order, Unilateral Change Directive, or Minor Change in the Work.
- B. Determination of Cost of Change. The total cost of any change in the Work, including a claim under Article 11, shall not exceed the prevailing cost for the Work in the locality of the Project. In all circumstances, the change in the Work shall be limited to the reasonable, actual cost of the following components:
 - 1.Direct labor costs: These are the actual labor costs determined by the number of additional craft hours at their normal hourly rate necessary to perform a change in the Work. The hourly cost of labor will be based upon the following:
 - a.Basic wages and fringe benefits: The hourly wage (without markup or labor burden) and fringe benefits paid by the Contractor as established by the Washington Department of Labor and Industries or contributed to labor trust funds as itemized fringe benefits, whichever is applicable, not to exceed that specified in the applicable "Intent to Pay Prevailing Wage," for the laborers, apprentices, journeymen, and foremen performing or directly supervising the change in the Work on site. These wages do not include the cost of Contractor's project manager or superintendent or above, and the premium portion of overtime wages is not included unless pre-approved in writing by the Port. Costs paid or incurred by the Contractor for vacations, per diem, subsistence, housing, travel, bonuses, stock options, or discretionary payments to employees are not separately reimbursable. The Contractor shall provide to the Port copies of payroll records, including certified payroll statements for itself and Subcontractors of any tier, upon the Port's request.
 - b.Workers' insurance: Direct contributions to the State of Washington as industrial insurance; medical aid; and supplemental pension by class and rates established by the Washington Department of Labor and Industries.
 - c.Federal insurance: Direct contributions required by the Federal Insurance Compensation Act (FICA); Federal Unemployment Tax Act (FUTA); and State Unemployment Compensation Act (SUCA).
 - 2.Direct material costs: This is an itemization, including material invoices, of the quantity and actual cost of additional materials necessary to perform the change in the Work. The cost will be the net cost after all discounts or rebates, freight costs, express charges, or special delivery costs, when applicable. No lump sum costs will be allowed unless approved in advance by the Port.

3.Construction equipment usage costs: This is an itemization of the actual length of time that construction equipment necessary and appropriate for the Work is used solely on the changed Work times the applicable rental cost as established by the lower of the local prevailing rates published in www.equipmentwatch.com, as modified by the AGC/WSDOT agreement, or the actual rate paid to an unrelated third party. If more than one rate is applicable, the lowest available rate will be utilized. Rates and quantities of equipment rented that exceed the local fair market rental costs shall be subject to the Port's prior written approval. Total rental charges for equipment or tools shall not exceed 75% of the fair market purchase value of the equipment or the tool. Actual, reasonable mobilization costs are permitted if the equipment is brought to the site solely for the change in the Work. Mobilization and standby costs shall not be charged for equipment already present on the site.

The rates in effect at the time of the performance of the changed Work are the maximum rates allowable for equipment of modern design, and in good working condition, and include full compensation for furnishing all fuel, oil, lubrication, repairs, maintenance, and insurance. No gas surcharges are payable. Equipment not of modern design and/or not in good working condition will have lower rates. Hourly, weekly, and/or monthly rates, as appropriate, will be applied to yield the lowest total cost.

- 4.Subcontractor costs: These are payments the Contractor makes to Subcontractors for changed Work performed by Subcontractors. The Subcontractors' cost of changed Work shall be determined in the same manner as prescribed in this Section 8.02 and, among other things, shall not include consultant costs, attorneys' fees, or claim preparation expenses.
- 5. Service provider costs: These are payments the Contractor makes to service providers for changed Work performed by service providers. The service providers' cost of changed Work shall be determined in the same manner as prescribed in this Section 8.02.
- 6.Markup: This is the maximum total amount for overhead, profit, and other costs, including office, home office and site overhead (including purchasing, project manager, superintendent, project engineer, estimator, and their vehicles and clerical assistants), taxes (except for sales tax on the Contract Sum), warranty, safety costs, printing and copying, layout and control, quality control/assurance, small or hand tools (a tool that costs \$500 or less and is normally furnished by the performing contractor), preparation of as-built drawings, impact on unchanged Work, Change Order and/or claim preparation, and delay and impact costs of any kind (cumulative, ripple, or otherwise), added to the total cost to the Port of any Change Order work. No markup shall be due, however, for direct settlements of Subcontractor claims by the Port after Substantial Completion. The markup shall be limited in all cases to the following schedule:
 - a.Direct labor costs -- 20% markup on the direct cost of labor for the party (Contractor or Subcontractor) providing labor related to the change in the Work;
 - b.Direct material costs -- 20% markup on the direct cost of material for the party (Contractor or Subcontractor) providing material related to the change in the Work;
 - c.Construction equipment usage costs -- 10% markup on the direct cost of equipment for the party (Contractor or Subcontractor) providing equipment related to the change in the Work;
 - d.Contractor markup on Subcontractor costs -- 10% markup for the Contractor on the direct cost (excluding markup) of a change in the Work performed by Subcontractors (and for Subcontractors, for a change in the Work performed by lower-tier Subcontractors); and

e.Service provider costs -- 5% markup for the Contractor on the direct cost (excluding markup) of a change in the Work performed by service providers.

The total summed markup of the Contractor and all Subcontractors of any tier shall not exceed 30% of the direct costs of the change in the Work. If the markup would otherwise exceed 30%, the Contractor shall proportionately reduce the markup for the Contractor and all Subcontractors of any tier.

7. Cost of change in insurance or bond premium. This is defined as:

a.Contractor's liability insurance: The actual cost (expressed as a percentage submitted with the certificate of insurance provided under the Contract Documents and subject to audit) of the Contractor's liability insurance arising directly from the changed Work; and

b.Public works bond: The actual cost (expressed as a percentage submitted under the Contract Documents and subject to audit) of the Contractor's performance and payment bond arising directly from the changed Work.

Upon request, the Contractor shall provide the Port with supporting documentation from its insurer or surety of any associated cost incurred. The cost of the insurance or bond premium together shall not exceed 2.0% of the cost of the changed Work.

8.Unit Prices. If Unit Prices are specified in the Contract Documents or established by agreement of the parties for certain Work, the Port may apply them to the changed Work. Unit Prices shall include pre-agreed rates for material quantities and shall include reimbursement for all direct and indirect costs of the Work, including overhead, profit, bond, and insurance costs arising out of, or related to, the Unit Priced item. Quantities must be supported by field measurement statements signed by the Port, and the Port shall have access as necessary for quantity measurement. The Port shall not be responsible for not-to-exceed limit(s) without its prior written approval.

13.03 CHANGES IN THE CONTRACT TIME

- A. Extension of the Contract Time. If the Contractor is delayed at any time in the commencement or progress of the Work by events for which the Port is responsible, by unanticipated abnormal weather (subject to Section 8.03(E) below), or by other causes not the fault or responsibility of the Contractor that the Port determines may justify a delay in the Contract Time, then the Contract Time shall be extended by Change Order for such reasonable time as the Port may determine. In no event, however, shall the Contractor be entitled to any extension of time absent proof of: (1) delay to an activity on the critical path of the Project, or (2) delay transforming an activity to the critical path, so as to actually delay the anticipated date of Substantial Completion.
- B. Allocation of responsibility for delay not caused by Port or Contractor. If a delay was not caused by the Port, the Contractor, or anyone acting on behalf of any of them, the Contractor is entitled only to an increase in the Contract Time but not an increase in the Contract Sum.
- C. Allocation of responsibility for delay caused by Port. If a delay was caused by the Port or someone acting on behalf of the Port and affected the critical path, the Contractor shall be entitled to a change in the Contract Time and Contract Sum in accordance with Section 8.02. The Contractor shall not recover damages, an equitable adjustment, or an increase in the Contract Sum or Contract Time from the Port; however, where the Contractor could reasonably have avoided the delay. The Port is not obligated directly or indirectly for damages for any delay suffered by a Subcontractor of any tier that does not increase the Contract Time.

- D. Allocation of responsibility for delay caused by Contractor. If a delay was caused by the Contractor, a Subcontractor of any tier, or anyone acting on behalf of any of them, the Contractor is not entitled to an increase in the Contract Time or in the Contract Sum.
- E. Adverse weather. If adverse weather is identified as the basis for a claim for additional time, the claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not reasonably have been anticipated and had an adverse effect on the critical path of construction, and that the Work was on schedule (or not behind schedule through the fault of the Contractor) at the time the adverse weather conditions occurred. Neither the Contract Time nor the Contract Sum will be adjusted for normal inclement weather. For a claim based on adverse weather, the Contractor shall be eligible only for a change in the Contract Time (but not a change in the Contract Sum) if the Contractor can substantiate that there was significantly greater than normal inclement weather considering the full term of the Contract Time.
- F. Damages for delay. In the event the Contractor (including any Subcontractors of any tier) is held to be entitled to damages from the Port for delay beyond the amount permitted in Section 8.02(B), the total combined damages to the Contractor and any Subcontractors of any tier for each day of delay shall be limited to the reasonable, actual costs of the delay for which the Port is wholly responsible. The limitation on damages set forth in this Section does not apply to any damages arising exclusively from delay to which the Contractor is entitled to recover under Section 8.03(F).
- G. Limitation on damages. The Contractor shall not be entitled to damages arising out of loss of efficiency; morale, fatigue, attitude, or labor rhythm; constructive acceleration; home office overhead; expectant under run; trade stacking; reassignment of workers; rescheduling of Work, concurrent operations; dilution of supervision; learning curve; beneficial or joint occupancy; logistics; ripple; season change; extended or increased overhead or general conditions; profit upon damages for delay; impact damages including cumulative impacts; or similar damages. Any effect that such alleged costs may have upon the Contractor or its Subcontractors of any tier is fully compensated through the markup on Change Orders paid through Section 8.02(B).

13.04 RESERVATION OF RIGHTS

- A. Reservations of rights void unless signed by Port. Reservations of rights will be deemed waived and are void unless any reserved rights are described in detail and are signed by the Contractor and the Port.
- B. Procedure for unsigned reservations of rights. If the Contractor adds a reservation of rights not signed by the Port to any Change Order, Unilateral Change Directive, Change Order proposal, Application for Payment, or any other document, all amounts and all Work therein shall be considered disputed and not payable until costs are re-negotiated or the reservation is withdrawn or changed in a manner satisfactory to, and signed by, the Port. If the Port makes payment based on a document that contains a reservation of rights not signed by the Port, and if the Contractor cashes such payment, then the reservation of rights shall be deemed waived, withdrawn, and of no effect.

13.05 UNIT PRICES

- A. Adjustment to Unit Prices. If Unit Prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed (less than eighty percent (80%) or more than one hundred and twenty percent (120%) of the quantity estimated) so that application of a Unit Price would be substantially unfair, the applicable Unit Price but not the Contract Time, shall be adjusted if the Port prospectively approves a Change Order revising the Unit Price.
- B. Procedure to change Unit Prices. The Contractor or Port may request a Change Order revising a Unit Price by submitting information to support the change. A proposed change to a Unit Price will be evaluated by the Port based on the change in cost resulting solely from the change in quantity, any change in production rate or method as compared to the original plan, and the share, if any, of fixed expenses properly chargeable to the item. If the Port and Contractor agree on the change, a Change Order will be executed. If the parties cannot agree, the Contractor shall comply with the dispute resolution procedures (Article 11).

ARTICLE 9 - SUSPENSION AND TERMINATION OF CONTRACT

14.01 PORT'S RIGHT TO SUSPEND WORK

- A. Port may suspend the Work. The Port may at any time suspend the Work, or any part thereof, by giving notice to the Contractor. The Work shall be resumed by the Contractor as soon as possible, but no later than fourteen (14) days after the date fixed in a notice to resume the Work. The Port shall reimburse the Contractor for appropriate and reasonable expenses consistent with Section 8.02 incurred by the Contractor as a result of the suspension, except where a suspension is the result of the Contractor repeatedly or materially failing to carry out or correct the Work in accordance with the Contract Documents, and the Contractor shall take all necessary steps to minimize expenses.
- B. Contractor obligations. During any suspension of Work, the Contractor shall take every precaution to prevent damage to, or deterioration of, the Work. The Contractor shall be responsible for all damage or deterioration to the Work during the period of suspension and shall, at its sole expense, correct or restore the Work to a condition acceptable to the Port prior to resuming Work.

14.02 TERMINATION OF CONTRACT FOR CAUSE BY THE PORT

- A. Port may terminate for cause. If the Contractor is adjudged bankrupt or makes a general assignment for the benefit of the Contractor's creditors, if a receiver is appointed due to the Contractor's insolvency, or if the Contractor, in the opinion of the Port, persistently or materially refuses or fails to supply enough properly skilled workmen or materials for proper completion of the Contract, fails to make prompt payment to Subcontractors or suppliers for material or labor, disregards laws, ordinances, or the instructions of the Port, fails to prosecute the Work continuously with promptness and diligence, or otherwise materially violates any provision of the Contract, then the Port, without prejudice to any other right or remedy, may terminate the Contractor after giving the Contractor seven (7) days' written notice (during which period the Contractor shall have the right to cure).
- B. Procedure following termination for cause. Following a termination for cause, the Port may take possession of the Project site and all materials and equipment, and utilize such materials and equipment to finish the Work. The Port may also exclude the Contractor from the Project site(s). If the Port elects to complete all or a portion of the Work, it may do so as it sees fit. The Port shall not be required to accept the lowest bid for completion of the Work and may choose to complete all or a portion of the Work using its own work force. If the Port elects to complete all or a portion of the Work, the Contractor shall not be entitled to any further payment until the Work is finished. If the expense of finishing the Work, including compensation for additional managerial and administrative services of the Port, exceeds the unpaid balance of the Contract Sum, the excess shall be paid by the Contractor.
- C. Port's remedies following termination for cause. The Port may exercise any rights, claims, or demands that the Contractor may have against third persons in connection with the Contract, and for this purpose the Contractor assigns and transfers to the Port all such rights, claims, and demands.
- D. Inadequate termination for cause converted to termination for convenience. If, after the Contractor has been terminated for cause, it is determined that inadequate "cause" for such termination exists, then the termination shall be considered a termination for convenience pursuant to Section 9.03.

14.03 TERMINATION OF CONTRACT FOR CONVENIENCE BY THE PORT

A. Port may terminate for convenience. The Port may, at any time (without prejudice to any right or remedy of the Port), terminate all, or any portion of, the Contract for the Port's convenience and without cause. The Contractor shall be entitled to receive payment consistent with the Contract Documents only for Work properly executed through the date of termination, and costs necessarily incurred by reason of the termination (such as the cost of settling and paying claims arising out of the termination under subcontracts or orders), along with a fee of one percent (1%) of the Contract Sum not yet earned on the whole or part of the Work. The total amount to be paid to the Contractor shall not exceed the Contract Sum as reduced by the amount of payments otherwise made. The Port shall have title to all Work performed through the date of termination.

14.04 TERMINATION OF CONTRACT BY THE CONTRACTOR

A. Contractor may terminate for cause. The Contractor may terminate the Contract if the Work is stopped for a period of sixty (60) consecutive days through no act or fault of the Contractor or a Subcontractor of any tier, for either of the following reasons:

1.Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped; or

- 2.An act of government, such as a declaration of national emergency, that requires all Work to be stopped.
- B. Procedure for Contractor termination. If one of the reasons described in Section 9.04A exists, the Contractor may, upon seven (7) days' written notice to the Port (during which period the Port has the opportunity to cure), terminate the Contract and recover from the Port payment for Work executed through the date of termination in accordance with the Contract Documents and for proven loss with respect to materials, equipment, tools, and construction equipment and machinery, including reasonable overhead and profit on Work executed and direct costs incurred by reason of such termination. The total recovery of the Contractor shall not exceed the unpaid balance of the Contract Sum.
- C. Contractor may stop the Work for failure of Port to pay undisputed amounts. The Contractor may stop Work under the Contract if the Port does not pay undisputed amounts due and owing to the Contractor within fifteen (15) days of the date established in the Contract Documents. If the Port fails to pay undisputed amounts, the Contractor may, upon fifteen (15) additional days' written notice to the Port, during which the Port can cure, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately, and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay, and start-up.

14.05 SUBCONTRACT ASSIGNMENT UPON TERMINATION

- A. Subcontracts assigned upon termination. Each subcontract is hereby assigned by the Contractor to the Port provided that:
 - 1. The Port requests that the subcontract be assigned.
 - 2. The assignment is effective only after termination by the Port and only for those subcontracts that the Port accepts in writing.
 - 3. The assignment is subject to the prior rights of the surety, if any, under any bond issued in accordance with the Contract Documents.

When the Port accepts the assignment of a subcontract, the Port assumes the Contractor's rights and obligations under the subcontract, but only for events and payment obligations that arise after the date of the assignment.

ARTICLE 10 - BONDS

15.01 CONTRACTOR PERFORMANCE AND PAYMENT BONDS

A. Contractor to furnish performance and payment bonds. Within ten (10) days following its receipt of a notice of award, and as part of the Contract Sum, the Contractor shall secure and furnish duly executed performance and payment bonds using the forms furnished by the Port. The bonds shall be executed by a surety (or sureties) reasonably acceptable to the Port, admitted and licensed in the State of Washington, registered with the Washington State Insurance Commissioner, and possessing an A.M. Best rating of "A-, FSC (6)" or better and be authorized by the U.S. Department of the Treasury. Pursuant to RCW 39.08, the bonds shall be in an amount equal to the Contract Sum, and shall be conditioned only upon the faithful performance of the Contract by the Contractor within the Contract Time and upon the payment by the Contractor of all taxes, fees, and penalties to the State of Washington and all laborers, Subcontractors, and suppliers, and others who supply provisions, equipment, or supplies for the performance of the Work covered by this Contract. The bonds shall be signed by the person or persons legally authorized to bind the Contractor.

- B. On contracts of one hundred fifty thousand dollars or less, at the option of the contractor as defined in RCW 39.10.210, the Port may, in lieu of the bond, retain ten percent of the contract amount for a period of thirty days after date of final acceptance, or until receipt of all necessary releases from the department of revenue, the Employment Security Department, and the Department of Labor and Industries and settlement of any liens filed under chapter 60.28 RCW, whichever is later. The recovery of unpaid wages and benefits must be the first priority for any actions filed against retainage held by a state agency or authorized local government.
 - For contracts of one hundred fifty thousand dollars or less, the Port may accept a full payment and performance bond from an individual surety or sureties.
- C. Port may notify surety. If the Port makes or receives a claim against the Contractor, the Port may, but is not obligated to, notify the Contractor's surety of the nature and amount of the claim. If the claim relates to a possibility of a Contractor's default, the Port may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

ARTICLE 11 - DISPUTE RESOLUTION

16.01 NOTICE OF PROTEST AND CLAIM

- A. Dispute resolution procedure mandatory. All claims, direct or indirect, arising out of, or relating to, the Contract Documents or the breach thereof, shall be decided exclusively by the following alternative dispute resolution procedure, unless the parties mutually agree otherwise. If the Port and Contractor agree to a partnering process to assist in the resolution of disputes, the partnering process shall occur prior to, and not be in place of, the mandatory dispute resolution procedures set forth below.
- B. Notice of protest defined. Except for claims requiring notice before proceeding with the affected Work as otherwise described in the Contract Documents, the Contractor shall provide immediate oral notice of protest to the Engineer prior to performing any disputed Work and shall submit a written notice of protest to the Port within seven (7) days of the occurrence of the event giving rise to the protest that includes a clear description of the event(s). The protest shall identify any point of disagreement, those portions of the Contract Documents believed to be applicable, and an estimate of quantities and costs involved. When a protest relates to cost, the Contractor shall keep full and complete records and shall permit the Port to have access to those records at any time as requested by the Port.

- C. Claim defined. A claim is a demand by one of the parties seeking adjustment or interpretation of the Contract terms, payment of money, extension of time, or other relief with respect to the terms of the Contract Documents. The term "claim" also includes all disputes and matters in question between the Port and Contractor arising out of, or relating to, the Contract Documents. Claims must be initiated in writing and include a detailed factual statement and clear description of the claim providing all necessary dates, locations, and items of Work, the date or dates on which the events occurred that give rise to the claim, the names of employees or representatives knowledgeable about the claim, the specific provisions of the Contract Documents that support the claim, any documents or oral communications that support the claim, any proposed change in the Contract Sum (showing all components and calculations) and/or Contract Time (showing cause and analysis of the resultant delay in the critical path), and all other data supporting the claim. Claims shall also be submitted with a statement certifying, under penalty of perjury, that the claim as submitted is made in good faith, that the supporting cost and pricing data are true and accurate to the best of Contractor's knowledge and belief, that the claim is fully supported, and that the amount requested accurately reflects the adjustment in the Contract Sum or Contract Time for which Contractor believes the Port is liable. A claim shall be deemed to include all changes, direct and indirect, in cost and in time to which the Contractor and Subcontractors of any tier are entitled and may not contain reservations of rights without the Port's written approval; any unapproved reservations of rights shall be without effect.
- D. Claim procedure. The Contractor shall submit a written claim within thirty (30) days of providing written notice of protest. The Contractor may delay submitting supporting data by an additional thirty (30) days if it notifies the Port in its claim that substantial data must be assembled. Any claim of a Subcontractor of any tier may be brought only through, and after review by and concurrence of, the Contractor.
- E. Failure to comply with notice of protest and claim requirements waives claims. Any notice of protest by the Contractor and any claim of the Contractor, whether under the Contract or otherwise, must be made pursuant to, and in strict accordance with, the applicable provisions of the Contract. Failure to properly and timely submit a notice of protest or to timely submit a claim shall waive the claim. No act, omission, or knowledge, actual or constructive, of the Port shall waive the requirement for timely written notice of protest and a timely written claim, unless the Port and the Contractor sign an explicit, unequivocal written waiver approved by the Port. The Contractor expressly acknowledges and agrees that the Contractor's failure to timely submit required notices of protest and/or timely submit claims has a substantial impact upon, and prejudices, the Port. For the purpose of calculating time periods, an "event giving rise to a claim," among other things, is not a Request for Information, but rather is a response that the Contractor believes would change the Contract Sum and/or Contract Time.
- F. False claims. The Contractor shall not make any fraudulent misrepresentations, concealments, errors, omissions, or inducements to the Port in the formation or performance of the Contract. If the Contractor or a Subcontractor of any tier submits a false or frivolous claim to the Port, which for purposes of this Section 11.01(F) is defined as a claim based in whole or in part on a materially incorrect fact, statement, representation, assertion, or record, the Port shall be entitled to collect from the Contractor by offset or otherwise (without prejudice to any right or remedy of the Port) any and all costs and expenses, including investigation and consultant costs, incurred by the Port in investigating, responding to, and defending against the false or frivolous claim.

- G. Compliance with lien and retainage statutes required. If a claim relates to, or is the subject of, a lien or retainage claim, the party asserting the claim may proceed in accordance with applicable law to comply with the notice and filing deadlines prior to resolution of the claim by mediation or by litigation.
- H. Performance required pending claim resolution. Pending final resolution of a claim, the Contractor shall continue to perform the Contract and maintain the Baseline Project Schedule, and the Port shall continue to make payments of undisputed amounts due in accordance with the Contract Documents.

16.02 MEDIATION

- A. Claims must be subject to mediation. At any time following the Port's receipt of a written claim, the Port may require that an officer of the Contractor and the Port's designee (all with authority to settle) meet, confer, and attempt to resolve a claim. If the claim is not resolved during this meeting, the claim shall be subject to mandatory mediation as a condition precedent to the initiation of litigation. This requirement can be waived only by an explicit, written waiver signed by the Port and the Contractor.
- B. Mediation procedure. A request for mediation shall be filed in writing with the other party to the Contract, and the parties shall promptly attempt to agree upon a mediator. If the parties have not reached agreement within thirty (30) days of the request, either party may file the request with the American Arbitration Association, or such other alternative dispute resolution service to which the parties mutually agree, with a copy to the other party, and the mediation shall be administered by the American Arbitration Association (or other agreed service). The parties to the mediation shall share the mediator's fee and any filing fees equally. The mediation shall be held in Pierce County, Washington, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof. Unless the Port and the Contractor mutually agree in writing otherwise, all claims shall be considered at a mediation session that shall occur prior to Final Completion.

16.03 LITIGATION

- A. Claims not resolved by mediation are subject to litigation. Claims not resolved through mediation shall be resolved by litigation, unless the parties mutually agree otherwise. The venue for any litigation shall be Pierce County, Washington. The Contractor may bring no litigation on claims, unless such claims have been properly raised and considered in the procedures of this Article 11. The Contractor must demonstrate in any litigation that it complied with all requirements of this Article.
- B. Litigation must be commenced promptly. All unresolved claims of the Contractor shall be waived and released, unless the Contractor has complied with the requirements of the Contract Documents, and litigation is served and filed within 180 days of the date of Substantial Completion approved in writing by the Port or termination of the Contract. The pendency of mediation (the time period between receipt by the non-requesting party of a written mediation request and the date of mediation) shall toll these deadlines until the earlier of the mediator providing written notice to the parties of impasse, or thirty (30) days after the date of the mediation session.
- C. Port not responsible for attorneys' fees. Neither the Contractor nor a Subcontractor of any tier, whether claiming under a bond or lien statute or otherwise, shall be entitled to attorneys' fees directly or indirectly from the Port (but may recover attorneys' fees from the bond or statutory retainage fund itself to the extent allowable under law).

D. Port may join Contractor in dispute. The Port may join the Contractor as a party to any litigation or arbitration involving the alleged fault, responsibility, or breach of contract of the Contractor or Subcontractor of any tier.

ARTICLE 12 - MISCELLANEOUS

17.01 GENERAL

- A. Rights and remedies are cumulative. The rights and remedies of the Port set forth in the Contract Documents are cumulative, and in addition to and not in limitation of, any rights and remedies otherwise available to the Port. The pursuit of any remedy by the Port shall not be construed to bar the Port from the pursuit of any other remedy in the event of similar, different, or subsequent breaches of this Contract. All such rights of the Port shall survive completion of the Project or termination of the Contractor.
- B. Reserved rights do not give rise to duty. The rights reserved or possessed by the Port to take any action shall not give rise to a duty for the Port to exercise any such right.

17.02 WAIVER

- A. Waiver must be in writing and authorized by Port. Waiver of any provisions of the Contract Documents must be in writing and authorized by the Port. No other waiver is valid on behalf of the Port.
- B. Inaction or delay not a waiver. No action, delay in acting, or failure to act by the Port shall constitute a waiver of any right or remedy of the Port, or constitute an approval or acquiescence of any breach or defect in the Work, nor shall any delay or failure of the Port to act waive or otherwise prejudice the right of the Port to enforce a right or remedy at any subsequent time.
- C. Claim negotiation not a waiver. The fact that the Port and the Contractor may consider, discuss, or negotiate a claim that has or may have been defective or untimely under the Contract, shall not constitute a waiver of the provisions of the Contract Documents, unless the Port and the Contractor sign an explicit, unequivocal waiver.

17.03 GOVERNING LAW

A. Washington law governs. This Contract and the rights and duties of the parties hereunder shall be governed by the internal laws of the State of Washington, without regard to its conflict of law principles.

17.04 COMPLIANCE WITH LAW

- A. Contractor to comply with applicable laws. The Contractor shall at all times comply with all applicable Federal, State and local laws, ordinances, and regulations. This compliance shall include, but is not limited to, the payment of all applicable taxes, royalties, license fees, penalties, and duties.
- B. Contractor to provide required notices. The Contractor shall give notices required by all applicable Federal, State and local laws, ordinances, and regulations bearing on the Work.
- C. Contractor to confine operations at site to permitted areas. The Contractor shall confine operations at the Project site to areas permitted by applicable laws, ordinances, permits, rules and regulations, and lawful orders of public authorities and the Contract Documents.

17.05 ASSIGNMENT

A. Assignment. The Port and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party and to the partners, successors, assigns, and legal representatives of such other party. The Contractor may not assign, transfer, or novate all or any portion of the Contract, including but not limited to, any claim or right to the Contract Sum, without the Port's prior written consent. If the Contractor attempts to make an assignment, transfer, or novation without the Port's consent, the assignment shall be of no effect, and Contractor shall nevertheless remain legally responsible for all obligations under the Contract. The Contractor also shall not assign or transfer, to any third party, any claims it may have against the Port arising under the Contract or otherwise related to the Project.

17.06 TIME LIMIT ON CAUSES OF ACTION

A. Time limit on causes of action. The Port and Contractor shall commence all causes of action, whether in contract, tort, breach of warranty, or otherwise, against the other arising out of, or related to, the Contract in accordance with the requirements of the dispute resolution procedure set forth in Article 11 of these General Conditions, within the time period specified by applicable law, and within the time limits identified in the Contract Documents. The Contractor waives all claims and causes of action not commenced in accordance with this Section 12.06.

17.07 SERVICE OF NOTICE

A. Notice. Written notice under the Contract Documents by either the Contractor or Port may be served on the other party by personal service, electronic or facsimile transmission, or delivery service to the last address provided in writing to the other party. For the purpose of measuring time, notice shall be deemed to be received by the other party on the next business day following the sender's electronic or facsimile transmittal or delivery by delivery service.

17.08 RECORDS

- A. Contractor and Subcontractors to maintain records and cooperate with Port audit. The Contractor and Subcontractors of any tier shall maintain books, ledgers, records, documents, estimates, bids, correspondence, logs, schedules, emails, and other tangible and electronic data and evidence relating or pertaining to costs and/or performance of the Contract ("records") to such extent, and in such detail, as will properly reflect and fully support compliance with the Contract Documents and with all costs, charges, and other amounts of whatever nature. The Contractor shall preserve these records for a period of six (6) years following the date of Final Acceptance under the Contract. Within seven (7) days of the Port's request, both during the Project and for six (6) years following Final Acceptance, the Contractor and Subcontractors of any tier shall make available, at their office during normal business hours, all records for inspection, audit, and reproduction (including electronic reproduction) by the Port or its representatives; failure to fully comply with this requirement shall constitute a material breach of contract and a waiver of all claims by the Contractor and Subcontractors of any tier.
- B. Rights under RCW 42.56. The Contractor agrees, on behalf of itself and Subcontractors of any tier, that any rights under Chapter 42.56 RCW will commence at Final Acceptance, and that the invocation of such rights at any time by the Contractor or a Subcontractor of any tier, or their respective representatives, shall initiate an equivalent right to disclosures from the Contractor and Subcontractors of any tier for the benefit of the Port.

17.09 STATUTES

- A. Contractor to comply with Washington statutes. The Contractor shall abide by the provisions of all applicable statutes, regulations, and other laws. Although a number of statutes are referenced in the Contract Documents, these references are not meant to be, and are not, a complete list.
 - 1.Pursuant to RCW 39.06, "Registration, Licensing of Contractors," the Contractor shall be registered and licensed as required by the laws of the State of Washington, including but not limited to RCW 18.27, "Registration of Contractors," and shall satisfy all State of Washington bonding and insurance requirements. The Contractor shall also have a current state Unified Business Identifier number; have industrial insurance coverage for the Contractor's employees working in Washington as required by Title 51 RCW; have an Employment Security Department number as required by Title 50 RCW; have a state excise tax registration number as required in Title 82 RCW; and not be disqualified from bidding on any public works contract under RCW 39.06.010 (unregistered or unlicensed contractors) or RCW 39.12.065(3) (prevailing wage violations).
 - 2.The Contractor shall comply with all applicable provisions of RCW 49.28, "Hours of Labor."
 - 3. The Contractor shall comply with pertinent statutory provisions relating to public works of RCW 49.60, "Discrimination."
 - 4.The Contractor shall comply with pertinent statutory provisions relating to public works of RCW 70.92, "Provisions in Buildings for Aged and Handicapped Persons," and the Americans with Disabilities Act.
 - 5. Pursuant to RCW 50.24, "Contributions by Employers," in general, and RCW 50.24.130 in particular, the Contractor shall pay contributions for wages for personal services performed under this Contract or arrange for an acceptable bond.
 - 6. The Contractor shall comply with pertinent provisions of RCW 49.17, "Washington Industrial Safety and Health Act," and Chapter 296-155 WAC, "Safety Standards for Construction Work."

7.Pursuant to RCW 49.70, "Worker and Community Right to Know Act," and WAC 296-62-054 et seq., the Contractor shall provide to the Port, and have copies available at the Project site, a workplace survey or material safety data sheets for all "hazardous" chemicals under the control or use of Contractor or any Subcontractor of any tier.

8.All products and materials incorporated into the Project as part of the Work shall be certified as "asbestos-free" and "lead-free" by United States standards, and shall also be free of all hazardous materials or substances. At the completion of the Project, the Contractor shall submit certifications of asbestos-free and of lead-free materials certifying that all materials and products incorporated into the Work meet the requirements of this Section, and shall also certify that materials and products incorporated into the Work are free of hazardous materials and substances.

END OF SECTION

Project No. 201146.01 00 72 00 - 41

Contract No. 071742

1.01 SUMMARY

A. This Section includes requirements for the Contractor's insurance.

1.02 SUBMITTAL REQUIREMENTS

- A. Evidence of the required insurance within ten (10) days of the issued Notice of Award to the Contractor.
- B. Updated evidence of insurance as required until final completion.

1.03 COMMERCIAL GENERAL LIABILITY (CGL) INSURANCE

- A. The Contractor shall secure and maintain until Final Completion, at its sole cost and expense, the following insurance in carriers reasonably acceptable to the Port, licensed in the State of Washington, registered with the Washington State Insurance Commissioner, and possessing an A.M. Best rating of "A-, FSC six (6)" or better.
- B. The Port of Tacoma (Port) and the Northwest Seaport Alliance (NWSA) will be included as additional insureds for both ongoing and completed operations by endorsement to the policy using ISO Form CG 20 10 11 85 or forms CG 20 10 04 13 and CG 20 37 04 13 (or equivalent coverage endorsements). The inclusion of the Port and the NWSA as additional insureds shall not create premium liability for either the Port nor the NWSA.

Also, by endorsement to the policy, there shall be:

- 1. An express waiver of subrogation in favor of the Port;
- 2. A cross liabilities clause; and
- 3. An endorsement stating that the Contractor's policy is primary and not contributory with any insurance carried by the Port.
- C. If the Contractor, Supplier, or Subcontractors will perform any work requiring the use of a licensed professional, per RCW 18, the Contractor shall provide evidence to the Port of professional liability insurance in amounts not less than \$1,000,000.
- D. This insurance shall cover all of the Contractor's operations, of whatever nature, connected in any way with the Contract, including any operations performed by the Contractor's Subcontractors of any tier. It is the obligation of the Contractor to ensure that all Subcontractors (at whatever level) carry a similar program that provides the identified types of coverage, limits of liability, inclusion of the Port and the NWSA as additional insured(s), waiver of subrogation and cross liabilities clause. The Port reserves the right to reject any insurance policy as to company, form, or substance. Contractor's failure to provide, or the Port's acceptance of, the Contractor's certificate of insurance does not waive the Contractor's obligation to comply with the insurance requirements of the Contract as specifically described below:
 - Commercial General Liability Insurance on an Occurrence Form Basis including, but not limited to:
 - a. Bodily Injury Liability;
 - b. Property Damage Liability:
 - c. Contractual Liability;

- d. Products Completed Operations Liability;
- e. Personal Injury Liability;

Alternatively, a Commercial General Liability (CGL) policy is acceptable if all of the above coverages are incorporated in the policy and there are no marine exclusions that will remove coverage for either vessels or work done by or above or around the water.

- 2. Comprehensive Automobile Liability including, but not limited to:
 - a. Bodily Injury Liability;
 - b. Property Damage Liability;
 - c. Personal Injury Liability;
 - d. Owned and Non-Owned Automobile Liability; and
 - e. Hired and Borrowed Automobile Liability.
- Contractor's Pollution Liability (CPL) covering claims for bodily injury, property damage and cleanup costs, and environmental damages from pollution conditions arising from the performance of covered operations.
 - a. If the Work involves remediation or abatement of regulated waste to include, but not limited to asbestos containing materials, lead containing products, mercury, PCB, underground storage tanks, or other hazardous materials or substances, the CPL policy shall not exclude such coverage, or a specific policy covering such exposure shall be required from the Contractor and all Subcontractors performing such Work.
 - b. If the Work involves transporting regulated materials or substances or waste, a separate policy or endorsement to the CPL policy specifically providing coverage for liability and cleanup arising from an upset or collision during transportation of hazardous materials or substances shall be required from the Contractor and all Subcontractors performing such Work.
 - c. It is preferred that CPL insurance shall be on a true occurrence form without a sunset clause. However, if CPL insurance is provided on a Claims Made basis, the policy shall have a retroactive date prior to the start of this project, and this insurance shall be kept in force for at least three years after the final completion of this project. Alternatively, the contractor, at its option, may provide evidence of extended reporting period of not less than three (3) years in its place. The Contractor shall be responsible for providing the Port with certificates of insurance each year evidencing this coverage.
 - d. The Port and the NWSA shall be named as an additional insured(s) on the CPL policy.
- 4. Technology Professional Liability Errors and Omissions Insurance appropriate to the Consultant's profession and work hereunder, with limits not less than \$2,000,000 per occurrence. Coverage shall be sufficiently broad to respond to the duties and obligations as is undertaken by the Vendor in this agreement and shall include, but not be limited to, claims involving infringement of intellectual property, copyright, trademark, invasion of privacy violations, information theft, release of private information, extortion and network security. The policy shall provide coverage for breach response costs as well as regulatory fines and penalties as well as credit monitoring expenses with limits sufficient to respond to these obligations.

The policy shall include, or be endorsed to include, **property damage liability coverage** for damage to, alteration of, loss of, or destruction of electronic data and/or information "property" of the Agency in the care, custody, or control of the Vendor.

- E. Except where indicated above, the limits of all insurance required to be provided by the Contractor shall be not less than \$2,000,000 for each occurrence. If the coverage is aggregated, the coverage shall be no less than two times the per occurrence or per claim limit. However, coverage in the amounts of these minimum limits shall not be construed as to relieve the Contractor from liability in excess of such limits. Any additional insured endorsement shall NOT be limited to the amounts specified by this Contract, unless expressly waived in writing by the Port.
- F. Contractor shall certify that its operations are covered by the Washington State Worker's Compensation Fund. The Contractor shall provide its Account Number or, if self-insured, its Certificate of Qualification Number. The Contractor shall also provide evidence of Stop-Gap Employers' Liability Insurance.
- G. The Contractor shall furnish, within ten (10) days following issuance of the Notice of Award, a certificate of insurance satisfactory to the Port evidencing that insurance in the types and minimum amounts required by the Contract Documents has been secured. The Certificate of Insurance shall be signed by an authorized representative of the insurer together with a copy of the endorsement, which shows that the Port and the NWSA are named as additional insured(s).
- H. Contractor shall provide at least forty-five (45) days prior written notice to the Port of any termination or material change, or ten (10) day's-notice in the case of non-payment of premium(s).
- I. If the Contractor is required to make corrections to the Work after Final Completion, the Contractor shall obtain at its own expense, prior to the commencement of any corrective work, insurance coverage as required by the Contract Documents, which coverage shall be maintained until the corrections to the Work have been completed and accepted by the Port.

1.04 BUILDER'S RISK INSURANCE

A. Until Final Completion of the Work, the construction Work is at the risk of the Contractor and no partial payment shall constitute acceptance of the Work or relieve the Contractor of responsibility of completing the Work under the Contract.

B. To the extent the Work provided under this Contract does not include the construction. rehabilitation or repair of any dam, road or bridge, and whenever the estimated cost of the Work is less than \$25,000,000, the Port and Contractor acknowledge that the Port will purchase, or has purchased, from a company or companies lawfully authorized and admitted to do business in Washington, property insurance written on a Builder's Risk "all-risk" (including Earthquake and Flood with applicable sub-limits) or equivalent policy form to cover the course of construction in the amount of the full insurable value thereof. This property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made or until no person or entity other than the Port has an insurable interest in the property, whichever is later. Without further endorsement, the coverage afforded by this insurance includes the interests of the Port, the Contractor, and Subcontractors of any tier on the Project. Coverage for materials intended to be installed in the facility will be covered by the Builder's Risk policy. Losses up to the deductible amount, and payment of any deductible amount, shall be the responsibility of the Contractor. All tools and equipment not intended as part of the construction or installation (including but not limited to Contractor's equipment and tools) will NOT be covered by the policy.

To the extent the Work provided under this Contract involves any dam, roadway or bridge, the value of which exceeds \$250,000, or whenever the estimated cost of the Work is equal to or greater than \$25,000,000, Contractor will purchase from a company or companies lawfully authorized and admitted to do business in Washington, property insurance written on a Builder's Risk "all-risk" (excluding Earthquake and Flood with applicable sub-limits) or equivalent policy form to cover the course of construction in the amount of the full insurable value thereof. This Builder's Risk insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made or until no person or entity other than the Port has an insurable interest in the property, whichever is later. Contractor shall provide evidence satisfactory to the Port confirming the coverage afforded by this insurance shall include the interests of the Port, the Contractor, and Subcontractors of any tier on the Project. Coverage for materials intended to be installed in the facility will be covered by the Builder's Risk policy purchased by the Contractor. Losses up to the deductible amount, and payment of any deductible amount, shall be the responsibility of the Contractor.

In all instances, the Contractor shall obtain property insurance for all Contractor-owned equipment and tools and, in the event of loss, payment of any deductible amount shall be the responsibility of the Contractor.

PART 2 - PRODUCTS - NOT USED PART 3 - PRODUCTS - NOT USED

END OF SECTION

1.01 PREVAILING AND OTHER REQUIRED WAGES

- A. The Contractor shall pay (and shall ensure that all Subcontractors of any tier pay) all prevailing wages and other wages (such as Davis-Bacon Act wages) applicable to the Project.
- B. Pursuant to RCW 39.12, "Prevailing Wages on Public Works," no worker, laborer, or mechanic employed in the performance of any part of the Work shall be paid less than the "prevailing rate of wage" in effect as of the date that bids are due.
 - 1. Based on the Bid Date, the applicable effective date for prevailing wages for this Project is November 1, 2024.
- C. The State of Washington prevailing wage rates applicable for this public works Project, which is located in Pierce County, may be found at the following website address of the Department of Labor and Industries:

https://www.lni.wa.gov/licensing-permits/public-works-projects/prevailing-wage-rates/

- D. The schedule of the prevailing wage rates is made a part of the Contract Documents by reference as though fully set forth herein, and a printed copy of the applicable prevailing wage rates are also available for viewing at the Port Administration Building, located at 1 Sitcum Plaza, Tacoma, WA 98421 (253-383-5841). Upon request to the Procurement Department at procurement@portoftacoma.com, the Port will email or mail a hard copy of the applicable Journey Level prevailing wages for this Project.
- E. Questions relating to prevailing wage data should be addressed to the Industrial Statistician.

Mailing Address: Washington State Department of Labor and Industries

Prevailing Wage Office

P.O. Box 44540 Olympia, WA 98504

Telephone: (855) 545-8163

Facsimile: (360) 902-5300

If there is any discrepancy between the provided schedule of prevailing wage rates and the
published rates applicable under WAC 296-127-011, the applicable published rates shall
apply with no increase in the Contract Sum. It is the Contractor's responsibility to ensure
that the correct prevailing wage rates are paid.

F. Statement to Pay Prevailing Wages

- Prior to any payment being made by the Port under this Contract, the Contractor, and each Subcontractor of any tier, shall file a Statement of Intent to Pay Prevailing Wages with the Department of Labor and Industries for approval.
- 2. The statement shall include the hourly wage rate to be paid to each classification of workers entitled to prevailing wages, which shall not be less than the prevailing rate of wage, and the estimated number of workers in each classification employed on the Project by the Contractor or a Subcontractor of any tier, as well as the Contractor's contractor registration number and other information required by the Department of Labor and Industries.

- The statement, and any supplemental statements, shall be filed in accordance with the requirements of the Department of Labor and Industries. No progress payment shall be made until the Port receives such certified statement.
- G. The Contractor shall post, in a location readily visible to workers, at the Project site: (i) a copy of the Statement of Intent to Pay Prevailing Wages approved by the Industrial Statistician of the Department of Labor and Industries and (ii) the address and telephone number of the Industrial Statistician of the Department of Labor and Industries to whom a complaint or inquiry concerning prevailing wages may be directed.
- H. If a State of Washington prevailing wage rate conflicts with another applicable wage rate (such as Davis-Bacon Act wage rate) for the same labor classification, the higher of the two shall govern.
- I. Pursuant to RCW 39.12.060, if any dispute arises concerning the appropriate prevailing wage rate for work of a similar nature, and the dispute cannot be adjusted by the parties in interest, including labor and management representatives, the matter shall be referred for arbitration to the Director of the Department of Labor and Industries, and his or her decision shall be final and conclusive and binding on all parties involved in the dispute.
- J. Immediately following the end of all Work completed under this Contract, the Contractor and each Subcontractor of any tier, shall file an approved Affidavit of Wages Paid with the Department of Labor and Industries.
- K. The Contractor shall defend (at the Contractor's sole cost, with legal counsel approved by Port), indemnify, and hold the Port harmless from all liabilities, obligations, claims, demands, damages, disbursements, lawsuits, losses, fines, penalties, costs, and expenses, whether direct, indirect, including, but not limited to, attorneys' fees and consultants' fees and other costs and expenses, from any violation or alleged violation by the Contractor or any Subcontractor of any tier of RCW 39.12 ("Prevailing Wages on Public Works") or RCW Title 51 ("Industrial Insurance"), including, but not limited to, RCW 51.12.050.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

1.01 REQUIREMENTS APPLICABLE PORT-WIDE

- A. The Contractor shall submit, prior to the start of Work, a list of emergency contact numbers for itself and its Subcontractors, Suppliers, and manufacturer representatives. Each person on the Project site shall have a valid identification card that is tamper proof with laminated photo identification, such as one (1) of the following:
 - 1. State-issued Driver's license (also required if driving a vehicle)
 - 2. Card issued by a governmental agency
 - 3. Passport
 - 4. Pacific Maritime Association card
 - 5. Labor organization identification card
- B. Identification cards shall be visible while on the Project site or easily displayed when requested.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

Project No. 201146.01 00 73 63 - 1

Contract No. 071742

1.01 SCOPE

- A. The accompanying Drawings and Specifications show and describe the location and type of Work to be performed under this project. Work is more specifically defined on the drawings listed in Section 00 01 15.
 - The Work under this contract is to provide, furnish and install all labor, materials and equipment required to complete the work, installed, tested, and ready for use, and as described in these documents.
 - 2. The Parcel 86 Pipe Realignment Project consists of:
 - a. Replacing an existing 12" concrete pipe outfall with a new 15" corrugated high density polyethene (HDPE) pipe outfall and lowering the outfall from 14.0 feet to 10.0 feet elevation based on the Port of Tacoma Datum.
 - Replacing approximately 310 linear feet of storm drain piping with approximately 480 linear feet of new piping sized to convey flows generated by the contributing drainage areas.
 - c. Installing a stormwater treatement vault.

1.02 LOCATION

A. The work is located at:

3701 Taylor Way

Tacoma, WA 98421

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

1.01 SUMMARY

- A. This Section specifies work sequence and constraints.
- B. The purpose of the milestones, sequence and limitations of construction are to ensure that the Contractor understands the requirements and limitations on its work by the specific characteristics of the Contract, schedules and conducts work in a manner consistent with achieving these purposes, and complies with the construction schedule, the specific sequence, constraints, milestones and limitations of work specified.
- C. Sequence of construction. Plan the sequence of construction to accommodate all the requirements of the specifications. The Contract Price shall include all specified requirements as described in this Section.

1.02 CONTRACTOR ACCESS AND USE OF PREMISES

A. Activity Regulations

1. Ensure Contractor personnel deployed to the project become familiar with and follow all regulations or restrictions established by the Engineer.

B. Working Facility

 The Facility will remain in operation for the duration of construction. The Contractor shall conduct all items of the Work in such a manner as to prevent interference with the normal operations of the Facility.

C. Work Site Regulations

- Keep within the limits of work and assigned avenues of ingress and egress. Do not enter any areas outside the designated wdork location unless previously approved by the Engineer. The Contractor must comply with the following conditions:
 - a. Restore all common areas to a clean and useable condition that permits the resumption of Tenant operations after the Contractor ceases daily work.
 - Be responsible for control and security of Contractor-owned equipment and materials at the work site. Report to Port Security (phone (253) 383-9472) any missing/lost/stolen property.
 - c. Ensure all materials, tools and equipment will be removed from the site or secured within the designated laydown area at the end of each shift.

1.03 CONSTRAINTS - GENERAL

A. Constraints for Work at Site

1. Other:

- a. Do not operate motorized equipment on the beach below the ordinary high water line (ordinary high water line).
- b. Do not stockpile construction material waterward of the ordinary high water line.
- c. Accessing the site via barge parked in the waterway will not be allowed.
- d. Work within the shoreline must be completed by February 15, 2025.

- e. Limit the removal of native bankline vegetation to the minimum amount needed to construct the project.
- f. Retain all natural habitat features on the beach larger than twelve inches in diameter including trees, stumps, logs, and large rocks. These natural habitat features may be moved during construction but they must be placed near the preproject location before leaving the job site.
- g. Do not conduct project activities when the work area is inundated by tidal waters.
- h. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

Project No. 201146.01 Contract No. 071742 01 14 00 - 2

1.01 SUMMARY

A. Procedures for preparation and submittal of applications for progress payments.

1.02 PAYMENT PROCEDURES

- A. Monthly pay estimates shall clearly identify the work performed for the given time period based on the approved Schedule of Values.
 - 1. At the Pre-construction meeting, the Engineer and the Contractor shall agree upon a date each month when payment applications shall be submitted.
- B. For each pay estimate the Contractor shall submit the following:
 - 1. Completed Contractor invoice and updated Schedule of Values tracking sheet as required by Division 01 or as established by the Engineer.
 - 2. Baseline Project Schedule and narrative updated as required by Section 01 32 16 of the Project Manual.
 - 3. Completed "Amounts Paid to Subcontracts and Suppliers" showing total contract amount, amount paid this estimate, total paid to date, and balance owing.
 - 4. Completed "Conditional Release and Waiver of Liens and Claims."
 - 5. An estimated cashflow statement projecting the Contractor's monthly billings on the project shall be submitted with each payment application.
- C. Prior to submitting a payment application, the Contractor and Engineer shall meet each month to review the work accomplished to determine the actual quantities including labor, materials and equipment charges to be billed.
 - 1. Prior to the payment application meeting, the Contractor shall submit to the Engineer all measurement documentation as referenced in these contract documents; to include all measurement by weight, volume or field.
 - For all change work being done on a force account basis, the Contractor shall submit prior
 to meeting with Engineer all Force Account back-up documentation as required to process
 the payment application where Force Account work is being billed. The Engineer and the
 Contractor shall review the documentation at the payment application meeting to verify
 quantities and review the work accomplished.
 - 3. The Contractor shall bring a copy of all documentation to the pay application meeting with the Engineer.
 - 4. The Contractor shall submit the updated baseline project schedule for review prior to submitting the payment application to ensure the payment processing is not held up due to necessary schedule revisions.
- D. Following the Engineers' review, the Contractor shall submit the agreed upon pay estimate electronically, with complete supporting documentation, using Microsoft Dynamic 365, or as directed by the Engineer.

1.03 PAYMENT PRICING

- A. Pricing for the various lump sum or unit prices in the Bid Form, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the work in accordance with the requirements of the Contract Documents.
- B. Pricing also includes all costs of compliance with the regulations of public agencies having jurisdiction, including safety and health requirements of the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA).
- C. No separate payment will be made for any item that is not specifically set forth in the Bid Form, and all costs therefore shall be included in the prices named in the Bid Form for the various appurtenant items of work.
- D. All other work not specifically mentioned in the measurement and payment sections identified below shall be considered incidental to the work performed and merged into the various unit and lump sum prices bid. Payment for work under one item will not be paid for under any other item.
- E. The Port of Tacoma reserves the right to make changes should unforeseen conditions necessitate such changes. Where work is on a unit price basis, the actual quantities occasioned by such changes shall govern the compensation.

1.04 LUMP SUM MEASUREMENT

- A. Lump sum measurement will be for the entire item, unit of Work, structure, or combination thereof, as specified and as indicated in the Contractor's submitted bid.
 - 1. If the Contractor requests progress payments for lump sum items, such progress payments will be made in accordance with an approved Schedule of Values. The quantity for payment for completed work shall be an estimated percentage of the lump sum amount, agreed to between the Engineer and Contractor, payable in monthly progress payments in increments proportional to the work performed in amounts as agreed between the Engineer and the Contractor.

1.05 MEASUREMENT OF QUANTITIES FOR UNIT PRICES

A. Measurement Standards:

 All Work to be paid for at a contract price per unit measurement, as indicated in the Contractor's submitted bid, will be measured by the Engineer in accordance with United States Standard Measures.

B. Measurement by Weight:

1. Reinforcing steel, steel shapes, castings, miscellaneous metal, metal fabrications, and similar items to be paid for by weight shall be measured by scale or by handbook weights for the type and quantity of material actually furnished and incorporated into the Work.

- 2. Unless shipped by rail, material to be measured and paid for by weight shall be weighed on sealed scales regularly inspected by the Washington State Department of Agriculture's Weights and Measures Section or its designated representative. Measurement shall be furnished by and at the expense of the Contractor. All weighing, measuring, and metering devices shall be suitable for the purpose intended and shall conform to the tolerances and specifications as outlined in Washington State Department of Transportation Standard Specifications, Division 1, General Requirements, Article 1-09.2, Weighing Equipment.
- 3. Provide or utilize platform scales of sufficient size and capacity to permit the entire vehicle or combination of vehicles to rest on the scale platform while being weighed. Combination vehicles may be weighed as separate units provided they are disconnected while being weighed. Scales shall be inspected and certified as often as the Engineer may deem necessary to ascertain accuracy. Costs incurred as a result of regulating, adjusting, testing, inspecting, and certifying scales shall be borne by the Contractor.
- 4. A licensed weighmaster shall weigh all Contractor-furnished materials. The Engineer may be present to witness the weighing and to check and compile the daily record of such scale weights. However, in any case, the Engineer will require that the Contractor furnish weight slips and daily summary weigh sheets. In such cases, furnish a duplicate weight slip or a load slip for each vehicle weighed, and deliver the slip to the Engineer at the point of delivery of the material.
- 5. If the material is shipped by rail, the certified car weights will be accepted, provided only actual weight of material will be paid for and not minimum car weights used for assessing freight tariff. Car weights will not be acceptable for material to be passed through mixing plants. Material to be measured by weight shall be weighed separately for each bid item under which it is to be paid.
- 6. Trucks used to haul material being paid for by weight shall be weighed empty daily and at such additional times as the Engineer may require. Each truck shall bear a plainly legible identification mark. The Engineer may require the weight of the material be verified by weighing empty and loaded trucks on such other scales as the Engineer may designate.

C. Measurement by Volume:

- Measurement by volume will be by the cubic dimension indicated in the Contractor's submitted bid. Method of volume measurement will be by the unit volume in place or removed as shown on the Contract Drawings or as specified.
- When material is to be measured and paid for on a volume basis and it is impractical to determine the volume by the specified method of measurement, or when requested by the Contractor in writing and accepted by the Engineer in writing, the material may be weighed in accordance with the requirements specified for weight measurement. Such weights will be converted to volume measurement for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Resident Engineer and shall be agreed to by the Contractor before such method of measurement of pay quantities will be accepted.
- D. Measurement by Area: Measurement by area will be by the square dimension shown on the Contract Drawings or as specified. Method of square measurement will be as specified.
- E. Linear Measurement: Linear measurement will be by the linear dimension listed or indicated in the Contractor's submitted bid. Unless otherwise indicated, items, components, or Work to be measured on a linear basis will be measured at the centerline of the item in place.

F. Field Measurement for Payment:

- The Contractor shall take all measurements by providing equipment, workers, and survey crews as required to measure quantities in accordance with the provisions for measurement specified herein. No allowance will be made for specified tolerances.
- 2. The Engineer will verify all quantities of Work performed by the Contractor on a unit-price basis, for progress payment purposes.

1.06 REJECTED, EXCESS, OR WASTED MATERIALS

A. Quantities of material wasted or disposed of in a manner not called for under the Contract; rejected loads of material, including material rejected after it has been placed by reasons of the failure of the Contractor to conform to the provisions of the Contract; material not unloaded from the transporting vehicle; material placed outside the lines indicated on the Contract Drawings or established by the Engineer; or material remaining on hand after completion of the Work, will not be paid for, and such quantities shall not be included in the final total quantities. No additional compensation will be permitted for loading, hauling, and disposing of rejected material.

1.07 MEASUREMENT AND PAYMENT

A. Item #1: Mobilization and Demobilization

- 1. Payment for Mobilization and Demobilization shall be for preparatory work and operations performed by the Contractor including, but not limited to, those necessary for the movement of its personnel, equipment, supplies and incidentals to and from the project site; temporary facilities and controls; for the establishment and removal of its offices, buildings and other facilities necessary for work on the project; for other work and operations which it must perform or costs it must incur before beginning production work on the various items on the project site, and for removal of personnel, equipment, supplies, offices, building facilities, sheds, fencing, and other incidentals from the site.
- Mobilization and Demobilization shall be paid at the lump sum price listed in the Contractor's submitted bid. Incremental payment shall be made for each location as follows:
 - a. 40% after completion of 5% of the total contract amount of other bid items have been earned.
 - b. 40% after completion of 20% of the total contract amount of other bid items have been earned.
 - c. 20% after completion of all work on the project has been completed, including cleanup and acceptance of the project by the Port.

B. Item #2: Project Administration

- Item Description: The Work of this item includes all administrative costs associated with administering and supervising the project including, but not limited to supervision of personnel, coordination of all work activities, coordination of subcontractors and/or suppliers, preparation and transmittal of submittals, permit acquisitions, for premiums on bonds and insurance for the project, and project overhead.
- 2. Measurement: This item will be measured based on a percentage complete for the overall lump sum amount.

3. Payment: This item will be paid for at the Contract lump sum price as specified in the Contractor's submitted bid, in accordance with the approved Schedule of Values.

C. Item #3: General Requirements

- 1. Item Description: The Work of this item includes construction surveying, utility locate services, dewatering and steel plates.
- 2. Measurement: This item will be measured based on a percentage complete for the overall lump sum amount.
- 3. Payment: This item will be paid for at the Contract lump sum price as specified in the Contractor's submitted bid, in accordance with the approved Schedule of Values.

D. Item #4: TESC Measures

- 1. Item Description: The Work of this item includes Temporary Erosion and Sediment Control protocols.
- 2. Measurement: This item will be measured based on a percentage complete for the overall lump sum amount.
- 3. Payment: This item will be paid for at the Contract lump sum price as specified in the Contractor's submitted bid, in accordance with the approved Schedule of Values.

E. Item #5: Demolition and Excavation

- 1. Item Description: The Work of this item includes demolition and removal of existing pipe and catch basins as well as plugging of pipe to be abandoned. Excavation and hauling of excess clean material to a nearby Port owned parcel.
- 2. Measurement: This item will be measured based on a percentage complete for the overall lump sum amount.
- 3. Payment: This item will be paid for at the Contract lump sum price as specified in the Contractor's submitted bid, in accordance with the approved Schedule of Values.

F. Item #6: Storm Drain Piping

- Item Description: The Work of this item is to furnish and install 15" HDPE N12 Pipe.
 Trench excavation at depths of 4 feet and up to approximately 10 ft. Backfill using suitable excavated material and install warning tape. Install connections to manholes. Install 15" inline check valve.
- 2. Measurement: This item will be measured based on a percentage complete for the overall lump sum amount.
- 3. Payment: This item will be paid for at the Contract lump sum price as specified in the Contractor's submitted bid, in accordance with the approved Schedule of Values.

G. Item #7: Paving Replacement

- Item Description: The Work of this item includes the sawcutting, hauling and disposal of existing asphalt; applying new asphalt sealant to finished work; and the removal and replacement of rip rap at outfall
- Measurement: This item will be measured based on a percentage complete for the overall lump sum amount.

3. Payment: This item will be paid for at the Contract lump sum price as specified in the Contractor's submitted bid, in accordance with the approved Schedule of Values.

H. Item #8: Asphalt

- 1. Item Description: Asphalt unit cost per section 32 12 16 2.01
- 2. Measurement: This item will be measured by tons.
- Payment: This item will be paid for based on actual quantities for the period being billed.
- I. Item #9: Crushed Surfacing Top Course
 - 1. Item Description: CSTC unit cost per section 31 23 33 2.01.B.2
 - 2. Measurement: This item will be measured by tons.
 - 3. Payment: This item will be paid for based on actual quantities for the period being billed.
- J. Item #10: Crushed Surfacing Base Course
 - Item Description: CSBC unit cost per section 31 23 33 2.01.D
 - 2. Measurement: This item will be measured by tons.
 - 3. Payment: This item will be paid for based on actual quantities for the period being billed.

K. Item #11: Pipe Bedding

- Item Description: Gravel backfill for pipe zone bedding per section 31 23 33 2.01.B.3
- Measurement: This item will be measured by tons.
- Payment: This item will be paid for based on actual quantities for the period being billed.

L. Item #12: Structural Backfill

- 1. Structural Backfill unit cost per section 31 23 33 2.01.B.4
- 2. Measurement: This item will be measured by tons.
- Payment: This item will be paid for based on actual quantities for the period being billed.

M. Item #13: Catch Basins and Structures

- Item Description: The Work of this item includes the installation of a water treatment system and all catch basins shown on plans. Placement of quarry spalls and geotextiles. Placement of base course and imported backfill. Post-construction installation of catch basin filters.
- 2. Measurement: This item will be measured based on a percentage complete for the overall lump sum amount.
- 3. Payment: This item will be paid for at the Contract lump sum price as specified in the Contractor's submitted bid, in accordance with the approved Schedule of Values.
- N. Item #14: Trench Safety Systems.
 - 1. Item Description: The Work of this item includes shoring and safety systems for all trench excavations exceeding 4-foot depths.
 - 2. Measurement: This item will be measured as a lump sum unit.

- 3. Payment: This item will be paid for at the Contract lump sum price as specified in the Contractor's submitted bid.
- O. Item #15: Contaminated Soil Allowance
 - 1. Item Description: This allowance will be to cover fees assessed by the disposal facility for the disposal of contaminated soils.
 - Measurement: This item will be measured by tons.
 - Payment: This item will be paid for at the actual rate assessed by the disposal facility.
 Contractor will submit documentation in the form of weight tickets and reciepts for all
 contaminated soil disposed of at an approved disposal facility. This entire bid item may or
 may not be used.
- P. Item #16: Unforseen Conditions Contingency
 - 1. Item Description: This contingency will be for UNFORESEEN CONDITIONS for work unidentified at the time of bid and will be paid preferably as negotiated unit price(s) or lump sum(s). If unit prices or lump sums cannot be established, work will be paid on a time and materials basis per section 00 72 00 General Conditions Article 8.0. Work under this bid item shall be accomplished upon written direction from the Engineer as a Minor Change in Work. This entire bid item may or may not be used.
 - Measurement: This item will be measured based upon the method agreed upon for each Minor Change issued.
 - 3. Payment: This item will be paid for at the price agreed upon for each Change in Work issued by the Engineer in accordance with procedures noted in Section 01 26 00 Change Management Procedures.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

1.01 SUMMARY

A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

1.02 SUBMITTALS

- A. The Contractor shall submit for approval the following documentation to the Port for force account change orders:
 - 1. List of Labor Rates
 - a. For the Contractor and each subcontractor, a list of labor rates for each trade applicable to the scope of work to be performed. These submitted rates shall be broken down to include the base wage, fringes, FICA, SUTA, FUTA, industrial insurance, and medical aid premiums as stated in the General Conditions. The rates shall not contain any travel time, safety, loss efficiency factors, overhead, or profit. Rates shall be submitted for straight time, overtime, and double time in a form acceptable to the Engineer. Contractor shall provide proof of all labor rate costs as required by the Engineer, including the submission of a copy of the most current Workers Compensation Rate Notice from Labor & Industries and a copy of the Unemployment Insurance Tax Rate notice from the Employment Security Department.
 - If labor rates change during the course of the project or additional labor rates become required to complete the work, the Contractor shall submit new rates for approval.

2. List of Equipment.

- a. Submit for the Contractor and each subcontractor, a list of equipment and rates applicable to the scope of work to be performed. The equipment rates shall conform to the rates shown on Equipment Watch. A separate page from equipment watch detailing the hourly rate shall be submitted as backup documentation for each piece of equipment.
 - If the list of equipment and/or equipment rates changes during the course of the project or additional equipment becomes required to complete the work, the Contractor shall submit a new list and rates for approval.

1.03 METHOD TO CALCULATE ADJUSTMENTS TO CONTRACT PRICE

- A. One of the following methods shall be used:
 - 1. Unit Price Method:
 - 2. Firm Fixed Price Method (Lump Sum); or,
 - Time and Materials Method (Force Account).
- B. The Port preferred methods are firm fixed price or unit prices.

1.04 MINOR CHANGES IN THE WORK

A. Engineer will issue a written directive authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time.

1.05 PROPOSAL REQUESTS

- A. Port-Initiated Proposal Requests: The Engineer will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by Engineer are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Contractor shall submit a written proposal within the time specified in the General Conditions. The proposal shall represent the Contractor's offer to perform the requested work, and the pricing set forth within the proposal shall represent full, complete, and final compensation for the proposed change and any impacts to any other Contract Work, including any adjustments in the Contract Time.
 - Include a breakdown of the changed work in sufficient detail that permits the Engineer to substantiate the costs.
 - 1) Generally, the cost breakdown should be divided into the time and materials categories listed in the General Conditions under Article 8.02.B for either Lump Sum Proposals or Force Account Proposals.
 - 2) For Unit Price Proposals, include the quantity and description of all work involved in the unit pricing being proposed, along with a not to exceed total cost.
 - b. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or differing site conditions require modifications to the Contract, the Contractor may initiate a claim by submitting a request for a change to the Engineer.
 - 1. Notify the Engineer immediately upon finding differing conditions prior to disturbing the site.
 - 2. Provide follow-up written notification and differing site conditions proposal within the time frames set forth in the General Conditions.
 - 3. Provide the differing site condition change proposal in the same or similar manner as described above under 1.05.A.
 - 4. Comply with requirements in Section 00 26 00 Substitution Procedures if the proposed change requires substitution of one product or system for product or system specified.
 - Proposal Request Form: Use form acceptable to Engineer.

1.06 PROCEEDING WITH CHANGED WORK

- A. The Engineer may issue a directive instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order per the General Conditions, Article 8.01.E.
 - 1. The directive will contain a description of change in the Work and a not-to-exceed amount. It will designate the method to be followed to determine the change in the Contract Sum or the Contract Time.

1.07 CHANGE ORDER PROCEDURES

A. Issuance of Change Order

- 1. On approval of the Contractor's proposal, and following successful negotiations, the Engineer will issue a Change Order for signature by the Contractor and execution by the Engineer.
 - a. The Contractor shall sign and return the Change Order to the Engineer within four (4) days following receipt of the Change Order from the Engineer. If the Contractor fails to return the signed Change Order within the allotted time, the Engineer may issue a Unilateral Change Directive.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

Project No. 201146.01

01 26 00 - 3

Contract No. 071742

1.01 SUMMARY

- A. This section includes specifications for preparation, format, and submittal of Schedule of Values.
- B. The Schedule of Values will establish unit prices for individual items of work.
- C. The Schedule of Values will be the basis for payment of contract work.

1.02 PREPARATION

- A. To facilitate monthly pay requests, develop the Schedule of Values based on the Contractor's submitted Bid Items. The Schedule of Values shall be used to provide an allocation of the Work for measurement and payment to a level of detail to ensure accurate payment for the Work accomplished. The Schedule of Values is based on unit priced bid items and a breakdown of each lump-sum bid item. The total dollars for the Schedule of Values shall total the bid amount.
- B. Obtain the agreement of the Engineer on the Schedule of Values. No payment will be made prior to an agreed upon Schedule of Values.
- C. Include an updated version of the Schedule of Values as changes occur. Update the Schedule of Values to include:
 - 1. Dollars earned and percent complete for the current progress payment period,
 - 2. Dollars earned and percent complete to-date, excluding the current progress payment period,
 - 3. Total dollars earned and percent complete to-date,
 - 4. Total dollars remaining, and
 - 5. Changes resulting from Change Orders.
- D. The total value of the line items in the Schedule of Values plus any approved Change Orders shall be equal to the current approved contract price.
- E. The value of stored material shall be identified in the Schedule of Values with both a material-purchase activity and a separate corresponding installation activity in the Construction Schedule(s).
- F. Include as exhibits, drawings or sketches as necessary, to better define the limits of pay items that are in close proximity and that have no clear boundary in the Contract Drawings.

1.03 SUBMITTAL

- A. Submit preliminary Schedule of Values within 10 days of the effective date of the Notice to Proceed.
- B. Submit corrected Schedule of Values within 10 days upon receipt of reviewed Schedule of Values.
- C. At the Engineer's request, submit documentation substantiating the cost allocations for line items within the Schedule of Values.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 SCHEDULE OF VALUES

- A. Submit the Schedule of Values in a form acceptable to the Engineer.
- B. Provide updated Schedule of Values as required by the Engineer and as indicated in the Contract Documents.

END OF SECTION

Project No. 201146.01 01 29 73 - 2

Contract No. 071742

1.01 SCOPE

A. The purpose of this section is to provide the framework for communication between the Port and the Contractor by defining the types and timing of administrative tasks, including meetings and other items related to communications.

1.02 NOTICE TO PROCEED

- A. Contract execution will be made per the requirements of the Contract Documents. Once the contract has been executed and all pre-work submittals have been received, the Engineer will issue a Notice to Proceed (NTP).
 - 1. In certain instances, the Engineer may issue to the Contractor a Limited NTP for specified elements of the work described in these Contract Documents.
- B. The Contractor shall submit all pre-work submittals within 14 days of contract execution.
 - No contract time extension shall be granted for any delays in issuance of the NTP by the Engineer due to the Contractor's failure to provide acceptable submittals required by the Contract Documents.

1.03 COORDINATION

- A. The Contractor shall coordinate all its activities through the Engineer.
- B. The Contractor shall coordinate construction operations as required to execute the Work efficiently, to obtain the best results where installation of one part of the Work depends on other portions.

1.04 PROJECT MEETINGS

- A. Pre-Construction Meeting
 - After execution of the contract, but prior to commencement of any work at the site, a
 mandatory one time meeting will be scheduled by the Engineer to discuss and develop a
 mutual understanding relative to the administration of the safety program, preparation of
 the Schedule of Values, change orders, RFI's, submittals, scheduling prosecution of the
 work. Major subcontractors who will engage in the work shall attend.
 - 2. Suggested Agenda: The agenda will include items of significance to the project.
 - 3. Location of the Pre-Construction Meeting will be held at the Port of Tacoma Administration Building located at One Sitcum Plaza.
- B. Weekly Progress Meetings Progress meetings include the Contractor, Engineer, consultants and others affected by decisions made.
 - 1. The Engineer will arrange meetings, prepare standard agenda with copies for participants, preside at meetings, record minutes and distribute copies within ten working days to the Contractor, meeting participants, and others affected by decisions made.
 - a. The Engineer will approve submitted meeting minutes in writing within 10 working days.
 - Attendance is required for the Contractor's job superintendent, major subcontractors and suppliers, Engineer, and representatives of the Port as appropriate to the agenda topics for each meeting.

3. Standard Agenda

- a. Review minutes of previous meeting
- b. Review of work progress
- c. Field observations, problems, and decisions
- d. Identification of problems that impede planned progress
- e. Maintenance of Progress Schedule (3 weeks ahead; 1 week back)
- f. Corrective measures to regain projected schedules
- g. Planned progress during succeeding work period
- h. Coordination of projected progress
- i. Maintenance of quality and work standards
- j. Effect of proposed changes on progress schedule and coordination
- k. Demonstration that the project record drawings are up-to-date
- I. Other business relating to the work

C. Cost Meeting

 A separate cost meeting may be set up by the Engineer to discuss RFI's (or any other issues) that may cause scope, schedule or monetary changes to the contracts in more detail then necessary at the progress meeting. The Engineer will arrange, host and provide an agenda for cost meetings. Attendees would include the Engineer, Contractor's job superintendent and others as invited.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

1.01 SUMMARY

- A. The Port and Contractor shall use the Port Contract Management application (e-Builder®) for electronic information exchange throughout the duration of the Contract, as later described.
 - 1. e-Builder® is a web-based application accessed via the web.
 - 2. The Contractor will receive up to two separate user accounts for access to e-Builder®.
 - The joint use of this system is to facilitate and coordinate the electronic exchange of Requests for Information, Submittals, Change Order Proposals, Pay Applications, and project specific correspondence.

1.02 USER ACCESS LIMITATIONS

- A. Contractor's access to e-Builder® is granted and controlled by the Engineer.
 - 1. The users assigned by the Contractor to use e-Builder® shall be competent and experienced with the practices commonly employed in the industry for electronically submitting requests for information, submittals, product data, shop drawings and related items as required by the contract and the methods commonly used for project correspondence transmission and filing.
 - 2. Any users assigned by the Contractor whom the Engineer determines is incapable of performing the prescribed tasks in an accurate, competent and efficient manner will be removed upon request from the Engineer. The qualifications and identity of a replacement user shall be submitted within 24 hours for consideration by the Engineer. Once accepted by the Engineer, the user account will be modified accordingly.

1.03 CONTRACTOR TECHNOLOGY REQUIREMENTS

A. The Contractor is responsible for providing and maintaining web enabled devices capable of running the desktop version of the e-Builder® website effectively.

1.04 CONTRACTOR SOFTWARE REQUIREMENTS

- A. The Contractor is responsible for providing and maintaining the following:
 - 1. An office suite that is Microsoft Office 2013 compatible for generation and manipulation of correspondence.
 - 2. A program capable of editing, annotating and manipulating Adobe pdf files for inserting the Contractor's review stamp, clouding and adding notation to the files as necessary for review by the Engineer.

1.05 CONTRACTOR RESPONSIBILITY

A. Provide all the equipment, internet connections, software, personnel and expertise required to support the use of e-Builder® as described in the Contract documents.

1.06 PORT RESPONSIBILITY

- A. Provide the Contractor with the following:
 - 1. All forms necessary for application to obtain permissions to access e-Builder® as described above.
 - 2. Information, basic user guides and requirements on methods for using e-Builder®.

3. Instruction for the Contractor's staff utilizing e-Builder®.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 UTILIZATION OF E-BUILDER®

- A. The Contractor shall provide required information in a timely manner that also supports the project schedule and meets the requirements of the Contract.
- B. The Contractor shall provide and maintain competent and qualified personnel to perform the various tasks required to support the work within e-Builder®.
- C. The Port will not be liable for any delays associated from the usage of e-Builder® including, but not limited to: slow response time, Port maintenance and off-line periods, connectivity problems or loss of information. Under no circumstances shall the usage of e-Builder® software be grounds for a time extension or cost adjustment to the contract.

END OF SECTION

Project No. 201146.01 01 31 23 - 2

1.01 SUMMARY

A. This section includes the requirements to provide a preliminary schedule and construction progress schedule, bar chart type.

1.02 SUBMITTALS

- A. Within 14 days following execution of the contract, submit a baseline project schedule defining planned operations.
- B. If the baseline project schedule requires revision after review, submit revised baseline project schedule within 10 days.
- C. Within 20 days after review of baseline project schedule, submit draft of proposed complete baseline project schedule for review.
- D. Submit updated progress schedule monthly to the Engineer with each pay application as required in Section 01 20 00 Price and Payment Procedures.

1.03 QUALITY ASSURANCE

A. Scheduler: Contractor's personnel or Consultant specializing in Critical Path Method (CPM) scheduling with one year's minimum experience in scheduling construction work of a complexity comparable to this Project, and having use of computer facilities capable of delivering a detailed graphic printout within 48 hours of request.

1.04 SCHEDULE FORMAT

- A. The baseline project schedule shall be produced using the CPM format.
- B. Listings: In chronological order according to the start date for each activity. Identify each activity with the applicable specification section number.
- C. Sheet Size: Multiples of 11 x 17 (280 x 432 mm).

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 BASELINE SCHEDULE

- A. Prepare baseline project schedule in the form of a horizontal bar chart.
- B. The baseline project schedule shall include all the activities listed in the Schedule of Values and be directly related to items listed in the Bid Form. The Contractor is encouraged to add sufficient activities to facilitate a clear understanding of the means and methods planned for the various work items.
- C. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction and critical path. At a minimum it shall include and show the following:
 - A time scale showing the elementary work items needed to complete the work;
 - 2. Estimated time durations for each activity, defined as any single identifiable work step within the project;
 - 3. A graphical network diagram showing the logical sequence of activities, their precedence relationships, and estimated float or leeway available for each;

- 4. The different categories of work as distinguished by crew requirements, equipment requirements, and construction materials; and
- 5. The different areas of responsibility, such as distinctly separate or subcontracted work, and identifiable subdivisions of work.
- D. It shall be maintained and updated as necessary to accurately reflect past progress and the most probable future progress.
- E. Activities shown shall include submittals, milestones, and sufficient task breakdown for major components of work.
- F. Identify work of separate stages and other logically grouped activities.
- G. Provide sub-schedules to define critical portions of the entire schedule.
- H. Provide separate schedule of submittal dates for shop drawings, product data, samples, owner-furnished products, products identified, and dates reviewed submittals will be required from the Engineer. Indicate decision dates for selection of finishes.

3.02 PROGRESS SCHEDULE

- A. From the regularly-maintained baseline project schedule, progress schedules showing a three-week look-ahead, one-week look-back, shall be submitted and distributed at the weekly progress meetings. The progress schedule shall represent a practical plan to complete the work shown within the contract work window presented. At a minimum, the presentation, typically a Gantt-style chart, shall convey the task durations, a logical work sequence, task interdependencies, and identify important or critical constraints.
- B. Submittal and distribution of progress schedules will be understood to be the Contractor's representation that the scheduled work meets the requirements of the contract documents and that the work will be executed in the manner and sequence presented, and over the durations indicated.
- C. The scheduling, coordination, and execution of construction in accordance with the contract documents are the responsibility of the Contractor. The Contractor shall involve, coordinate, and resolve scheduling with all subcontractors, material suppliers, or others affected in development of the progress schedules.
- D. The progress schedule shall be used for coordination purposes for inspection and testing purposes as well as validation of work progress against the baseline schedule.

3.03 UPDATING SCHEDULE

- A. Maintain schedules to record actual start and finish dates of completed activities.
- B. Indicate progress of each activity to date of revision, with projected completion date of each activity.
- C. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- D. Indicate changes required to maintain Date of Substantial Completion.
- E. Submit reports required to support recommended changes.
- F. Contractor shall submit an updated progress schedule with each pay application and include a written narrative describing the overall progress of the work. The narrative shall include the following key aspects:

- 1. Progress in the last period.
- 2. Critical Path progress and schedule concerns.
- 3. Changes to schedule logic or sequencing of the work.

END OF SECTION

Project No. 201146.01 01 32 16 - 3

1.01 SUMMARY

A. This section includes the requirements to provide a submittal log and project submittals.

1.02 SUBMITTAL LOG

- A. Contractor shall, within 14 days of contract execution prepare and submit for Engineer approval a detailed log of all the submittals required under this Contract, along with any other submittals identified by the Port or Contractor. The log shall include, but not be limited to, schedules, required construction Work plans, equipment and material cut sheets, shop drawings, project record documents, test results, survey records, record drawings, results of QC testing, and all other items for which a submittal is required. The submittal log shall be organized by CSI Specification Division, and Section number and include the following information:
 - 1. Item Description
 - 2. Category
 - 3. Specification Section information of the applicable section
 - 4. After the submittal log is reviewed and approved by the Engineer, it shall become the basis for the submittal of all items by Contractor.

1.03 COMPLIANCE

A. Failure to comply with these requirements shall be deemed as the Contractor's agreement to furnish the exact materials specified or materials selected by the Engineer based on these specifications.

1.04 SHOP DRAWINGS AND MANUFACTURERS' LITERATURE

- A. The Port will not accept shop drawings that prohibit the Port from making copies for its own use.
- B. Shop drawings shall be prepared accurately and to a scale sufficiently large to indicate all pertinent features of the products and the method of fabrication, connection, erection, or assembly with respect to the Work.
- C. All drawings submitted to the Engineer for approval shall be drawn to scale as ANSI D.
- D. Required electronic formats for these drawings are as follows:
 - AutoCad DWG
 - 2. PDF Formatted to print to half-scale using 11x17 paper
- E. Catalog cuts or brochures shall show the type, size, ratings, style, color, manufacturer, and catalog number of each item and be complete enough to provide for positive and rapid identification in the field. General catalogs or partial lists will not be accepted. Manufacturers' original electronic files are required for submitting.

1.05 SUBMITTAL REVIEW

A. After review of each of Contractor's submittals, the submittal will be returned to Contractor with a form indicating one or more of the following:

- No Exceptions Taken Means, accepted subject to its compatibility with future submittals
 and additional partial submittals for portions of the work not covered in this submittal. But it
 does not constitute approval or deletion of specified or required items not shown in the
 partial submittal.
- 2. Make Corrections Noted Same as Item 1, except that minor corrections as noted shall be made by Contractor.
- 3. Reviewed Submittal has been reviewed by the Port, does not constitute approval, and the Contractor is responsible for requirements in submittal.
- 4. Review as Noted Submittal has to be reviewed by the Port with comments as noted.
- 5. Revise and Resubmit Means, rejected because of major inconsistencies or errors. Resolve or correct before next submittal.
- 6. Rejected Means, submitted material does not conform to the Contract Documents in a major respect (e.g., wrong material, size, capacity, model, etc.).
- B. Submittals marked "No Exceptions Taken," "Make Corrections Noted," or "Reviewed as Noted" authorizes Contractor to proceed with construction covered by those data sheets or shop drawings with corrections, if any, incorporated.
- C. When submittals or prints of shop drawings have been marked "Revise and Resubmit" or "Rejected," Contractor shall make the necessary corrections and submit required copies. Every revision shall be shown by number, date, and subject in a revision block, and each revised shop drawing shall have its latest revision numbers and items clearly indicated by clouding around the revised areas on the shop drawing.
- D. Submittals authorized by the Engineer do not in any case supersede the Contract Documents. The approval by the Engineer shall not relieve the Contractor from responsibility to conform to the Drawings or Specifications, or correct details when in error, or ensure the proper fit of parts when installed. A favorable review by the Port of shop drawings, method of work, or information regarding material and equipment Contractor proposes to furnish shall not relieve Contractor of its responsibility for errors therein and shall not be regarded as assumption of risk or liability by the Port or its officers, employees, or representatives. Contractor shall have no claim under the Contract on account of failure or partial failure, or inefficiency or insufficiency of any plan or method of work, or material and equipment so accepted. Favorable review means that the Port has no objection to Contractor using, upon its own full responsibility, the plan or method of work proposed, or furnishing the material and equipment proposed.
- E. It is considered reasonable that the Contractor's submittals shall be complete and acceptable by at least the second submission of each submittal. The Port reserves the right to deduct monies from payments due Contractor to cover additional costs for review beyond the second submission.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 PREPARATION OF SUBMITTALS

- A. The Contractor shall submit all shop drawings, catalog cuts, brochures and physical samples using Trimble Unity Construct (a web based construction management software). All post-document-generated notations such as notes, arrows, stamps, clouding, or other items, are required to be shown directly on the submittal document. Each submittal shall be accompanied by a transmittal developed within the Trimble Unity Construct software.
- B. A separate submittal shall be prepared for each product or procedure and shall be further identified by referencing the Specification Section and paragraph number and each submittal shall be numbered consecutively.
- C. Product submittals that cannot be accomplished electronically shall be submitted electronically without attachments, marked as being hand delivered, and accompanied by a printed version of a transmittal.
- D. Shop and detail drawings shall be submitted in related packages. All equipment or material details which are interdependent, or are related in any way, must be submitted indicating the complete installation. Submittals shall not be altered once marked "No Exceptions Taken" Revisions shall be clearly marked and dated. Major revisions must be submitted for approval.
- E. The Contractor shall thoroughly review all shop and detail drawings, prior to submittal, to assure coordination with other parts of the work.
- F. Components or materials which require shop drawings and which arrive at the job site prior to approval of shop drawings shall be considered as not being made for this project and shall be subject to rejection and removal from the premises.
- G. All submittal packages including, but not limited to, product data sheets, mix designs, shop drawings and other required information for submittal must be submitted, reviewed and approved before the relevant scheduled task may commence. It is the responsibility of the Contractor to provide the submittal information which may drive a task on the construction schedule to submit items well enough in advance as to provide adequate time for review and comment from the Engineer without adversely impacting the construction schedule.
- H. When completing the Trimble Unity Construct submittal form, a Date Due field is required to be completed. This field is intended to inform the Port of the urgency of the submittal. Failure of the Port to return the submittal by the date provided by the Contractor will not be considered grounds for a contract time extension.

3.02 PRE-WORK SUBMITTALS

- A. Prior to issuance of Notice to Proceed, the following submittals must be submitted and returned to the Contractor as No Exceptions Taken, Make Corrections Noted, Reviewed, or Reviewed as Noted.
 - 1. Per 00 72 00 and 01 32 16, Baseline Project Schedule
 - 2. Per 00 73 63, Emergency Contact Numbers
 - 3. Per 01 35 29, Health and Safety Plan (HASP)
 - 4. Per 01 35 29, Spill Prevention and Countermeasures Plan (SPCC)

5. Per 01 35 47, List of equipment and written statement that equipment meets the emissions standards of 01 35 47 paragraph 3.01

3.03 MAINTENANCE OF SUBMITTAL LOG

A. Prepare and submit for Port review a detailed submittal log conforming to the requirements of paragraph 1.02 of this section. When approved by the Engineer, use the submittal log to track the transmittal of submittals to the Engineer, the receipt of submittal comments from the Engineer, and all subsequent action with respect to each submittal. Provide an updated copy of the submittal log to the Engineer during each weekly progress meeting, unless otherwise approved by the Engineer.

END OF SECTION

Project No. 201146.01 01 33 00 - 4

DIVISION	SECTION/ PARAGRAPH	ITEM DESCRIPTION
00	00 72 00-3.16	PROJECT SCHEDULE
	00 73 63	EMERGENCY CONTACTS
01	01 33 00.10	SUBMITTAL LOG
	01 35 29-1.02	SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN
	01 35 29-1.02	HEALTH AND SAFETY PLAN
	01 35 47-1.02	EQUIPMENT LIST AND STATEMENT OF EMISSIONS STANDARDS COMPLIANCE
	01 57 13-1.04	CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN
	01 57 13-1.04	CONSTRUCTION SCHEDULE WITH TEMPORARY EROSION AND SEDIMENTATION CONTROL
	01 74 16	WASTE MANAGEMENT PLAN
02	02 96 00 - 1.02	TEMPORARY STORMWATER REROUTE PLAN
22	22 11 00-1.03	SHOP DRAWINGS, PRODUCT DATA ON GASKETS, FLEXIBLE SEALANT, BOLTS AND TIE RODS, FUSION EPOXY COATING, FLEXIBLE COUPLINGS, AND TRANSITION COUPLINGS
	22 11 00-2.03, 2.05	DUCTILE IRON PIPE (DIP), DIP JOINTS AND FITTINGS, HIGH DENSITY POLYETHYLENE (HDPE) PIPE, HDPE FITTINGS, PROTECTION FOR BURIED PIPE, COUPLINGS
	22 11 00-3.07	FIELD TEST REPORTS
31	31 23 19-1.03	DEWATERING WORK PLAN
	31 23 33-1.04	SHEETING AND SHORING PLAN, IMPORT MATERIAL TEST DATA

	31 32 00-1.04	PRODUCT DATA, WARRANTY AND INSTALLATION INSTRUCTIONS
32	32 12 16-1.03	SAMPLES
	32 12 16-1.03	SIGNED VERIFICATION FROM SOURCE, MIX DESIGN, MANUFACTURER'S CERTIFICATION OF VOC CONTENT, AND VERIFICATION THAT VOC CONTENT MEETS APPLICABLE REGULATIONS
	33 49 13-1.03	PRODUCT DATA AND SHOP DRAWINGS
	33 49 20-1.03	PRODUCT DATA AND SHOP DRAWINGS

END OF SECTION

1.01 SUMMARY

- A. The work includes the requirements for health and safety provisions necessary for all work at the site for this project. The work also includes compliance with all laws, regulations and ordinances with respect to safety, noise, dust, fire and police action, civil disobedience, security or traffic.
- B. The Contractor shall monitor site conditions for indications of identified and other potentially hazardous, dangerous, and/or regulated materials (suspicious material). Indicators of suspicious material include, but are not limited to, refuse, oily sheen or coloring on soil or water, or oily or chemical odors. If suspicious materials are encountered, the Contractor shall stop all work in that area and notify the Engineer immediately.
- C. The Contractor is alerted to the presence of odorous conditions during excavation and stockpiling of materials due to hydrogen sulfide and possibly other odorous gases. Section 00 31 26 Existing Hazardous Material Information describes odorous conditions encountered during site investigations. The Contractor shall take appropriate health and safety measures to assess concentrations of these gases, and mitigate as required. Mitigation measures shall include the use of personal protective equipment, if required.

1.02 SUBMITTALS

- A. Prior to Notice to Proceed, the Contractor shall provide a site specific Health and Safety Plan (HASP), which meets all the requirements of local, state and federal laws, rules and regulations. The HASP shall address all requirements for general health and safety and shall include, but not be limited to:
 - 1. Description of work to be performed and anticipated chemical and/or physical hazards associated with the work:
 - 2. Map of the site(s) illustrating the location of the anticipated hazards and areas of control for those hazards (including containments, exclusion/work zones, and contaminant reduction/decontamination zones);
 - 3. Hazardous material inventory and safety data sheets (SDSs) for all chemicals which will be brought on site;
 - 4. Signage appropriate to warn site personnel and visitors of anticipated site hazards;
 - 5. Documentation that the necessary workers have completed the required Hazardous Waste Operations and Emergency Response (HAZWOPER) training;
 - 6. Engineering controls/equipment to be used to protect against anticipated hazards;
 - 7. Personal protective equipment and clothing including head, foot, skin, eye, and respiratory protection;
 - 8. Procedures which will be used for:
 - a. Lockout/Tagout,
 - b. Fall protection,
 - c. Trenching and shoring,
 - d. Hot work.

- e. Explosive conditions due to methane,
- f. Oxygen deficient conditions,
- g. Asbestos and lead hazards,
- h. Suspicious materials and/or unidentified materials,
- Confined-space entry (could include dewatering storage tanks, manholes, or other items),
- Confined-space rescue, and
- k. Odorous conditions and toxic gases;
- 9. Exposure monitoring to be used to evaluate actual hazards compared with anticipated conditions, including but not limited to arsenic exposure assessment;
- 10. Site housekeeping procedures and personal hygiene practices;
- 11. Personnel and equipment decontamination plan;
- 12. Railroad safety procedures;
- 13. Administrative controls:
- 14. Emergency plan including locations of and route to nearest hospital;
- 15. Medical surveillance program for site personnel before, during, and after completion of site work;
- 16. Recordkeeping including:
 - a. Documentation of appropriate employee training (e.g., Hazardous Waste Operations and Emergency Response [HAZWOPER] 40-hour training for staff involved with excavation and handling of soil),
- 17. Name and qualification of person preparing the HASP and person designated to implement and enforce the HASP:
- 18. Excavation, stockpiling, and truck loading procedures;
- 19. Lighting and sanitation; and
- 20. Signatory page for site personnel to acknowledge receipt, understanding, and agreement to comply with the HASP.
- B. Prior to the start of any Work, the Contractor shall provide a site specific Spill Prevention, Control and Countermeasures (SPCC) Plan, which meets all the requirements of local, state and federal laws, rules and regulations.
- C. Contractor may submit the HASP and SPCC Plan as one comprehensive document or may submit the plans as separate documents.
- D. The Contractor shall include in the HASP recent requirements associated with the State's COVID-19 Job Site Requirements as noted at in the Appendix or online at https://www.governor.wa.gov/sites/default/files/Phase%201%20Construction%20COVID-19%20Safety%20Requirements%20%28final%29.pdf.

1.03 POTENTIAL CHEMICAL HAZARDS

A. Site Contaminants

1. The Contractor must provide site workers with Hazard Communication standard information for potential site contaminants (in accordance with WAC 296-843). The Contractor shall ensure that all site workers are aware of and understand this information. Additional information shall also be provided by the Contractor, as necessary, to meet the Hazard Communication Standard and HASP requirements as noted in WAC 296-901-14010 and 296-843. Workers shall be instructed on basic methods or techniques to assist in detecting suspicious material.

B. Potential Exposures Routes

- Ingestion: Inadvertent transfer of site contaminants from hands or other objects to the
 mouth could occur if site workers eat, drink, smoke, chew tobacco, or engage in similar
 activities in work areas. This could result in ingestion of site contaminants. Precautions to
 prevent accidental or inadvertent ingestion of hazardous materials will be included in the
 HASP.
- C. Chemical hazards may also result from Contractor operations resulting in inadvertent release of fuel, oil, or other chemicals in a manner that would expose workers.

1.04 POTENTIAL PHYSICAL AND OTHER HAZARDS

- A. The Work of the Contractor is described elsewhere in these specifications. Precautions to prevent all anticipated physical and other hazards, including heavy equipment, shall be addressed in the HASP.
- B. Specific aspects of construction resulting in physical hazards anticipated for this project include, but are not limited to the following:
 - 1. Work over or adjacent to water, presenting hazards of falling into water, hypothermia from exposure to the elements, and drowning;
 - Major hazards associated with earthwork impacts from moving construction vehicles and trucks, noise, thermal stress, contact with unguarded machines, excavation hazards (i.e., cave-in, utility, etc.), strains from heavy lifting, and reduced visibility and communications difficulties in work area; and
 - 3. Operation of equipment, including excavators, loaders, and related equipment, presenting hazards of entrapment, ensnarement, and being struck by moving parts.

C. Other anticipated physical hazards:

- 1. Heat stress, such as that potentially caused by impermeable clothing (may reduce the cooling ability of the body due to evaporation reduction);
- 2. Cold stress, such as that potentially caused during times when temperatures are low, winds are high, especially when precipitation occurs during these conditions;
- 3. Biological hazards, such as mold, insect stings, or bites, poisonous plants (i.e., poison oak, sumac, etc.); and
- 4. Trips and falls.

PART 2 - PRODUCTS

2.01 PRODUCTS SPECIFIED FOR HEALTH AND SAFETY

A. Provide the equipment and supplies necessary to support the work as described in the site-specific HASP. Equipment and supplies may include, but are not limited to:

- 1. Enclosure equipment (for dust and asbestos fiber control);
- 2. Fencing and barriers;
- Warning signs and labels;
- 4. Trenching equipment;
- 5. Fire extinguishers;
- 6. Equipment to support hot work;
- 7. Equipment to support lockout/tagout procedures;
- 8. Personal protective equipment (hard hats, foot gear, skin, eye, and respiratory protection);
- 9. Area and personnel exposure monitoring equipment;
- 10. First aid equipment;
- 11. Spill response and spill prevention equipment; and
- 12. Field documentation logs/supplies.

PART 3 - EXECUTION

3.01 WORK AREA PREPARATION

- A. Contractor shall comply with health and safety rules, regulations, ordinances promulgated by the local, state, and federal government, the various construction permits, and other sections of the Contract Documents. Such compliance shall include, but not be specifically limited to: any and all protective devices, equipment and clothing; guards; restraints; locks; latches; switches; and other safety provisions that may be required or necessitated by state and federal safety regulations. The Contractor shall determine the specific requirements for safety provisions and shall have inspections and reports by the appropriate safety authorities to be conducted to ensure compliance with the intent of the regulations.
- B. Contractor shall inform employees, subcontractors and their employees of the potential danger in working with any potentially regulated materials, equipment, soils and groundwater at the project site.
- C. Contractor shall perform whatever work is necessary for safety and be solely and completely responsible for conditions of the job site, including safety of all persons (including employees of the Engineer, Engineer's Representative, and Contractor) and property during the Contract period. This requirement applies continuously and is not limited to normal working hours.
- D. The Engineer's review of the Contractor's performance does not include an opinion regarding the adequacy of, or approval of, the Contractor's safety supervisor, the site-specific HASP, safety program or safety measures taken in, on, or near the job site.
- E. Accidents causing death, injury, or damage must be reported immediately to the Engineer and the Port Security Department in person or by telephone or messenger. In addition, promptly report in writing to the Engineer all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.
- F. If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing within 24 hours after occurrence, to the Engineer, giving full details of the claim.

3.02 SITE SAFETY AND HEALTH OFFICER

- A. Contractor shall provide a person designated as the Site Safety and Health Officer, who is thoroughly trained in rescue procedures, has a minimum current 40-hour HAZWOPER certification (minimum), and trained to use all necessary safety equipment, air monitoring equipment, and gas detectors. The person must be available and/or present at all times while work is being performed, and conduct testing, as necessary.
- B. The Site Safety and Health Officer shall be empowered with the delegated authority to order any person or worker on the project site to follow the safety rules. Failure to observe these rules is sufficient cause for removal of the person or worker(s) from this project.
- C. The Site Safety and Health Officer is responsible for determining the extent to which any safety equipment must be utilized, depending on conditions encountered at the site.

3.03 GENERAL SAFETY GUIDELINES FOR HAZARDOUS GASES

- A. The generally accepted procedure to protect the worker from the effects of the dangers from hazardous gases is through the use of four safeguard measures:
 - Test the atmosphere: Before entering a trench, underground vault, or any other
 excavation, the atmosphere shall be tested to detect any adverse environmental conditions
 with a gas detector instrument. Test instruments shall be properly maintained and
 calibrated. The test shall be conducted from top to bottom of the excavation or every four
 (4) feet.
 - 2. Ventilate all confined spaces: Before entry and during the entire time workers are in the confined space. Forced ventilation is the generally accepted procedure.
 - 3. Use appropriate safety equipment: All personnel shall be trained to operate the appropriate safety equipment that are to be utilized during the course of their work. It is the responsibility of the Contractor's Site Safety and Health Officer to ascertain that all safety equipment is being used when appropriate.
 - 4. Provide backup safety personnel: Prior to any personnel entering an excavation or confined space, a separate individual shall be positioned outside the space.
- B. Safety Monitoring Instrumentation: The Safety and Health Officer shall have appropriate instruments (detector[s]) to test for oxygen deficiency and for the presence of methane gas, hydrogen sulfide, and/or other known or suspected vapors and gases. The Site Safety and Health Officer shall periodically calibrate the instruments, regularly test the excavation or space areas and other work areas for safe working conditions, and ensure that appropriate safety equipment is available.

3.04 SUPPLEMENTAL SAFETY PROGRAM FOR GASES

- A. Supplemental to the Contractor's regular safety program, the Contractor shall develop and institute procedures to inform all workers at the site of the potential for the presence of methane and other landfill gases emanating from the natural decomposition of refuse buried at or near the job site, and the importance of safety precautions to ensure the safety of workers and the public.
- B. Recommended Precautions: In addition to conforming to safety rules and regulations of governmental authorities having jurisdiction, the Contractor shall conform to the following minimum precautionary measures:

- 1. Frequently monitor for all possible hazardous gases, oxygen deficiency and other known or suspected vapors and gases.
- 2. Prohibit smoking in or near open excavations, exposed refuse, and in the vicinity of underground pipe laying activities. Smoking will be permitted only in those areas designated by the Site Safety and Health Officer.
- In the event toxic gas is present in sufficient quantities to trigger a gas detection alarm, the Contractor shall immediately evacuate all personnel from the area until determined safe by the Site Safety and Health Officer.
- 4. Do not use explosives.
- 5. Do not leave refuse exposed overnight, unless otherwise approved by the Engineer. Any refuse exposed during construction activities shall be covered with at least a 6-inch layer of earth, tarps, or membrane.
- 6. Do not weld in trenches, enclosed areas, or over refuse unless performed in areas tested and approved by the Site Safety and Health Officer.
- 7. Construction equipment used in excavation activities and/or refuse removal operations shall be equipped with vertical exhaust and spark arresters.
- 8. Electric motors utilized in excavation areas and below ground shall be explosion-proof.
- 9. As construction progresses, all pipe openings and valves shall be closed as soon as installed to prevent the migration of gases through the pipeline system.
- C. Suggested Measures: If not already included in the Contractor's standard safety practices, the Contractor shall add the following measures to their safety program:
 - 1. Workers shall be cautioned on the possibility of collapsing excavations during construction operations near and in open excavations particularly in refuse-filled areas. Anyone working near the edge of deep excavations should be secured with a safety belt, harness, or limit line to preclude the possibility of falling into the opening. Refuse filling operations and compaction is quite variable and therefore may not provide the same slope stability as excavations in native soils.
 - Any personnel working near the edge of well excavations or similar construction should wear a harness securely attached to a lanyard. The lanyard shall be made as short as possible and securely fastened to a safe object.
 - 3. Safe and suitable ladders that project 2 feet above the top of the trench shall be provided for all trenches over 4 feet in depth. A minimum of one ladder shall be provided for each 25 feet of open trench, and be so located that workers in the trench need not move more than 25 feet to a ladder.
 - 4. No worker shall be allowed to work alone in an excavation. An individual shall be positioned outside the excavation, but within eyesight of the workers in the excavation, and assist them should an emergency develop.
 - 5. Work upwind of an excavation where possible, unless the excavation is constantly monitored and declared safe.
 - 6. Workers should avoid contact with exposed refuse where possible.
 - 7. No excavation or drilled hole greater than 2 feet deep shall be left unattended or open overnight unless it is securely covered in a manner acceptable to the Engineer.

- 8. Fire extinguishers with a rating of at least A, B, and C shall be available onsite.
- 9. Startup and shutdown of equipment shall be avoided in areas of exposed refuse.
- 10. Personnel in an open excavation or in the presence of landfill gas shall be fully clothed with appropriate personal protection equipment. Workers shall immediately vacate the excavation if gases are detected therein, and shall not be permitted to re-enter the excavation unless satisfactory precautionary measures are implemented.

3.05 SPILL PREVENTION AND CONTROL

- A. The Contractor shall be responsible for prevention, containment and cleanup of spilling petroleum and other chemicals/hazardous materials used in the Contractor's operations. All such prevention, containment and cleanup costs shall be borne by the Contractor.
- B. The Contractor is advised that discharge of oil, fuel, other petroleum, or any chemicals/hazardous materials from equipment or facilities into state waters or onto adjacent land is not permitted under state water quality regulations.
- C. In the event of a discharge of oil, fuel or chemicals/hazardous materials into waters, or onto land with a potential for entry into waters, containment and cleanup efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work. Cleanup shall include proper disposal of all spilled material and used cleanup materials.
- D. The Contractor shall, at a minimum, take the following measures regarding spill prevention, containment and cleanup:
 - Fuel hoses, lubrication equipment, hydraulically operated equipment, oil drums and other
 equipment and facilities shall be inspected regularly for drips, leaks or signs of damage,
 and shall be maintained and stored properly to prevent spills. Proper security shall be
 maintained to discourage vandalism.
 - All land-based chemical, oil and products' storage tanks shall be diked, contained and/or located so as to prevent spills from escaping into the water. Dikes and containment area surfaces shall be lined with impervious material to prevent chemicals or oil from seeping through the ground and dikes.
 - 3. All visible floating sheen shall be immediately contained with booms, dikes or other appropriate means and removed from the water prior to discharge into state waters. All visible spills on land shall be immediately contained using dikes, straw bales or other appropriate means and removed using sand, sawdust or other absorbent material, which shall be properly disposed of by the Contractor. Waste materials shall be temporarily stored in drums or other leak-proof containers after cleanup and during transport to disposal. Waste materials shall be disposed offsite in accordance with applicable local, state and federal regulations.
 - 4. In the event of any oil or product discharges into public waters, or onto land with a potential for entry into public waters, the Contractor shall immediately notify the Port Security at their listed 24-hour response number:
 - a. Port Security: 253-383-9472
- E. The Contractor shall maintain the following materials (as a minimum) at each of the project sites:
 - 1. Oil-absorbent booms: 100 feet;

- 2. Oil-absorbent pads or bulk material, adequate for coverage of 200 square feet of surface area;
- 3. Oil-skimming system; and
- 4. Oil dry-all, gloves, and plastic bags.

END OF SECTION

Project No. 201146.01 01 35 29 - 8

1.01 SUMMARY

A. This Section discloses procedures to follow if unknown regulated materials are encountered.

1.02 NOTIFICATION AND SUSPENSION

- A. In the event the Contractor detects the presence of potentially regulated materials not previously identified in this specification, the Contractor shall stop work and immediately notify the Port. Following such notification by the Contractor, the Port shall in turn notify the various governmental and regulatory agencies concerned with the presence of regulated materials, if warranted. Depending upon the type of materials identified, the Port may suspend work in the vicinity of the discovery under the provisions of General Conditions.
 - 1. Following completion of any further testing necessary to determine the nature of the materials involved, the Port will determine how the material shall be managed. Although the actual procedures used in resuming the work shall depend upon the nature and extent of the regulated material, the following alternate methods of operation are foreseen as possible:
 - a. Contractor to resume work as before the suspension.
 - Contractor to move its operations to another portion of the work until measures to eliminate any hazardous conditions can be developed and approved by the appropriate regulatory agencies.
 - c. The Port to direct the Contractor to dispose or treat the material in an approved manner.
 - d. The Port to terminate or modify the Contract accordingly, for unforeseen conditions.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

1.01 SUMMARY

- A. Soils that cannot be reused onsite and are anticipated to be exported to an off-site facility must have a completed soil profile prior to export. The Port will conduct testing of material as defined further in this specification. The Contractor is responsible for any additional testing necessary to satisfy requirements of the Contractor's receiving facility.
- B. Soils excavated within the project area, as shown on the drawings, are anticipated to be free of regulated material; however, should the Contractor identify soil that cannot be reused as part of the project, the Contractor shall notify the Engineer to determine if the soil requires special handling.
 - Soil with unexpected regulated material, as identified by visual and/or olfactory methods, shall be segregated from other excavated material until such time as appropriate testing and analysis can be completed by the Port. Upon completion of the soil profile, the Engineer will inform the Contractor of any special handling requirements based on the results.
 - Soil beyond construction excavation limits will not require excavation unless free draining
 product is observed or other special conditions exist; in which case the Engineer will direct
 the Contractor in additional excavation. Soils determined to require special handling will be
 hauled and disposed of at an approved disposal facility.
- C. No soil shall be removed from the site without prior notification to the Engineer. The notification shall include:
 - 1. An estimate of the number of truck-trips, the haul destination, and the period in which these trips will be made (e.g., 20 truck-trips to the Waste Management Facility over the two-week period beginning on March 1, 2012).

1.02 DEFINITIONS

- A. Olfactory Indications (methods): Of or relating to the sense of smell. Soils containing petroleum and other volatile constituents typically exhibit characteristic odors that can be detected (and sometimes identified) by smell.
- B. Regulated Material: Any chemical, physical, biological, or radiological substance that does not occur naturally in the environment, or that occurs at concentrations higher than natural background levels, and is regulated by agencies as to the disposal/recycling facility(ies) the material can and cannot go (i.e., EPA, Department of Ecology, Tacoma-Pierce County Health Department).
- C. Soil (waste) Profile: A characterization of the chemical and physical properties of soil material designated for off-site disposal, including the presence of pollutants and their concentrations as measured by approved laboratory analytical methods. A profile is required by the receiving permitted disposal or recycling facility.

01 35 43.19 - 1

D. Special Handling: Refers to hauling and disposal of soils that cannot be reused in place as backfill or as general fill at another (off-site) location due to the presence of pollutants in concentrations above allowable limits. Such soils must be hauled to and managed at a permitted disposal facility.

Project No. 201146.01

- E. Type A Regulated Soil: Soil that must be removed from the Project site and has been determined by the Engineer to contain pollutants in concentrations that exceed state or federal dangerous or hazardous designations (respectively), or other special Port-determined criteria. Type A Regulated Soil requires disposal at an approved Subtitle C hazardous waste landfill.
- F. Type B Regulated Soil: Soil that must be removed from the Project site and has been determined by the Engineer to contain pollutants in concentrations that are below dangerous or hazardous levels, but could negatively impact the quality of air, waters of the state, soils or sediments, or pose a threat to the health of humans or other living organisms, depending on where the soil is disposed. Type B Regulated Soil requires disposal an approved Subtitle D solid waste landfill.
- G. Type C Regulated Soil: Soil that must be removed from the Project site and has been determined by Engineer to contain unknown constituent(s) and/or in unknown concentration(s) and requires further analysis and characterization. Type C Regulated soil will require disposal at an approved Subtitle C hazardous waste landfill or Subtitle D solid waste landfill if additional soil characterization indicates special handling is required.
- H. Type D Soil: Soil determined by the Engineer not to require special handling with regard to this Contract. Classification of material as Type D Soil by the Port is not a certification nor does it release the Contractor of liability or obligation to meet any disposal or storage facility acceptance or testing requirements.
- Unexpected Regulated Material: Regulated material unexpectedly found in an excavation or in other locations where there is no prior knowledge, information, or history to indicate possible spills or releases of regulated material.
- J. Visual Indications (methods): A preliminary evaluation of the potential presence of contamination based on visual observation. For example, soils containing petroleum are frequently discolored or stained relative to non-petroleum impacted native soils or clean fill.

1.03 HEALTH AND SAFETY

A. The Contractor is required to implement all health and safety provisions as required by Specification 01 35 29 – Health, Safety and Emergency Response. These provisions include any special monitoring, personal protective equipment, or work plans to accommodate regulated soil or material special handling. Use of environmental characterization data may not be appropriate for health and safety purposes.

1.04 SUBMITTALS

- A. Prior to excavation of any subsurface materials, the Contractor shall submit a Soils Management Plan to the Engineer. The Soils Management Plan must be approved by the Engineer prior to any excavation of subsurface materials. The Soils Management Plan must include the following:
 - 1. Identification of all soil disposal facilities anticipated to be used for soils that are determined to be Type A or Type B Regulated Soil.
 - 2. Identification of all fill sites, disposal/recycling facilities and/or end uses anticipated to be used for soil determined to be Type D Soil in accordance with paragraph 3.02 of this section.
 - 3. Contingency for delivery and placement of Type C Regulated Soil at an on-site soil stockpile area.

- 4. Contingency for managing soil/debris encountered during excavation that may disqualify soil for disposal or recycle at the anticipated facilities.
- 5. General description of how equipment operators, safety staff and other applicable on-site personnel will identify and respond to soil containing potentially regulated material.
- 6. Contractor shall coordinate with the Engineer to facilitate handling of regulated soil in accordance with this specification.
- 7. Description of all haul routes to be used on the project.
- B. A completed soil profile prior to export to an off-site receiving facility.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 EXCAVATION/TESTING

- A. The field-testing for soil to be exported offsite will be performed by the Port and will result in the following classification of material:
 - 1. Type A Regulated Soil as defined in 1.02(E) of this Section
 - 2. Type B Regulated Soil as defined in 1.02(F) of this Section
 - 3. Type C Regulated Soil as defined in 1.02(G) of this Section
 - 4. Type D Soil as defined in 1.02(H) of this Section
- B. Contractor shall give Port no less than one week notice for sampling export soil prior to disposal offsite. Contractor shall anticipate at least two weeks for lab results.
- C. Laboratory turnaround times may require additional time for analytical results; therefore, Contractor should coordinate with Engineer well in advance of anticipated disposal date. Samples that are required to have "rush" analysis performed due to the Contractor's failure to disclose the anticipated disposal date shall have the difference in service fees paid by the Contractor, or the Contractor may delay the disposal until the standard analysis turnaround time is complete, at no additional cost to the Port.

3.02 TRANSPORTATION AND OFF-SITE DISPOSAL OF SOILS

- A. The Contractor shall be responsible for handling, re-handling, loading, transporting, and legal off-site removal of all waste materials and excavated soils not reused onsite.
 - 1. Contractor shall ensure that transport truck gross weight meets federal and/or state Department of Transportation (DOT) requirements and the requirements of the receiving facility, whichever is more stringent.
 - 2. Contractor shall take measures to prevent debris from being spilled from trucks or tracked from the site to local streets. Contractor shall sweep streets adjacent to the site as necessary or as directed by the Engineer.
 - 3. Contractor shall ensure that any vehicle transporting materials offsite are properly labeled and placarded in accordance with federal and state DOT requirements.
- B. Type A Regulated and Type B Regulated Soil shall be hauled to an approved facility by the Contractor for disposal.

- C. Type C Regulated Soil is of unknown origin or special circumstances. Type C Regulated Soil shall be hauled to an on-site segregated stockpile area. The Contractor shall protect the material from weather and other disturbances once stockpiled. The Port will inform the Contractor of the soil profile following additional analysis of the suspect material (as needed), and the soil will be categorized as either Type A Regulated, Type B Regulated or Type D Soil and disposed of accordingly.
- D. Type D Soil that is not reused onsite shall be hauled by the Contractor to a site determined by the Contractor. If the receiving/disposal facility requires additional testing or certification of this soil, Contractor shall complete these requirements, at no additional cost to the Port. The Port will not certify or declare the material suitable for unrestricted use.

3.03 OTHER REQUIREMENTS

- A. Type A, Type B or Type C Regulated Soil may be, upon approval of the Engineer, temporarily stockpiled within the construction area. Contractor shall place an impervious liner beneath the soil and securely cover the stockpile with waterproof covering (e.g., plastic sheeting). Additional measures (e.g., berm, jersey barriers, silt fence, etc.) may be required to minimize soil runoff from the stockpile area. The soil shall be removed prior to completion of Work.
- B. Contractor shall provide the Engineer with all hauling receipts (or copies of receipts) from the disposal facility for all Type A, Type B or Type C Regulated Soil at least weekly.
- C. The Engineer may shut down excavation activities should unexpected regulated material be encountered during excavation.

END OF SECTION

1.01 SUMMARY

A. The Work includes the requirements to provide air and noise control measures until Final Completion of the Work.

1.02 SUBMITTALS

A. Prior to Notice to Proceed, the Contractor shall submit a list of equipment to be used on the project and written certification that all equipment on the list and any additional equipment, including Contractor's, subcontractors or supplier's equipment, shall meet the requirements of 3.01 below.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 AIR POLLUTION CONTROL

- A. The Contractor shall meet or exceed EPA Tier 2 off-road diesel engine emission standards for off-road equipment >= 25hp and meet or exceed EPA 1994 on-road diesel engine emission standards for on-road equipment except as follows:
 - 1. Equipment being used in an emergency or public safety capacity
- B. The Contractor shall not discharge smoke, dust, and other hazardous materials into the atmosphere that violate local, state or federal regulations.
- C. No vehicles can idle for more than 5 consecutive minutes, except as follows:
 - 1. Idling is required to bring or maintain the equipment to operating temperature;
 - 2. Engine idling is necessary to accomplish work for which the equipment was designed (i.e. operating a crane); or
 - 3. Idling vehicles being used in an emergency or public safety capacity.
- D. The Contractor shall minimize nuisance dust by cleaning, sweeping, vacuum sweeping, sprinkling with water, or other means. Equipment for this operation shall be on the job site or available at all times.

3.02 NOISE CONTROL

- A. The Contractor shall comply with all local controls and noise level rules, regulations and ordinances which apply to work performed pursuant to the Contract.
- B. All internal combustion engines used on the job shall be equipped with a muffler of a type recommended by the manufacturer.

END OF SECTION

1.01 SUMMARY

- A. The Work shall consist of the procedures to be followed in the event that cultural and/or historical resources are inadvertently discovered during the projects activities.
- B. The project is located in an area previously inventoried for cultural and historical resources; however it is possible that additional, previously unidentified archaeological resources and/or skeletal remains could be inadvertently discovered during project activities. In the event that prehistoric, historic-era archaeological materials or skeletal remains are discovered, the appropriate protection measures and protocols described in this section must be followed.
- C. The Port will provide archaeological monitoring by or under the guidance of a professional archaeologist (archaeologist).
 - 1. All ground disturbing activities in native soils must be observed by the archaeologist.

1.02 REFERENCES

- A. The rules, requirements, and regulations that apply to this Work include, but are not necessarily limited to the following:
 - Port of Tacoma "Archaeological Monitoring and Inadvertent Discovery Plan"

1.03 AUTHORITY OF ARCHAEOLOGIST

- A. At any time, when the archaeologist determines that possible cultural resources or skeletal remains might be present, they have the authority to stop work, secure the area of the find and determine a work stoppage zone. This area shall remain protected until further decisions can be made regarding the work site.
- B. The archaeologist will stand in close proximity of the construction equipment to view subsurface deposits as they are exposed and will be in close communication with the equipment operators to ensure adequate opportunity for observation and documentation. The monitor will coordinate the depths of the lifts with the Port and the Contractor.
- C. The archaeologist will be provided the opportunity to screen excavated sediments and matrix samples when this is judged to be useful.
- D. Archaeological monitoring will proceed until it can be determined by the archaeologists that skeletal remains or other cultural resources are not likely to be impacted by construction activities.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 PROTOCOLS FOR DISCOVERY OF ARCHAEOLOGICAL RESOURCES

- A. In the event that archaeological resources are encountered within the project, the following actions will be taken:
 - 1. All ground disturbing and construction activity at the specific location will stop and the area will be protected via temporary fencing or other appropriate measures.
 - 2. The Contractor's work supervisor will be notified immediately.
 - 3. Contact the PORT's Engineer and Environmental Project Manager immediately.

- 4. A work stoppage zone, as determined by the Archaeologist and PORT, will be established.
- 5. The PORT's Environmental Project Manager will contact the appropriate agencies where the discovery is located as well as the Washington State Department of Archaeology and Historic Preservation (DAHP) the Puyallup Tribe (TRIBE) and the U.S. Army Corps of Engineers (Corp).
- 6. The Work Stoppage Zone will remain protected until further decisions can be made regarding the area.
- 7. The Contractor will be allowed to continue ground disturbing and other construction activities outside of the established work stoppage zone.

3.02 PROTOCOLS FOR DISCOVERY OF HUMAN REMAINS

- A. In the event of that human remains are encountered within the project, the following actions, consistent with RCWs 68.50.645, 27.44.055 and 68.60.055 will be taken:
 - 1. All ground disturbing and construction activity at the specific location will stop and the area will be protected via temporary fencing or other appropriate measures. The remains will not be touched, moved or further disturbed.
 - 2. The Contractor's work supervisor will be notified immediately.
 - 3. Contact the Port's Engineer and Environmental Project Manager immediately.
 - 4. The Environmental Project Manager will notify the county medical examiner / coroner and local law enforcement.
 - 5. A Work Stoppage Zone will be determined and remain protected until further decisions can be made regarding the area.
 - 6. The Contractor will be allowed to continue ground disturbing and other construction activities outside of the established work stoppage zone.

3.03 PROTOCOLS FOR CONFIDENTIALITY

- A. In the event of that human remains or cultural resources are discovered within the project area, the Port and the Contractor shall keep and maintain all information regarding any discovery confidential.
 - 1. At no time shall the Contractor contact the media, any third party or otherwise share information regarding the discovery with any member of the public.
 - 2. If the Contractor is contacted by the media or the public regarding any discovery, they shall refrain from comment, and contact the Port's Environmental Project Manager immediately.

END OF SECTION

1.01 PERMITS, CODES, AND REGULATIONS

- A. The following permits/approvals have been applied for (or are on file) and incorporated into the Contract:
 - 1. State Environmental Policy Act (SEPA) Compliance
 - 2. Shoreline Management Act / Critical Areas Compliance
 - 3. Hydraulic Code Compliance
 - 4. Section 404 of CWA and Section 10 of RHA Compliance
 - 5. Section 106 of NHPA Compliance
- B. Conform with the requirements of listed permits and additional or other applicable permits, codes, and regulations as may govern the Work.
- C. Obtain and pay fees for licenses, permits, inspections, and approvals required by laws ordinances, and rules of appropriate governing or approving agencies necessary for proper completion of Work (other than those listed under item 1.01.A above and Special Inspections called for by the International Building Code).
- D. Conform with current applicable codes, regulations and standards, which is the minimum standard of quality for material and workmanship. Provide labor, materials, and equipment necessary for compliance with code requirements or interpretations, although not specifically detailed in Drawings or specifications. Be familiar with applicable codes and standards prior to bidding.
- E. Process through Engineer, request to extend, modify, revise, or renew any of the permits (listed in 1.01.A above). Furnish requests in writing and include a narrative description and adequate Drawings to clearly describe and depict proposed action. Do not contact regulatory agency with requests for permit extensions, modifications, revisions, or renewals without the prior written consent of the Engineer.

1.02 VARIATIONS WITH CODES, REGULATIONS AND STANDARDS

- A. Nothing in the Drawings and specifications permits Work not conforming to codes, permits, or regulations. Promptly submit written notice to the Engineer of observed variations or discrepancies between the Contract Documents and governing codes and regulations.
- B. Appropriate modifications to the Contract Documents will be made by Change Order to incorporate changes to Work resulting from code and/or regulatory requirements. Contractor assumes responsibility for Work contrary to such requirements if Work proceeds without notice.
- C. Contractor is not relieved from complying with requirements of Contract Documents which may exceed, but not conflict with requirements of governing codes.

1.03 COORDINATION WITH REGULATORY AGENCIES

- A. Coordinate Work with appropriate governing or regulating authorities and agencies.
- B. Provide advance notification to proper officials of Project schedule and schedule revisions throughout Project duration, in order to allow proper scheduling of inspection visits at proper stages of Work completion.

C. Regulation coordination is in addition to inspections conducted by Engineer. Notify Engineer at least 48 hours in advance of scheduled inspections involving outside regulating officials, to allow Engineer to be present for inspections.

1.04 COORDINATION WITH WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

- A. Notify Enforcement Officer HPAapplications@dfw.wa.gov at least 3 days prior to start of construction.
- B. Notify Officer HPAapplications@dfw.wa.gov within 7 days of completion of project. See Notification Requirements per provision three of the Hydraulic Project Approval (HPA).

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

Project No. 201146.01 01 41 00 - 2

1.01 SUMMARY

A. This section includes requirements relating to referenced standards.

1.02 QUALITY ASSURANCE

- A. For products or workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard of date of issue specified in this section, except where a specific date is established by applicable code.
- C. Should specified reference standards conflict with Contract Documents, request clarification from the Engineer before proceeding.
- D. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of the Engineer shall be altered by the Contract Documents by mention or inference otherwise in any reference document.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

1.01 QUALITY CONTROL FOR COMPLIANCE:

A. The Contractor shall perform such detailed examination, inspection, quality control and assurance of the Work as to ensure that the Work is progressing and is being completed in strict accordance with the Contract Documents. The Contractor shall plan and lay out all Work in advance of operations so as to coordinate all Work without delay or revision. The Contractor shall be responsible for inspection of portions of the Work already performed to determine that such portions are in proper condition to receive subsequent Work. Under no conditions shall a portion of Work proceed prior to preparatory work having been satisfactorily completed. The Contractor shall ensure that the responsible Subcontractor has carefully examined all preparatory work and has notified the Contractor (who shall promptly notify the Port in writing) of any defects or imperfections in preparatory work that will, in any way, affect completion of the Work.

1.02 QUALITY ASSURANCE - CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop Drawings or as instructed by the manufacturer.
- G. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.03 TOLERANCES

- A. Monitor fabrication and installation tolerance control of Products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Engineer before proceeding.
- C. Adjust Products to appropriate dimensions; position before securing Products in place.

1.04 TESTING SERVICES

- A. Tests, inspections and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities.
 - Neither observations by an inspector retained by the Port, the presence or absence of such inspector at the site, nor inspections, tests, or approvals by others, shall relieve the Contractor from any requirement of the Contract Documents, nor is any such inspector authorized to change any term or condition of the Contract Documents.

- B. Necessary materials testing shall be performed by an independent testing laboratory during the execution of the Work and paid for by the Port of Tacoma, unless otherwise specified. Access to the area necessary to perform the testing and/or to secure the material for testing, shall be provided by the Contractor.
- C. Testing does not relieve Contractor from performing work to contract requirements.
- D. Re-testing required because of non-conformance to specified requirements will be charged to the Contractor by deducting testing charges from the Contract Sum via Change Order.
- E. Material testing for initial material approval will be performed by an independent, certified laboratory and paid for by the Contractor. These tests must be dated within six (6) months of the submittal date.
- F. Subsequent sampling and testing, required as the work progresses to ensure continual control of materials and compliance with all requirements of the Contract documents, shall be the responsibility of the Port, except as required by other sections of these Specifications.

1.05 MANUFACTURER'S FIELD SERVICES

- A. When specified in individual specification sections, require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up equipment, test, and adjust and balance equipment as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Engineer 30 days in advance of required observations. Observer subject to approval of Engineer.
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

1.01 SUMMARY

- A. This section includes requirements relating to the following:
 - 1. Temporary utilities,
 - 2. Temporary telecommunications services,
 - 3. Temporary sanitary facilities,
 - 4. Temporary Controls: Barriers, enclosures, and fencing, and
 - 5. Field offices.

1.02 TEMPORARY UTILITIES

- A. Provide and pay for all electrical power, lighting, water, heating and cooling, and ventilation required for construction purposes. Contractor is responsible for getting required permits and meters from the City of Tacoma.
- B. Existing facilities may not be used.
- C. Use trigger-operated nozzles for water hoses, to avoid waste of water.

1.03 TELECOMMUNICATIONS SERVICES

A. Provide, maintain, and pay for telecommunications services to field office at time of project mobilization. It is the Contractor's responsibility to be able to receive phone calls and emails at the job site.

1.04 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. Maintain daily in clean and sanitary condition.
- C. At end of construction, return facilities to same or better condition as originally found.

1.05 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for Port's use of site, and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building.
- C. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.06 FENCING

- A. Construction: Contractor's option.
- B. Provide 6 ft. (1.8 m) high fence around construction site; equip with vehicular gates with locks.

1.07 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to final inspection.
- B. Clean and repair damage caused by installation or use of temporary work.

C. Restore existing facilities used during construction to original condition.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

Project No. 201146.01 01 50 00 - 2

1.01 SUMMARY

- A. This section includes requirements relating to the following:
 - 1. Access roads
 - 2. Parking
 - Construction parking controls
 - 4. Traffic Control
 - 5. Flares and lights
 - 6. Haul routes
 - 7. Maintenance
 - 8. Removal, repair
 - 9. Mud from site vehicles

PART 2 - PRODUCTS

2.01 SIGNS, SIGNALS, AND DEVICES

A. Traffic Cones and Drums, Flares and Lights: As approved by local jurisdictions.

PART 3 - EXECUTION

3.01 PREPARATION

A. Clear areas, provide surface and storm drainage of road, parking, area premises, and adjacent areas.

3.02 ACCESS TO SITE

- A. Contractor shall conduct all business through the gate assigned by the Engineer.
 - The Contractor may be required to relocate entry and related work areas as required by Port Operations.
- B. Provide unimpeded access for emergency vehicles. Maintain 20 foot (6 m) width driveways with turning space between and around combustible materials.
- C. Provide and maintain access to fire hydrants free of obstructions.

3.03 PARKING

A. All Contractor's employee cars and work vehicles will be parked on-site as designated by the Engineer.

3.04 CONSTRUCTION PARKING CONTROL

- A. Control vehicular parking to prevent interference with public traffic and parking, access by emergency vehicles, and Port operations.
- B. Prevent parking on or adjacent to access roads or in non-designated areas.

3.05 HAUL ROUTES

A. Confine construction traffic to designated haul routes.

3.06 MAINTENANCE

- A. Maintain traffic and parking areas in a sound condition free of excavated material, construction equipment, Products, mud, snow, and ice.
- B. Maintain existing paved areas used for construction. Promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.

3.07 REMOVAL, REPAIR

- A. Repair existing facilities damaged by use, to original condition.
- B. Repair damage caused by installation.

3.08 PUBLIC STREET AND ONSITE ROADWAY CLEANING

- A. The Contractor shall be responsible for preventing dirt and dust escaping from trucks and other vehicles operating on or departing the project site by sweeping, covering dusty loads, washing truck tires, and all other reasonable methods.
- B. In the event that the above requirements are violated and no action is taken by the Contractor after notification of infraction by the Engineer, the Port reserves the right to have the streets, roadways, and other paved surfaces in question cleaned by others and have the expense of the operation charged to the Contractor.

END OF SECTION

Project No. 201146.01 01 55 00 - 2

1.01 SUMMARY

- A. The Work shall consist of planning, installing, inspecting, maintaining and removing Temporary Erosion and Sediment Control (TESC) Best Management Practices (BMPs) to prevent pollution of air and water; and to control, respond to, and dispose of eroded sediment and turbid water during the term of the Contract.
- B. These TESC requirements shall apply to all areas associated with the Work, including but not limited to the following:
 - 1. Work areas:
 - 2. Equipment and material storage areas;
 - Staging areas;
 - 4. Stockpiles; and
 - 5. Discharge points within or adjacent to the work areas that are impacted by stormwater runoff from the site.
- C. Acceptance of TESC plans does not constitute an approval of permanent Work or drainage design (e.g., size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.).
- D. Contractor shall read and conform to all requirements set forth in Washington Department of Ecology's (Ecology) Phase I Municipal Stormwater Permit (MS4) for projects less than one acre.

1.02 REFERENCES

- A. The rules, requirements, and regulations that apply to this Work include, but are not necessarily limited to the following:
 - 1. Washington Department of Ecology, "Stormwater Management Manual for Western Washington." current version.
 - 2. Washington Department of Ecology Phase I Municipal Stormwater Permit (MS4), current version.
 - 3. Washington State Department of Transportation, current version, Standard Specification M41-10, Division 8-01 Erosion Control and Water Pollution Control.
 - 4. Pierce County Stormwater and Site Development Manual, current version (if applicable).

1.03 SUBMITTALS

- A. Prior to the start of any construction activities, a Construction Stormwater Pollution Prevention Plan (SWPPP), as required by the MS4.
 - 1. Contractor shall comply with a Contractor provided project SWPPP.
 - Contractor shall be responsible for updating the project SWPPP during construction to reflect the required changes to BMPs and personnel, as needed, to comply with the MS4 at no additional cost to the Port.
- B. Safety Data Sheet (SDS) for any dust palliative product.

- C. A copy of all Contractor site inspection logs at a time interval (e.g., weekly, monthly) specified by the Engineer.
- D. Water Management Plan/Temporary Dewatering Plan.

1.04 AUTHORITY OF ENGINEER

- A. The Engineer has the authority to limit the surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and fill operations, as determined by analysis of project conditions; and to direct the Contractor to provide immediate permanent or temporary pollution control measures to minimize impacts to adjacent streams or other watercourses, lakes, ponds, and other areas of water impoundment.
- B. In the event that areas adjacent to the work area are suffering degradation due to erosion, sediment deposit, water flows, or other causes, the Engineer may stop construction activities until the Contractor rectifies the situation.

PART 2 - PRODUCTS

2.01 DUST CONTROL

A. Dust palliative for dust control proposed by the Contractor and approved by the Engineer.

PART 3 - EXECUTION

3.01 GENERAL

- A. The Port is subject to a Phase I Municipal Stormwater Permit (MS4). The Contractor shall be responsible for compliance with the Department of Ecology Western Washington Stormwater Management Manual, Volume II, Construction Stormwater Pollution Prevention for the duration of the project.
- B. In the event of conflict between these requirements and pollution control laws, rules, or regulations of other federal, state, or local agencies, the more restrictive laws, rules, or regulations shall apply as determined by the Engineer.
- C. No project discharge of water shall be allowed that exceeds the regulated pollutant levels in Ecology's NPDES permit associated with the Project.
- D. Contractor shall be solely responsible for all BMP modifications and upgrades to comply with the MS4 and the requirements of this Section, at no additional cost to the Port.
- E. Contractor shall be solely responsible for any damages and fines incurred because of Contractor, subcontractor, or supplier actions in implementing the requirements of this Section.
- F. The Contractor shall be solely responsible for schedule impacts incurred because of Contractor, subcontractor, or supplier actions in implementing the requirements of this Section.

3.02 TEMPORARY EROSION AND SEDIMENT CONTROL DEVELOPMENT

- A. Contractor shall prepare and submit a site-specific SWPPP prior to initiating ground disturbing activities.
 - The SWPPP describes construction activities and sequencing, and the proposed Temporary and Permanent Erosion and Sediment Control measures. If there are any changes to BMPs or personnel on the site, Contractor must update the SWPPP and be prepared to submit the SWPPP to the Port and Ecology upon request.

- The SWPPP shall consist of planning, installing, inspecting, maintaining, and removing TESC BMPs per Volume II of the Stormwater Management Manual for Western Washington (current version) or equivalent. The BMPs shown in the Drawings are the minimum required to prevent pollution of air and water, to control peak volumetric flow rates and velocity of stormwater, and to control, respond to, and dispose of eroded sediment and turbid water during the term of the Contract.
- 3. A SWPPP template is available to the Contractor for this purpose. The template was prepared by the Port to meet part of the National Pollution Discharge Elimination System (NPDES) stormwater permit requirements for the project. Contractor may use the applicable Port template to prepare the project SWPPP or prepare their own SWPPP. If the Contractor elects to prepare their own SWPPP, it must meet or exceed the control measures required by Ecology (reference Ecology's Stormwater Management Manual for Western Washington, current version).
- 4. If Contractor chooses to write a SWPPP separate from the Port-provided SWPPP, it must comply with all of the requirements set forth by the CSGP.
- B. Contractor shall develop project-specific TESC BMPs and incorporate them into the SWPPP.Contractor shall address the following issues as part of developing and implementing the BMPs:
 - 1. TESC BMPs must meet the requirements in Ecology's Volume II of the Stormwater Management Manual for Western Washington (current version) or equivalent.
 - 2. TESC notes and details shown in the Drawings and the information in this Section form a basis of the minimum requirements for a TESC Plan. Contractor shall develop a TESC Plan specific to the construction schedule and proposed means and methods prior to commencing construction activities for the duration of the Project.
- C. Contractor shall inspect the existing system and report to the Engineer the levels of existing material prior to installation of TESC BMPs.

3.03 TEMPORARY EROSION AND SEDIMENT CONTROL IMPLEMENTATION

- A. Contractor is responsible for implementing and updating the SWPPP including TESC BMPs.
 - 1. Contractor shall inspect the TESC measures daily and maintain these measures to ensure continued proper functioning for the duration of the Project.
 - 2. Contractor will be responsible for documenting TESC site inspections on a weekly basis in areas of active construction and on a monthly basis in areas that have undergone stabilization. Contractor shall keep records of the inspections on site.
 - 3. During the construction period the Contractor shall, at no additional cost to the Port, upgrade and/or maintain TESC measures as needed, based on Contractor means and methods, work sequencing, and changing site conditions (e.g., changes to impervious surface coverage, proximity of work to storm conveyance systems, storm events, etc.). Contractor shall modify these measures for changing site conditions and update the SWPPP to document all modifications made.
- B. Contractor shall clean all stormwater components affected by construction debris prior to Work completion, per TESC BMPs for catch basin maintenance. The cleaning process shall not flush sediment-laden water into a downstream system.

- C. Contractor shall ensure that water, or a dust palliative and a dispensing subcontractor, if needed, is available for project use. It is the responsibility of the Contractor to develop and adhere to appropriate safety measures pertaining to the palliative use. This also includes ensuring the dispensing subcontractor develops and adheres to the appropriate safety measures, if a dispensing subcontractor is used. Water used for dust suppression shall not be applied at such a rate or in a location that it will generate runoff from the site.
- D. Areas of exposed soils, including embankments, which will not be disturbed for two days during the wet season (October 1 through April 30) or seven days during the dry season (May 1 through September 30), shall immediately be stabilized by the Contractor with an Ecology-approved TESC measure (e.g., seeding, mulching, plastic covering, etc.).
- E. TESC measures in an inactive area shall be inspected and maintained by the Contractor until the area is permanently stabilized.
- F. In the event that additional temporary erosion and pollution control measures are required due to the Contractor's negligence, carelessness, or failure to install permanent controls as a part of the Work as scheduled or as ordered by the Engineer, such work shall be performed by the Contractor at its own expense.
- G. Contractor shall remove all TESC facilities, install permanent site surfacing improvements and permanent BMPs with minimal disturbance, and shall clean stormwater facilities prior to Work completion.

END OF SECTION

Project No. 201146.01 01 57 13 - 4

Contract No. 071742

1.01 SUMMARY

A. This section includes the requirements to provide product data under the applicable specification section.

1.02 SUBMITTALS

- A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
 - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

PART 2 - PRODUCTS

2.01 NEW PRODUCTS

A. Provide new products unless specifically required or permitted by the Contract Documents.

2.02 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

PART 3 - EXECUTION

3.01 TRANSPORTATION AND HANDLING

- A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- B. Transport and handle products in accordance with manufacturer's instructions.
- C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- D. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.02 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Prevent contact with material that may cause corrosion, discoloration, or staining.
- H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

END OF SECTION

Project No. 201146.01 01 60 00 - 2

Contract No. 071742

1.01 SUMMARY

- A. This section includes information on warranty, operation and maintenance manuals, and as built documentation.
- B. Prior to requesting final inspection, the Contractor shall assure itself that the project is complete in all aspects.

PART 2 - PRODUCTS

2.01 WARRANTY

- A. The Contractor warrants the labor, materials and equipment delivered under the contract to be free from defects in design, material, or workmanship, and against damage caused prior to final inspection. Unless otherwise specified, this warranty extends for a period of one (1) year from the date of Substantial Completion.
- B. The Contractor shall promptly (within 48-hours) repair or replace all defective or damaged items delivered under the contract. The Contractor will haul away all defective or damaged items prior to Substantial Completion.
- C. In the event of equipment failure, during such time or in such a location that immediate repairs are mandatory, the Contractor shall respond promptly, irrespective of time. If the Contractor is not available, the Port will effect repairs. The Contractor shall then reimburse the Port for parts and labor necessary to correct deficiencies as defined within the warranty clause and time.

PART 3 - EXECUTION

3.01 FINAL DOCUMENTS

- A. Final Survey
 - See Section 01 71 23 Field Engineering for Final Survey requirements. The Final Survey shall be completed and submitted to the Engineer within 30 days of Substantial Completion. Final Survey must be complete and accepted by the Engineer before Final Completion is issued.
- B. The following Certificates shall be submitted by the Contractor prior to Final Completion:
 - 1. Certificates of Conformance
 - a. Notice of Termination (NOT) Construction Stormwater General Permit: (Confirmation of Termination request acceptance by DOE).

3.02 CLEAN-UP

- A. Definition: Except as otherwise specifically provided, "clean" (for the purpose of this Article) shall be interpreted as meaning the level of cleanliness generally provided by commercial building maintenance subcontractors using commercial quality building maintenance equipment and materials.
- B. General: Prior to completion of the work, remove from the job site all tools, surplus materials, equipment, scrap, debris, and waste. Conduct final progress cleaning as described above.
- C. Site: Unless otherwise specifically directed by the Engineer, hose down all paved areas on the site, all public sidewalks and catch basins on adjoining streets. Completely remove all resultant debris.

D. Timing: Schedule final cleaning as approved by the Engineer to enable the Port to occupy a completely clean project.

END OF SECTION

Project No. 201146.01 01 70 00 - 2

Contract No. 071742

1.01 SUMMARY

- A. This section includes requirements relating to the following:
 - 1. Examination, preparation, and general installation procedures
 - 2. Cutting and patching

1.02 SUBMITTALS

A. Project As-Built Documents: Accurately record actual locations of capped and active utilities.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.03 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.

3.04 ADJUSTING

A. Adjust operating products and equipment to ensure smooth and unhindered operation.

END OF SECTION

1.01 SUMMARY

A. This section includes construction waste management requirements.

1.02 DESCRIPTION OF WORK

- A. The work includes demolition and removal within the project areas as shown on the drawings. The work also includes waste generated by construction activities, materials, packaging, scraps, and garbage.
- B. Soils excavated within the projects areas, as shown on the drawings, are anticipated to be free of contamination, however, should the Contractor, using visual and olfactory methods, identify potentially contaminated soil, the Contractor shall notify the Engineer to determine if the soil requires special handling. This material shall be segregated from other excavated material. It shall be stockpiled on plastic and covered with plastic until such time as appropriate testing and analysis can be completed by the Engineer. Upon completion of the testing and analysis the Engineer will direct the Contractor concerning the disposition of the material. Soil beyond construction excavation limits will not require excavation unless free draining product is observed or other special conditions exist in which case the Engineer will direct the Contractor in additional excavation. Soils determined to be contaminated will be hauled and disposed of at a locations designated in the following paragraphs.

1.03 DEFINITIONS

- A. Co-mingled or Off-site Separation: Collecting all material types into a single bin or mixed collection system and separating the waste materials into recyclable material types at an off-site facility.
- B. Construction, Demolition and Land-Clearing (CDL) Waste: Includes all nonhazardous solid wastes resulting from construction, remodeling, alterations, repair, demolition, and land clearing. Includes material that is recycled, reused, salvaged or disposed as garbage.
- C. Hazardous/Dangerous Waste: As defined by Chapter 70.105.010 Revised Code of Washington and 40 Code of Federal Register 261 and by Washington Administrative Code 173-303.
- D. Proper Disposal: As defined by the jurisdiction receiving the waste.
- E. Recyclable Materials: Products and materials that can be recovered and remanufactured into new products.
- F. Recycling: The process of sorting, cleaning, treating and reconstituting materials for the purpose of using the material in the manufacture of a new product. Can be conducted on-site (as in the grinding of concrete).
- G. Recycling Facility: An operation that is permitted to accept materials for the purpose of processing the materials into an altered form for the manufacture of a new product.
- H. Salvage for Reuse: Existing usable product or material that can be saved and reused in some manner on the project site or other projects off-site.
- I. Salvage for Resale: Existing usable product or material that can be saved and removed intact (as is) from the project site to another site for resale to others without remanufacturing.
- J. Source-Separated Materials: Materials that are sorted at the site into separate containers for the purpose of reuse or recycling.

- K. Sources Separation: Sorting the recovered materials into specific material types with no, or a minimum amount of, contamination on site.
- L. Time-Based Separation: Collecting waste during each phase of construction or deconstruction that results in primarily one major type of recovered material. The material is removed before it becomes mixed with the material from the next phase of construction.
- M. Garbage: Product or material typically considered to be trash or debris that is unable to be salvaged for resale, salvaged and reused, returned, or recycled.
- N. Olfactory Indications (methods): Of or relating to the sense of smell. Soils contaminated with petroleum and other volatile constituents typically exhibit characteristic odors that can be detected (and sometimes identified) by smell.
- O. PID: Photo Ionization Detector. A field instrument that is used to detect the presence of and give a relative indication of the concentration of vapors emitted from volatile constituents (contamination) in environmental media (soil and water).
- P. Soil (waste) Profile: A characterization of the chemical and physical properties of a waste material including the types of contaminants and their concentrations as measured by approved laboratory analytical methods. A profile is required by the receiving permitted disposal or recycling facility.
- Q. Special Handling: Refers to hauling and disposal of soils that, because they are contaminated, cannot be reused in place as backfill or as general fill at another location. Such soils must be hauled to and managed at a permitted disposal or recycling facility.
- R. Type A Contaminated Soil: Soil that must be removed from the Project site and has been determined by the Engineer to contain petroleum hydrocarbons in concentrations exceeding state or federal cleanup standards or special Port determined criteria. Type A soil requires disposal at an approved facility.
- S. Type B Contaminated Soil: Soil that must be removed from the Project site and has been determined by the Engineer to contain petroleum hydrocarbons or other contaminants in concentrations that will require disposal or recycling at one of the approved facility.
- T. Type C Contaminated Soil: Soil determined by Engineer to contain unknown constituent(s) and requires further testing and classification. Type C soil requires disposal at one of the approved facility.
- U. Type D Material: Material including soil, determined by the Engineer not to require special handling with regard to this Contract. Classification of material as Type D material by the Port is not a certification nor does it release the Contractor of liability or obligation to meet any disposal or storage facility acceptance or testing requirements.
- V. Unanticipated Contamination: Contamination unexpectedly found in an excavation or in other locations where there is no prior knowledge, information, or history to indicate possible spills or releases of contamination.
- W. Visual Indications (methods): A preliminary evaluation of the potential presence of contamination based on visual observation. For example, fuel contaminated soils are frequently discolored or stained relative to non-petroleum impacted native soils or clean fill.

1.04 SUBMITTALS

A. Waste Management Plan

- B. Waste Management Final Report
- C. Soils Management Plan
- D. Soils Hauling Receipts

1.05 PERFORMANCE GOALS

- A. General: Divert CDL waste to the maximum extent practicable from the landfill by one or a combination of the following activities:
 - Salvage
 - 2. Reuse
 - 3. Source separated CDL recycling
 - 4. Co-mingled CDL recycling
- B. CDL waste materials that can be salvaged, resold, reused or recycled, include, but are not limited to the following:
 - 1. Clean dimensional wood, pallet wood, plywood, OSB, and particleboard
 - 2. Asphalt
 - 3. Concrete and concrete masonry units
 - 4. Ferrous and non-ferrous metals
 - 5. Field office waste paper, aluminum cans, glass, plastic, and cardboard
- C. Hazardous/Dangerous Wastes, contaminated soils and other hazardous materials such as paints, solvents, adhesives, batteries, and fluorescent light bulbs and ballasts shall be disposed of at applicable permitted facilities.

1.06 WASTE MANAGEMENT PLAN

- A. Submit a Waste Management Plan within 10 days after the notice to proceed and not less than 5 days before any demolition activities in accordance with these specifications. Provide a Waste Management Plan in a format as approved by the Engineer.
- B. The Waste Management Plan shall include the following:
 - 1. Name of designated Waste Management Coordinator.
 - A list of waste materials, including estimated types and quantities, of the waste that will be generated. Indicate salvaged for resale, salvaged for reuse, recycled, or disposed for each item.
 - 3. Identify waste handling methods to be used, including one or more of the following:
 - Method 1 Contractor or subcontractor(s) hauls recyclable materials to an approved recycling facility.
 - b. Method 2 Contracting with diversion/recycling hauler to haul recyclable material to an approved recycling or material recovery facility.
 - c. Method 3 Recyclable material reuse on-site.
 - d. Method 4 Recyclable material salvage for resale.
 - e. Method 5 Contractor or subcontractor hauls waste to an approved disposal facility.

- 4. Identification of each recycling, disposal, or material recovery facility to be utilized, including name, address and types of materials being recycled at each facility.
- 5. Description of the method to be employed in collecting, and handling, waste materials.
- 6. Description of methods to communicate Waste Management Plan to personnel and subcontractors.
- 7. Actions that will be taken to reduce solid waste generation.
- C. Revise and resubmit Waste Management plan as required by the Engineer. Approval of the Contractor's Plan does not relieve the Contractor of responsibility for compliance with all applicable laws and regulations. Distribute copies of the Waste Management Plan to each subcontractor.

1.07 WASTE MANAGEMENT FINAL REPORT

- A. Provide a Waste Management Final Report, in a format approved by the Engineer. The Waste Management Final Report shall list the following for the project:
 - 1. A record of each waste material type and quantity recycled, reused, salvaged, or disposed from the Project. Include total quantity of waste material removed from the site and hauled to a landfill.
 - 2. Percentage of total waste material generated that was recycled, reused, or salvaged.
- B. Quantities shall be reported by weight (tons) unless otherwise approved by the Engineer.
- C. Submit copies of manifests, weight tickets, recycling/disposal receipts or invoices, which validate the calculations or a signed certification of completeness and accuracy of the final quantities reported.

1.08 SOILS MANAGEMENT PLAN

- A. A minimum of 10 days prior to excavation of any subsurface materials, submit a Soils Management Plan to the Engineer. The Soils Management Plan must be approved by the Engineer prior to any excavation of subsurface materials. Include the following in the Soils Management Plan:
 - 1. Identification of all soil disposal/recycling facilities to be used on the project for Type A and B Contaminated Soil.
 - 2. Identification of all fill sites, disposal facilities and/or end uses of material determined to be Type D Material.
 - Contingency for delivery and placement of Type C Contaminated Soil at an onsite Soil Stockpile area.
 - 4. Contingency for managing debris encountered during excavation that may disqualify soil for disposal or recycle at the approve facilities.
 - 5. General description of how equipment operators, safety personnel and other applicable Contractor shall coordinate with the Engineer to facilitate handling of contaminated soil in accordance with this specification.
 - 6. Description of all haul routes to be used on the project.
- B. Include in the Two Week Look Ahead Schedule specific time frames for excavation. Each excavation activity shall be given an individual line item description, time frame and duration.

- C. Notify the Engineer prior to hauling contaminated soil to the soil disposal facility. The notification shall include:
 - An estimate of the number of truck-trips, the haul destination, and the period in which
 these trips will be made (e.g., 20 truck-trips to the Waste Management Facility over the
 two-week period beginning on March 1, 2012).

1.09 QUALITY ASSURANCE

- A. Regulatory Requirements: The Contractor shall maintain compliance with all applicable Federal, State, or Local laws that apply to Construction Waste Management and material salvage, reuse, recycling and disposal.
- B. Disposal Sites, Recyclers and Waste Materials Processors: All facilities utilized for management of any materials covered under this specification must maintain all necessary permits as required by federal, state and local jurisdictions.

1.10 HEALTH AND SAFETY

A. The Contractor is required to implement all health and safety provisions as required by Specification 01 35 29 - Health, Safety and Emergency Response Procedures.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 WASTE DISPOSAL

- A. Source-Separated CDL Recycling: Provide individual containers for separate types of CDL waste to be recycled, clearly labeled with a list of acceptable and unacceptable materials.
- B. Co-Mingled CDL Recycling: Provide containers for co-mingled CDL waste to be recycled, clearly labeled with a list of acceptable and unacceptable materials.
- C. Landfill: Provide containers for CDL waste that is to be disposed of in a landfill clearly labeled as such.
- D. Removal of CDL Waste from Project Site: Transport CDL waste off Port's property and provide legal disposal.

3.02 SOIL DISPOSAL

- A. Excavation/Testing: The field-testing for contaminated soil will be performed by the Port and will result in the following classification of material as defined in paragraph DEFINITIONS of this section:
 - 1. Type A Contaminated Soil.
 - Type B Contaminated Soil.
 - 3. Type C Contaminated Soil.
 - 4. Type D Material.

B. Disposition of Material

1. Type A and B Contaminated Soil: Material determined to be Type A or B Contaminated Soil shall be hauled by the Contractor to an approved facility for disposal.

- 2. Type C Material: Material determined to be Type C is of unknown origin or special circumstances. Material determined to be Type C contaminated soils shall be hauled to an onsite Soil Stockpile Site area. The Contractor shall protect the material once stockpiled. The Port will direct the Contractor on the disposition of the material following the analysis of the suspect material.
- 3. Type D Material: Material determined not to require special handling (Type D) shall be hauled by the Contractor to a site determined by the Contractor. If testing or certification of this material is required by the receiving site, the Contractor shall complete these requirements. The Port will not certify or declare the material suitable for unrestricted use.

C. Other Requirements

- Cover all soil stockpiles and maintain stockpile areas in accordance with SECTION 01 57 13 - Temporary Erosion and Sediment Control and Construction Stormwater Pollution Prevention.
- Material determined to be Type A, Type B or Type C contaminated material may be, upon approval of the Engineer, temporarily stockpiled within the construction area. Provide an impervious liner beneath this soil and securely cover with a waterproof covering. Remove the material prior to completion of work in the work area.
- 3. Submit all hauling receipts (or copies of receipts) from the receiving facility for all Type A, Type B or Type C Contaminated soil at least weekly.
- 4. The Engineer may require shut down of excavation should unforeseen condition warrant.

END OF SECTION

1.01 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures
 - 2. Final completion procedures
 - Warranties
 - 4. As-Built Drawings

1.02 ACTION SUBMITTALS

A. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.

1.03 PROJECT SUBMITTALS

- A. Submittal of Project Warranties
- B. Record Drawings
 - Miscellaneous Record Submittals: See other Specification Sections for miscellaneous recordkeeping requirements and submittals in connection with various construction activities
- C. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.04 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 7 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request:
 - Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Port unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in individual Sections, including specific warranties, operation and maintenance manuals, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by the Contract Document or Engineer. Label with manufacturer's name and model number where applicable.
 - Submit test/adjust/balance records.
 - 5. Submit changeover information related to Port's occupancy, use, operation, and maintenance.

- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 7 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request:
 - 1. Make final changeover of permanent locks and deliver keys to Port
 - 2. Complete startup and testing of systems and equipment
 - 3. Perform preventive maintenance on equipment used prior to Substantial Completion
 - 4. Instruct Port's personnel in operation, adjustment, and maintenance of products, equipment, and systems
 - 5. Advise Port of changeover in heat and other utilities
 - 6. Terminate and remove temporary facilities from Project site
 - 7. Complete final cleaning requirements
- D. Submit a written request for inspection to determine Substantial Completion a minimum of 5 days prior to the date the work will be completed and ready for final inspection and tests. On receipt of request, Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare the Notice of Substantial Completion after inspection or will notify Contractor of items, either on the Contractor's list or additional items identified by the Engineer, that must be completed or corrected before notice will be issued.
 - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for final completion.

1.05 PUNCH LIST (LIST OF INCOMPLETE ITEMS)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of Construction.
 - 1. Organize list of spaces in sequential order.
 - 2. Organize items applying to each space by major elements.

1.06 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete and submit the following:
 - 1. Submittal of all remaining items, including as-built documents, final completion construction photographic documentation, damage or settlement surveys, surveys, and similar final record information and all other submittals defined in the Contract Documents.
 - List of Incomplete Items: Submit copy of Engineer's Substantial Completion inspection list
 of items to be completed or corrected (Punch List). Copy of the list shall state that each
 item has been completed or otherwise resolved for acceptance.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 5 days prior to date the work will be complete and ready for final inspection and tests. On receipt of request, the Engineer will either proceed with inspection or notify contractor of unfulfilled requirements.

- 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
- C. Execution of all Change Orders.

1.07 FINAL ACCEPTANCE PROCEDURES

- A. Submittals Prior to Final Acceptance:
 - 1. Receipt and approval of application for final payment; due within seven (20) days of receipt of Final Completion by the Engineer;
 - 2. Contractor's signed waiver and release of claims on the Engineer provided form;
 - 3. Contractor's submittal of list of all suppliers and subcontractors and the total amounts paid to each on the Engineer provided form; and
 - 4. Contractor's submittal of a list of all subcontractors and suppliers requiring Affidavits of Wages paid on the Contract and certify that each of companies will submit an approved Affidavit of Wages paid to the Port within 30 days.
- B. The Engineer will issue the Final Acceptance Memo upon receipt of the required submittals.

PART 2 - PRODUCTS

2.01 CONTRACTOR'S WARRANTY

- A. The Contractor warrants the labor, materials and equipment delivered under the contract to be free from defects in design, material, or workmanship, and against damage caused prior to final inspection. Unless otherwise specified, this warranty extends for a period of one (1) year from the date of Substantial Completion.
 - 1. Time of Submittal: Submit written warranties on request of Engineer for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit the Port's rights under warranty.
 - 2. Submit Warranties to the Engineer as a submittal, as described in 01 33 00 Submittal Procedures.
 - 3. Provide additional copies of each warranty in Operation and Maintenance Manuals as described in 01 78 23 Operation and Maintenance Manuals.
- B. In the event of equipment failure, during such time or in such a location that immediate repairs are mandatory, the Contractor shall respond promptly (within 48 hours), irrespective of day of the week. If the Contractor is not available, the Port will affect repairs. The Contractor shall then reimburse the Port for parts and labor necessary to correct deficiencies as defined within the warranty clause and time.

2.02 AS-BUILT DRAWINGS

- A. Project As-Built Drawings: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
- B. Project As-Built Drawings shall be compiled by the Contractor and submitted to the Engineer for translation to the Record Drawings on a monthly basis.
 - 1. The Project As-Built Drawings will be submitted on paper full-sized (ANSI D) copy.

- 2. Drawings shall be kept current and shall be done at the time the material and equipment is installed. Annotations to the record documents shall be made with an erasable colored pencil conforming to the following color code:
 - a. Additions Red
 - b. Deletions Green
 - c. Comments Blue
 - d. Dimensions Graphite
- 3. Project As-Built Drawings must be complete and accepted by the Engineer before Final Completion is issued.
- 4. As-Built Drawings shall be in accordance with horizontal and vertical control as shown on the drawings.

PART 3 - EXECUTION

3.01 MAINTENANCE OF AS-BUILT DRAWINGS

- A. The Contractor shall maintain at the Project site, in good order for ready reference by the Engineer, one complete copy of the Contract Documents, including Addenda, Change Orders, other documents issued by the Port, a current Progress Schedule, and approved Submittals. The Contractor shall also generate and keep on site all documents and reports required by applicable permits.
- B. The Contractor's As-Built Drawings shall be updated to record all changes made during construction. The location of all existing or new underground piping, valves and utilities, and obstructions located during the Work shall be appropriately marked until the Contractor incorporates the actual field dimensions and coordinates into the as-built drawings. The as-built drawings shall be updated at least weekly and before elements of the Work are covered or hidden from view. After the completion of the Work, the as-built drawings shall be provided to the Port.

END OF SECTION

1.01 DESCRIPTION

- A. Provide all demolition required to perform the work covered under this contract including without limitation:
 - 1. Remove existing construction shown to be removed.
 - 2. Remove mechanical and electrical work that is to be abandoned and is contained in construction to be removed whether or not the mechanical and electrical work is shown. Disconnect and cap off utilities in accordance with applicable codes and safety regulations.
 - 3. Where utilities that are not shown pass through construction that must be removed and those utilities serve other areas notify the Engineer before disrupting service.
 - 4. Store and protect items intended for reuse.
 - Assume ownership of debris and unwanted materials, remove from the site and dispose of in accordance with Section 00 72 00 3.08. Provide the Port copies of documentation certifying disposal in accordance with regulatory agencies.
 - 6. If illegal electrical wiring is encountered such as "BX" or nonmetallic sheathed cable, notify the Engineer. Proceed with other available work after notification is made.

1.02 NOISE AND DUST CONTROL

- A. Perform work in accordance with requirements in Section 01 50 00.
- B. Perform work in a manner to avoid disturbance to site operations and least damage to work to remain.

PART 2 - NOT USED

PART 3 - EXECUTION

3.01 REMOVAL OF CONSTRUCTION IN AREAS TO RECEIVE NEW WORK

- A. Provide careful selective cutting and removal of existing construction where required to perform work.
- B. Replace and/or patch removed construction and finishes in accordance with other parts of this Section.
- C. Remove structural work designated for removal. Take precautions not to damage structural work intended to remain. Where temporary shoring is needed, submit a design prepared by an appropriately licensed engineer for review before proceeding.

3.02 PROTECTION OF WORK TO REMAIN

A. Protect all work to remain. Repair damage with materials, workmanship and finishes matching existing work when new.

3.03 DISPOSAL OPERATIONS

A. Disposal shall be in accordance with Section 01 74 16.

- B. General: All materials, except those indicated as Port salvage, and except those materials containing substances classified as hazardous or potentially hazardous by local, state or Federal regulating agencies, shall upon their demolition become the property of the Contractor. All such material, including those containing hazardous or potentially hazardous substances shall be removed and promptly disposed of legally away from the site and on property not owned by the Client, except as otherwise provided in these specifications. No material shall be disposed of in adjoining waterways or in the fill. Burning of materials in these areas falls under the jurisdiction of the Pierce County regulations and is generally forbidden under all circumstances.
- C. Cleanup: After removal of structures, buildings and foundations, clean and grade the area. There shall be no debris, rubble, or litter left at the site from any of the demolition operations and the site shall be clean.
- D. The Port encourages the salvage and recycling of materials from demolished structures. The Contractor shall salvage or recycle, in an acceptable manner to environmental agencies and the Port, at his option any of the materials designated for disposal.
- E. Non-salvageable or non-recyclable demolition, contaminated soils and creosote debris shall be transported to a Port approved lined landfill with a Leachate Collection System.

F. Excavated Materials:

1. Native soil complying with the requirements of Section 31 23 33, Earthwork, may be used for backfill, fill, and embankments as allowed by that section.

2. Spoil Material:

- a. Remove all material which is excavated in excess of that required for backfill. All excess material shall become property of the Contractor and legally disposed.
- b. Rubbish shall consist of all materials not classified as suitable materials or rubble and shall include shrubbery, trees, timber, trash, and garbage, and shall be disposed of offsite and part of this Contract.

END OF SECTION

1.01 SUMMARY

- A. Contractor is responsible to plan, schedule, and sequence his construction activities to ensure that pumping of stormwater at all times is uninterrupted and performed in accordance with all regulations.
- B. Bypassing of stormwater to surface waters or drainage courses other than through the Port's storm drainage system is prohibited during construction. Penalties imposed on the Port as a result of any bypass caused by Contractor, his employees or subcontractors, and legal fees and other expenses to the Port resulting directly or indirectly from the bypass shall be borne in full by Contractor.

C. Related Sections

- 1. Section 31 23 19: Dewatering
- Section 31 23 33: Earthwork
- 3. Section 22 11 00: Piping, Valves, and Accessories

1.02 SUBMITTALS

- A. Submit the following information, at a minimum, in accordance with 01 33 00:
 - Descriptions and design calculations for sizing of temporary bypass facilities, including pumping facilities, pipelines, valves, gates and related for a fully operable temporary system.
 - 2. Description of control equipment and temporary control panel(s) and method to be used to operate the temporary pumping and piping facilities.
 - 3. Provide a maintenance plan describing regular maintenance to be performed while the temporary facilities are in operation.
 - 4. Provide a Contingency plan describing steps to be taken if any component of the temporary facilities fail and emergency contact phone numbers.
 - 5. Drawings showing layout and routing of bypass equipment, piping, and valves with associated sizes and dimensions.

1.03 CONTINUITY OF OPERATION

- A. The existing storm system must be kept in operation through the use of existing or temporary systems, except as specified herein, until the new facilities are accepted by the Port and capable of accepting stormwater.
- B. The Contractor shall execute his work in such a way that maintenance and operation of the storm system can be normally operated. Access to the facilities shall be provided at all times; switch-over to the new facilities shall be fully coordinated with the Port.
- C. Minimum System Requirements: Through the use of permanent or temporary facilities, the Contractor shall maintain system capacity for storm events.
 - 1. Redundancy: Contractor shall provide on site, and installed ready for operation, a complete redundant pump equal to or larger than the largest pump in the system used to provide the specified maximum pumping capacity.

2. Backup Power: If the maximum pumping capacity is being provided by electric motor drive pumps, an engine-driven generator or standby pump shall be provided and installed ready for operation

1.04 BYPASSING TO SURFACE WATERS

A. Any discharge of stormwater other than through the Port's storm drainage system to surface waters is prohibited.

PART 2 - PRODUCTS

2.01 TEMPORARY FACILITIES

- A. Operation of temporary equipment shall be automatic unless manually operated by the Contractor's staff 24 hours per day.
- B. Provide temporary facilities including pumps, piping, valves, and related.

PART 3 - EXECUTION

3.01 OPERATION

- A. Contractor shall coordinate with the Port to respond to and resolve all alarms from temporary pumping operations.
- B. Be responsible for ensuring that the temporary pumps and pipelines are maintained and remain available for use 24 hours per day 7 days per week for the duration of any Contractor planned bypass.

END OF SECTION

Project No. 201146.01 02 96 00 - 2

Contract No. 071742

1.01 SUMMARY

- A. Section Includes: Provide all piping, including fittings, valves, and accessories as shown on the Drawings, described in the Specifications and as required to completely interconnect all equipment with piping for complete and operable systems.
- B. Related Sections:
 - 1. Section 31 23 33: Earthwork
 - Section 33 49 13: Precast Concrete Manholes
 - 3. Section 33 49 20: Precast Concrete Utility Vaults

1.02 REFERENCES

- A. ASTM International (ASTM)
- B. American National Standards Institute (ANSI)
- C. American Water Works Association (AWWA)
- D. U.S. Department of Transportation (DOT)
- E. Manufacturers Standardization Society of the Valve and Fittings Industry (MSS)

1.03 SUBMITTALS

- A. Submittals shall be in accordance with Section 01 33 00, Submittal Procedures.
- B. Shop Drawings:
 - 1. Verify existing utilities and structures and incorporate in Shop Drawings.
- C. Submit data to show that the following items conform to the Specification requirements:
 - 1. Pipe, fittings and accessories shall include:
 - a. Manufacturing method and material standards
 - b. Grade of material
 - c. Wall thickness and tolerances
 - d. Pressure rating
 - e. Fitting fabrication details
 - 2. Submit certified test reports as required herein and by the referenced standard specifications (Product Information).
- D. Manuals: Furnish manufacturer's installation and operation manuals, bulletins, and spare parts lists for the following items:
 - 1. Valves 4 inches or larger.
- E. Affidavits: Furnish affidavits from the manufacturers for the following equipment:
 - 1. Valves, hydraulic or pneumatically operated.
- F. Field test reports as required in Part 3.

1.04 QUALITY ASSURANCE

- A. Materials and equipment furnished under this Section shall be of manufacturers who have been regularly engaged in the design and manufacture of the materials and equipment for a period of at least 5 years. Demonstrate to the satisfaction of the Engineer that the quality is equal to the materials and equipment made by the manufacturers specifically named herein, if an alternate manufacturer is proposed.
- B. Factory Quality Control: The Contractor shall test all products as noted herein and by the reference specifications. All pipe and fittings to be installed under this Contract may be inspected at the plant by the Port for compliance with these Specifications using an independent testing laboratory selected and paid for by the Port.
- C. Field Quality Control:
 - 1. The Port will:
 - a. Inspect field welds and test the welds if it is deemed necessary.
 - 2. The Contractor shall:
 - a. Perform leakage tests.
 - b. Be responsible for the costs of additional inspection and retesting by the Port resulting from noncompliance.

1.05 POTHOLING

A. Do not prepare any shop drawings for, or make final order for, or design any pipe materials for any particular section of pipeline until all utilities in that section of pipeline have been exposed, and until such time as no interferences are found between said existing utilities and the proposed pipeline alignment. If interferences are found in any particular section of pipeline, do not prepare any shop drawings for, or make final order for, or design any pipe materials for that particular section of pipeline until the pipeline alignment has been modified by the Engineer to eliminate all such interferences.

1.06 CONSTRUCTION SCHEDULING/SEQUENCING

- A. Connections and utilities changes must be programmed to provide the least possible interruptions of service. Prior to any shutdown, all materials, fittings, supports, equipment and tools shall be on the site and all necessary labor scheduled prior to starting any connection work. The Contractor shall notify the Engineer in writing at least 7 days in advance of any required shutdowns so that affected customers may be notified. In general, shutdowns shall not exceed four hours in duration unless specifically authorized or indicated in the suggested construction sequence. If a shutdown of more than fours hours is required, the Contractor shall first install temporary service connections to all affected houses and other buildings. All work under this Contract shall be conducted in a manner which will minimize shutdowns, open roadways, or traffic obstructions caused by the construction. Shutdowns causing damage to adjacent public and private property shall not be permitted, and any damage resulting shall be the sole responsibility of the Contractor.
- B. Planned utility service shutdowns shall be accomplished during periods of minimum use. In some cases, this will require night or weekend work, which shall be at no additional cost to the Port. The Contractor shall program his work so that service will be restored in the minimum possible time and shall cooperate with the Port in reducing shutdowns of the utility system to a minimum. No utility interruption will be permitted without the prior approval of the Engineer.

1.07 APPURTENANCES

A. Furnish and install all necessary guides, inserts, anchors and assembly bolts, washers and nuts, hangers, supports, gaskets, couplings and flanges; all other appurtenant items shown on the Drawings, specified or required for the proper installation and operation of the piping; devices included in or on the piping equipment; and piping accessories.

PART 2 PRODUCTS

2.01 GENERAL

- A. Pipe and valve sizes are nominal inside diameter unless otherwise noted.
- B. All materials delivered to the job site shall be new, free from defects, and marked to identify the material, class, and other appropriate data such as thickness for piping.
- C. Acceptance of materials shall be subject to strength and quality testing in addition to inspection of the completed product. Acceptance of installed piping systems shall be based on inspection and leakage tests as specified hereinafter.

2.02 GENERAL MATERIAL REQUIREMENTS

- A. Gaskets: Except where specified otherwise, gaskets shall be SBR rubber or NBR (Nitrile or Buna-N).
- B. Flexible Sealant: Flexible sealant for pipe joints, where shown on the Drawings, shall be a two-component polysulfide, non-sag; Sikaflex 2C, Dualthane, or equal.
- C. Bolts and Tie Rods: Unless specified otherwise herein, flange bolts and nuts, coupling bolts and nuts, tie rods and other hardware shall be as follows:
 - 1. Exposed: Type 304 stainless steel.
 - 2. Submerged: Type 304 stainless steel, minimum tensile strength: 60,000 psi.
 - 3. Concrete Encased: Steel.
 - 4. Buried: Type 304 stainless steel, minimum tensile strength: 60,000 psi.
 - 5. Apply an anti-galling compound to the threads of stainless steel bolts.

2.03 PIPING MATERIALS

- A. Pipe and Fitting Designation: Piping materials are identified by a "Type" designation in these Specifications. The "Type" designation identifies not only the pipe itself but the associated fittings and appurtenances and the installation and test procedures described for that "Type." The designation of a particular type shall indicate a complete installation including fittings, joints, cleaning and testing. The pipe and fitting materials for each type designation shall be as specified herein and summarized in the Pipe Type Schedule.
- B. Piping Schedule: Piping systems and their corresponding piping and valve systems are listed on the Drawings.
- C. Pipe Type Schedule: Pipe material, joints and fittings shall be as summarized below. A detailed specification of each pipe type follows. (The detailed specification supersedes the schedule in case of any conflicts.)

Pipe Type	Pipe Description	Field Joints	Fittings
DIP	Ductile Iron Pipe, AWWA C151, gravity	Push-On or Mechanical Joint	Ductile Iron

	drainage		
HDPE	Corrugated Dual-Wall Polyethylene, gravity pipe, ASTM F2648	Integral Bell and Spigot	Polyethylene

D. DIP SD:

- 1. Pipe: Ductile iron bell and spigot pipe, AWWA C151.
 - a. Thickness Class: 53
 - b. Minimum Pressure Class: 350
- 2. Joints: Push-on, AWWA C111 as modified, except where flanged joints are shown on the Drawings or where making connections to valves.
 - a. Gaskets: NBR (Nitrile or Buna-N).
- 3. Fittings: Ductile iron with push-on joints, AWWA C110 and AWWA C153.
- 4. Lining: Standard thickness cement mortar lining for pipe and fittings, AWWA C104. Cement mortar linings shall be seal coated.

E. HDPE SD:

- 1. Pipe shall conform to ASTM F2648, minimum 2% carbon black. Pipe shall have smooth interior and annular exterior corrugations, and joints shall be watertight in accordance with ASTM D3212.
 - a. Manufacturer: Advanced Drainage Systems (ADS) N-12 WT (IB) or approved equal.
- Gaskets shall conform to ASTM F477. NBR (Nitril or Buna N).

2.04 PIPE COUPLINGS AND FLEXIBLE PIPE PIECES

- A. General: For typical pipe joints refer to pipe material specifications. Other joint devices shall be furnished where called for on the Drawings and as specified below.
- B. Flexible Couplings:
 - 1. Sleeve: Cast iron or fabricated steel.
 - Followers: Cast iron, ductile iron, or steel.
 - 3. Sleeve Bolts: ASTM A325, Type 3; malleable iron; or equivalent, except for buried and submerged, which shall be Type 304 stainless steel and Type 316 stainless steel, respectively.
 - 4. Coating: Fusion epoxy OR High-build epoxy line and coat sleeve and followers.
 - 5. Pressure Rating: The test pressure of the applicable service.
 - Performance: Longitudinal movement and angular deflection capabilities shall meet AWWA C219.
 - 7. Buried Flexible Coupling Sleeve: Long barrel; Smith-Blair 442, Dresser Style 40; or equal.
 - 8. Manufacturers:
 - a. Flexible Couplings:

- 1) Connecting Pipe with Identical Outside Diameters: Smith-Blair 411 or 441; Dresser Style 38 or 138; or equal.
- 2) Connecting Pipe with Slightly Different Outside Diameters: Smith-Blair 413 or R441; Dresser Style 62; or equal.
- 9. Gaskets: SBR rubber or NBR (Nitrile or Buna-N).
- 10. Protection for Buried Couplings and Adaptors:
 - Double-wrap with polyethylene encasement, AWWA C105 and tape the edges of the encasement with PVC tape
 - b. The entire flexible coupling shall be protected. The pipe and coupling or adapter shall be cleaned and primed in accordance with the manufacturer's instructions. Apply a filler to form a smooth, continuous surface and spiral wrap with tape, overlapping by at least 50%. Filler shall be dense Mastic or equal. Tape shall be Dense Tape or equal.

2.05 TRANSITION COUPLINGS

- A. Provide transition couplings for concrete pipe to ductile iron pipe connections.
- B. Transition coupling shall be ductile iron conforming to AWWA C219.
- C. Manufacturer: Romac ductile iron transition coupling; or equal.

2.06 VALVES AND ACCESSORIES

- A. Valve and Accessory System Designation: Most valves and accessories to be furnished and installed are identified by a valve and accessory system designated by a letter symbol in the Piping Identification Schedule.
- B. General Requirements for Valves:
 - 1. All valves of each type shall be the product of one manufacturer.
- C. Inline Check Valves:
 - 1. The inline check valve must hold back 40 feet of pressure and open when experiencing a maximum of 1 inch of head pressure.
 - 2. The pipe internal diameters must be measured and reported to the manufacturer prior to procurement.
 - 3. Valve Material: Buna-N rubber.
 - 4. Clamp Material: 316 stainless steel.
 - 5. Manufacturer: Tideflex Checkmate, WaPro Wastop, or equal.

PART 3 EXECUTION

3.01 PIPING INSTALLATION

- A. General Handling and Placing:
 - 1. Exercise great care to prevent injury to or scoring of the pipe lining and coating, as applicable, during handling, transportation or storage. Do not store pipe on rough ground and do not roll the pipe on the coating. Any damaged pipe sections, specials, or fittings shall be repaired or replaced at the expense of the Contractor as satisfactory to the Engineer.

- 2. Carefully inspect each pipe, fitting, valve and accessory before installation to insure there is no defective workmanship or obstructions. Inspect the interior and exterior protective coatings and patch all damaged areas in the field or replace to the satisfaction of the Engineer.
- 3. Place or erect all piping to accurate line and grade and backfill, support, hang, or brace against movement as specified or shown on the Drawings, or as required for proper installation. Remove all dirt and foreign matter from the pipe interior prior to installation and thoroughly clean all joints before joining.

B. General Buried Piping Installation:

- 1. Trenching, bedding, and backfill for buried piping shall be as shown on the Drawings and as specified in Section 31 23 33.
- 2. Where pipe grade elevations are shown on the Drawings, install the pipe with straight grades between the indicated elevations.
- 3. Where no pipe grade elevations are shown on the Drawings, install buried piping with at least 3 feet of cover to finished grade. Where piping crosses under buried electrical ducts, provide at least 4 feet 6 inches of cover. Provide 12 inches minimum separation between the buried pipes.
- 4. Provide each pipe with a firm, uniform bearing for its full length in the trench except at field joints. Do not lay pipe in water or when trench conditions or weather are unsuitable for such work.
- 5. Do not pull bell and spigot, gasketed joints more than 75% of the maximum deflection permitted by the pipe manufacturer.

C. DIP

- 1. Install buried pipe in accordance with AWWA C600.
- 2. Support and brace encased pipe to support the pipe and to prevent movement during testing and placement of the concrete encasement. The braces and supports shall be erected of materials and by methods that will prevent any future contact of the pipe with the environment surrounding the encasement.
- 3. Wrap buried pipe with 8 mil polyethylene film in accordance with AWWA C105. Continuously seal seams and overlaps with tape. Seal circumferential overlaps with two turns of tape, half lapped. Gather excess polyethylene on top of pipe so as not to block backfill material from getting under bottom of pipe. Use caution so as not to rip or cut the polyethylene film. Seal any rips or cuts in the film with tape.
- 4. Trace wire shall be installed in accordance with current version of the WSDOT Standard Specifications and as specified herein. Junctions and termini shall be located outside of the travel way as directed by the Engineer.
- 5. Install restrained joints in accordance with manufacturer's instructions. Pull the slack out of restrained joints after they are made up.

D. HDPE Pipe:

 Handling and laying of pipe and fittings shall be in accordance with the manufacturer's instructions, PPI guidelines, AWWA M55, ASTM D2321, and as specified herein to line and grades as shown on the Drawings.

- 2. Pipe and fittings shall not be dropped. All pipe and fittings shall be examined before laying and no piece shall be installed which is found to be defective. Any damage to the pipe shall be repaired as directed by the manufacturer and approved by the Port. If any defective pipe is discovered after it has been laid, it shall be removed and replaced with a sound pipe in a satisfactory manner at the Contractor's expense. Any pipe with gouges exceeding 5% of the nominal wall thickness will be rejected.
- 3. All pipe and fittings shall be thoroughly cleaned before laying, shall be kept clean until they are used in the work.
- 4. The Contractor shall not drag the pipe. Rollers or other such devices shall be used to reduce dragging of the pipe. Damage to pipe caused by dragging is the responsibility of the Contractor and cause for replacement of damaged portion as determined by the Port. If, in the opinion of the Port, the pipe may have been dragged to an extent where damage may have occurred to the pipe wall, the Contractor will rotate the pipe in a manner which will facilitate inspection.
- 5. As much as practicable, the print line on the pipe shall be installed facing upward to facilitate identification of the pipe when initially installed.
- 6. Prior to installing a pipe section, the bedding material shall be brought to grade along the entire length of the section to be installed.
- 7. Bending of the pipe to achieve horizontal or vertical changes in direction is allowed. The minimum bending radius, measured along the centerline axis of the pipe is 50 times the nominal pipe size.
- 8. Flange connections shall be in accordance with the manufacturer's requirements. Flange bolts shall not be used to draw the connection into alignment. Bolt threads shall be lubricated and flat washers shall be used under nuts. Tighten bolts evenly according to the pipe manufacturer's tightening pattern and torque step recommendations. Retighten flange connections at least 1 hour after the initial tightening using the pipe manufacturer's tightening pattern and torque step recommendations.
- 9. Install tracer wire and warning tape.
- 10. All HDPE pipe must be at the temperature of the surrounding soil at the time of backfilling and compaction.

3.02 INSTALLATION OF COUPLINGS

A. Flexible Couplings and Flange Coupling Adaptors: Prior to installation, thoroughly clean oil, scale, rust, and dirt from the pipe to provide a clean seat for the gasket. Wipe gaskets clean before they are installed. If necessary, flexible couplings and flanged coupling adapter gaskets may be lubricated with soapy water or manufacturer's standard lubricant before installation on the pipe ends. Install in accordance with the manufacturer's recommendations. Tighten bolts progressively, drawing up bolt on opposite sides a little at a time until all bolts have a uniform tightness. Workers tightening bolts shall be equipped with torque-limiting wrenches or other favorably reviewed type. Anchor studs on restrained flanged coupling adaptors shall be installed so as to lock into holes drilled through the pipe wall in accordance with manufacturer's recommendation.

3.03 INSTALLATION OF VALVES AND ACCESSORIES

- A. Use reducing fittings where any change in pipe size occurs between valves or accessories and the attached pipeline. Bushings shall not be used, unless specifically noted on the Drawings. Use eccentric reducing fittings wherever necessary to provide free drainage of lines.
- B. Install valves and accessories such that all parts are easily accessible for maintenance and operation.
- C. Inline rubber check valves shall be installed while being fully within the pipe, and shall incorporate a Type 316 stainless steel expandable clamp.
- D. Connections between ferrous and non-ferrous piping, valves, accessories or pipe supports shall be made using a dielectric coupling, union, or flange.
- E. Install pipe-to-structure connectors in cast-in-place metal sleeves or in smooth core drilled holes. Grout both sides flush with non-shrink grout unless otherwise shown on the Drawings.

3.04 PIPE AND VALVE IDENTIFICATION

- A. General: Identify all buried and exposed valves with tags as specified below.
- B. Valves: Provide each buried valve with a valve tag identifying the pipeline contents, and either its valve number, or the area or item served by the valve for valves without a valve number. The valve tag for inline check valves should be anchored in the adjoining manhole right above the pipe penetration where the valve is housed.

3.05 FIELD QUALITY CONTROL

- A. Factory Quality Control: The Contractor shall test all products as required herein and by the reference specifications.
- B. The Contractor shall
 - 1. Perform leakage tests.
 - 2. Be responsible for the costs of additional inspection and retesting by the Port resulting from non-compliance.

3.06 CLEANING

A. Prior to testing, thoroughly clean the inside of each completed piping system of all dirt, loose scale, sand and other foreign material. Cleaning shall be by sweeping, flushing with water or blowing with compressed air or oil-free nitrogen gas, as appropriate for the size and type of pipe. Flushing shall achieve a velocity of at least 3 feet per second. The Contractor shall install temporary strainers, temporarily disconnect equipment or take other appropriate measures to protect equipment while cleaning piping. Cleaning shall be completed after any pipeline repairs.

3.07 FIELD TESTING

A. General: Perform leakage tests on all pipe installed in this project. Furnish all equipment, material, personnel and supplies to perform the tests and make all taps and other necessary temporary connections. The test pressure, allowable leakage and test medium shall be as specified and as described below. Test pressure shall be measured at the highest point on the line, except that pressure at lowest point shall not exceed pipe manufacturer's rated test pressure, unless specifically noted otherwise. Leakage tests shall be performed on all piping at a time agreed upon and in the presence of the Engineer. All visible leaks shall be repaired, regardless of the test results.

Project No. 201146.01 22 11 00 - 8

Contract No. 071742

- B. Buried Piping: The leakage test for buried piping shall be made after all pipes are installed and backfilled. However, the Contractor may conduct preliminary tests prior to backfill. If the Contractor elects to conduct preliminary tests, provide any necessary temporary thrust restraint.
- C. Encased Piping: The leakage test for encased piping shall be made after all pipe is installed and encased, and before any structures are constructed above it. However, the Contractor may conduct preliminary tests prior to encasement. If the Contractor elects to conduct preliminary tests, provide any necessary temporary thrust restraint.
- D. Accessories: It shall be the responsibility of the Contractor to block off or remove equipment, valves, gauges, etc., which are not designed to withstand the full test pressure.
- E. Testing Apparatus: Provide pipe taps, nozzles and connections as necessary in piping to permit testing including valves to isolate the new system, addition of test media, and draining lines and disposal of water, as is necessary. These openings shall be plugged in a manner favorably reviewed by the Engineer after use. Provide all required temporary bulkheads.
- F. Correction of Defects: If leakage exceeds the allowable, the installation shall be repaired or replaced, and leakage tests shall be repeated as necessary until conformance to the leakage test requirements specified herein have been fulfilled. All visible leaks shall be repaired even if the pipeline passes the allowable leakage test.
- G. Reports: The Contractor shall keep records of each piping test, including:
 - 1. Description and identification of piping tested.
 - 2. Test pressure.
 - 3. Date of test.
 - 4. Witnessing by Contractor and Engineer.
 - 5. Test evaluation.
 - 6. Remarks, to include such items as:
 - a. Leaks (type, location).
 - b. Repairs made on leaks.
 - 7. Test reports shall be submitted to the Engineer.
- H. Testing Specifics:
 - DIP and HDPE: Water exfiltration test or air pressure test in accordance with the American Public Works Association Standard Specifications for Public Works Construction ("GREENBOOK").

END OF SECTION

1.01 SUMMARY

A. Section Includes: Perform all dewatering and storm drain redirect necessary or required for the construction of the work as covered by these Specifications and indicated on the Drawings.

1.02 RELATED SECTIONS:

A. Section 31 23 33: Earthwork

B. Section 31 32 19: Geotextiles

1.03 SUBMITTALS

- A. Submit in accordance with Section 01 33 00, Submittal Procedures
- B. Submit a Dewatering Work Plan stamped by a Professional Engineer licensed in Washington State. The Work Plan shall include drawings and complete design data showing methods and equipment for dewatering necessary to keep excavations and pipe trenches dry during construction. At a minimum, include the following:
 - 1. Drawings indicating the location and size of berms, dikes, ditches, sumps, and vacuum and discharge lines.
 - 2. Capacities of pumps, prime movers, and standby equipment.
 - Design calculations providing adequacy of the system and selected equipment, including estimated water volumes.
 - 4. Detailed description of the dewatering schedule, operation, maintenance, and removal procedures.
 - 5. If required, excavation groundwater treatment system suitable for the anticipated water quality at each site. Discharge shall meet applicable regulatory requirements.
 - 6. List all permits required for dewatering and disposing of the dewatering discharge.

1.04 QUALITY ASSURANCE

A. It shall be the sole responsibility of the Contractor to control the rate and effect of the dewatering operations in such a manner as to avoid all settlement, subsidence, and undermining.

1.05 SUBSURFACE INVESTIGATIONS

A. Geotechnical investigations for design purposes for this project are available in the Reference Documents of these Contract Documents.

1.06 ADDITIONAL SAFETY RESPONSIBILITIES

A. The Contractor shall be responsible for the safety of his/her workers and shall comply with safety and health standards such as Safety Standards for Construction Work (Chapter 296-155 WAC), General Safety and Health Standards (Chapter 296-24 WAC), General Occupational Health Standard (Chapter 296-62 WAC), and any other appropriate safety and health codes.

PART 2 - PRODUCTS NOT USED.

PART 3 - EXECUTION

3.01 CONTROL OF WATER

- A. There is a potential for contaminants in groundwater, therefore the dewatering approach implemented by the Contractor shall minimize the amount of pumping required.
- B. All excavations shall be kept free from water and all construction shall be in the dry.
 - 1. It should be presumed that the presence of groundwater will require dewatering operations. Furnish, install, maintain, and operate all necessary pumping and other equipment for dewatering all excavations. At all times have on the project sufficient pumping equipment for immediate use, including standby pumps for use in case other pumps become inoperable.
 - Provide a sufficient number of pumps so as to hold the groundwater level at an elevation of not less than 2 feet below the lowest elevation of the pipe, duct, structure or other material to be placed.
 - 3. Dispose of water in such a manner as to cause no injury or nuisance to public or private property, or be a menace to the public health. The Contractor shall:
 - a. Obtain a permit for dewatering disposal and comply with all permit requirements.
 - b. Furnish all piping, pumps and other required equipment for the dewatering operation.
 - c. Treat dewatering discharge for sediment, color, or other materials as required by the ermit.
 - 4. Begin pumping for dewatering in advance of excavation to ensure that water drains out of the soil column and soil pore pressure is relieved.
 - 5. The dewatering operation shall be continuous, so that the excavated areas shall be kept free from water during construction, while concrete is setting and achieves full strength, and until backfill has been placed to a sufficient height to anchor the work against possible flotation.
 - 6. Continue dewatering during backfilling operations such that the groundwater is at least 2 feet below the level of the compaction effort at all times. No compaction of saturated materials will be allowed.
 - 7. Dewatering devices must be adequately filtered to prevent the removal of fines from the soil.
 - 8. The Contractor shall be responsible for any damage to the foundations or any other parts of existing structures or of the new work caused by failure of any part of the Contractor's protective works. After temporary protective works are no longer needed for dewatering purposes, they shall be removed by the Contractor.
 - 9. If pumping is required on a 24-hour basis, requiring engine drives, then engines shall be equipped in a manner to keep noise to a minimum. Refer to Section 01 50 00 for noise control requirements.
 - 10. Prevent disposal of sediments from the soils to adjacent lands or waterways by employing whatever methods are necessary, including settling basins.

3.02 REGULATED MATERIALS IN GROUNDWATER

A. Refer to Section 31 23 33, Part 3.14 for details. **END OF SECTION**

1.01 SUMMARY

A. Section Includes: Perform all excavation, shoring, dewatering, backfilling, compaction and grading necessary or required for the construction of the work as covered by these Specifications and indicated on the Drawings. The excavation shall include, without classification, the removal and disposal of all materials of whatever nature encountered, including water and all other obstructions that would interfere with the proper construction and completion of the required work.

1.02 RELATED SECTIONS:

- A. Section 02 40 00: Demolition
- B. Section 31 23 19: Dewatering

1.03 REFERENCES

- A. American Society for Testing and Materials (ASTM).
- B. Revised Code of Washington (RCW)
 - 1. RCW 39.04.180 Trench Excavations Safety Systems Required
- C. Washington Administrative Code (WAC)
 - 1. WAC 173-340 Model Toxics Control Act
 - 2. WAC 173-303 Dangerous Waste Regulations

1.04 SUBMITTALS

- A. Submit in accordance with Section 01 33 00, Submittal Procedures.
- B. Submit the following:
 - Shoring Plan, designed and stamped by a Professional Engineer licensed in Washington State.
 - 2. Samples and Test Results:
 - a. Furnish, without additional cost to the Port, such quantities of import materials as may be required by the Engineer for test purposes. Cooperate with the Engineer and furnish necessary facilities for sampling and testing of all materials and workmanship.
 - b. Submit supplier name and test results for all import materials required in this specification, for Engineer's approval, with sufficient lead time for Engineer to review and approve prior to delivery to site. Tests shall be performed within 1 year of the submission.
 - c. Tests shall be completed by a qualified testing agency. Accompanying documentation should indicate that test results comply with these Specifications.
 - d. All material furnished and all work performed shall be subject to rigid inspection, and no material shall be delivered to the site until it has been favorably reviewed by the Engineer, or used in the construction work until it has been inspected in the field by the Engineer.

1.05 QUALITY ASSURANCE

A. Source Quality Control: Test import materials proposed for use to demonstrate that the materials conform to the specified requirements. Tests shall be performed by an independent testing laboratory employed by the Contractor.

B. Field Quality Control:

- 1. The Engineer will:
 - a. Observe placement and compaction of fill.
 - b. Review results of independent testing laboratory tests.

2. Contractor shall:

- a. Test soils during placement of fill to verify conformance with material requirements defined herein. Tests shall be performed by an independent testing laboratory employed by the Contractor.
- b. Be responsible for costs of additional inspection and re-testing resulting from non-compliance.
- c. Provide testing results to the Engineer.

C. Testing Methods:

- 1. Field testing procedures shall be an AASHTO or ASTM test procedure.
- 2. Chemical analytical testing shall conform to the requirements of Part 3.16.

D. Definitions

1. Relative Compaction: In-place dry density divided by the maximum dry density laboratory compaction expressed as percentage.

1.06 SUBSURFACE INVESTIGATIONS

A. Geotechnical investigations for design purposes for this project are available in the Reference Documents of these Contract Documents.

1.07 ADDITIONAL SAFETY RESPONSIBILITIES

- A. The Contractor shall select, install and maintain shoring, sheeting, bracing, and sloping as necessary to maintain safe excavations. The Contractor shall be responsible for ensuring such measures: (1) comply fully with WAC 296-155-650 through 66411, Part N Excavation, Trenching, and Shoring (2) provide necessary support to the sides of excavations, (3) provide safe access to the Engineer's sampling and testing within the excavation, (4) provide safe access for backfill, compaction, and compaction testings, and (5) otherwise maintain excavations in a safe manner that shall not endanger property, life, health, or the project schedule. All earthwork shall be performed in strict accordance with applicable law, including local ordinances, and applicable DOSH (Washington Department of Labor and Industries Division of Occupational Safety and Heath) requirements.
- B. The Contractor shall be responsible for the safety of his/her workers and shall comply with safety and health standards such as Safety Standards for Construction Work (Chapter 296-155 WAC), General Safety and Health Standards (Chapter 296-24 WAC), General Occupational Health Standard (Chapter 296-62 WAC), and any other appropriate safety and health codes.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Import materials shall be natural, native, virgin materials, meeting the chemical standards identified in Part 3.16.D. and other specifications herein.
- B. Aggregates: Contractor shall not use crushed concrete as aggregate.
 - 1. Overexcavation Support:
 - a. Gravel Borrow: Aggregate for gravel borrow shall consist of granular material, either naturally occurring or processed, and shall meet the following requirements for grading and quality:

Sieve Size	Percent Passing
4" Square ¹	100
2" Square	75-100
U.S. No. 4	50-80
U.S. No. 40	30 Maximum
U.S. No. 200	7 Maximum
Dust Ratio	2/3 Maximum
Sand Equivalent	50 Minimum

All percentages are by weight.

¹For geosynthetic reinforced walls or slopes, 100 percent passing 1-1/4 inch square sieve and 90 to 100 percent passing 1 inch square sieve.

Ballast may be substituted for gravel borrow for embankment construction.

2. Crushed Surfacing Base Course:

Crushed surfacing material shall be manufactured from ledge rock, talus, or gravel. The materials shall be uniform in quality and substantially free from wood, roots, bark, and other extraneous material and shall meet the following quality test requirements:

Los Angeles Wear, 500 Rev.	35% Maximum
Degradation Factor	15% Minimum

Crushed surfacing shall meet the following requirements for grading and quality when placed in hauling vehicles for delivery to the site, or during manufacture and placement into a temporary stockpile.

Sieve Size	Percent Passing
1-1/4" Square	100
1" Square	80-100
5/8" Square	50-80
U.S. No. 4	25-45
U.S. No. 40	3-18
U.S. No. 200	7.5 Maximum
% Fracture	75 Minimum
Sand Equivalent	40 Minimum

The fracture requirement shall be at least one fractured face and will apply to the combined aggregate retained on the U.S. No. 4 sieve in accordance with FOP for AASHTO PT 61. The portion of crushed surfacing retained on a U.S. No. 4 sieve shall not contain more than 0.15 percent wood waste.

3. Pipe Bedding:

Gravel backfill for pipe zone bedding shall consist of crushed, processed or naturally occurring granular material. It shall be free from various types of wood waste or other extraneous or objectionable materials. It shall have such characteristics of size and shape that it will compact and shall meet the following specifications for grading and quality

Material used for backfill shall be one of the following:

Sieve Size	Percent Passing
1 1/2" Square	100
1" Square	75-100
5/8" Square	50-100
U.S. No. 4	20-80
U.S. No 40	3-24
U.S. No. 200	10 Maximum
Sand Equivalent	35 Minimum

Imported material shall be characterized as specified in paragraph 3.16 at the Contractor's expense.

Controlled Density Fill (CDF) per WSDOT Standard Specification 2-09.3(1)E shall be used were indicated on the Drawings. CDF Shall have a minimum 28-day compressive strength of 200 psi, but no more than 300 psi.

4. Structural Backfill:

a. Gravel Borrow meeting the requirements of 2.01B.1.a.

5. Excavation Bottom Stabilization:

a. Quarry Spalls shall consist of broken stone meeting the characterization requirements in paragraph 3.16, either naturally occurring, or processed meeting the following requirements.

Parameter	Criteria
Degradation Factor	15 Minimum
Los Angeles Wear, 500 Rev.	50% Maximum
Specific Gravity	2.55 Minimum
Sieve Size	Percent Passing
8" Square	100
3" Square	40 Maximum
3/4"	10 Maximum

C. Water: Water quality must be approved by the Engineer.

D. Aggregate Base: Crushed Surfacing Top Course, crushed surfacing material shall be manufactured from ledge rock, talus, or gravel. The materials shall be uniform in quality and substantially free from wood, roots, bark, and other extraneous material and shall meet the following quality test requirements:

Los Angeles Wear, 500 Rev.	35% Maximum
Degradation Factor	25 Minimum

Crushed surfacing shall meet the following requirements for grading and quality when placed in hauling vehicles for delivery to the site, or during manufacture and placement into a temporary stockpile.

Sieve Size	Percent Passing
3/4" Square	100
1/2" Square	80-100
U.S. No. 4	46-66
U.S. No. 40	8-24
U.S. No. 200	10 Maximum
% Fracture	75 Minimum
Sand Equivalent	40 Minimum

The fracture requirement shall be at least one fractured face and will apply to the combined aggregate retained on the U.S. No. 4 sieve in accordance with FOP for AASHTO PT 61. The portion of crushed surfacing retained on a U.S. No. 4 sieve shall not contain more than 0.15 percent wood waste.

E. Warning Tape: 6-inch-wide, minimum 4-mil thick, inert, fade-resistant plastic film resistant to acids, alkalis, and other components likely to be encountered in soil. Tape shall be green, imprinted with "CAUTION STORM DRAIN BELOW", Griffolyn Terra Tape; or equal.

PART 3 - EXECUTION

3.01 EXISTING UTILITIES

- A. General: The known existing buried utilities and pipelines are shown on the Drawings in their approximate location. The Contractor shall exercise care in avoiding damage to all utilities as he will be held responsible for their repair if damaged. There is no guarantee that all utilities or obstructions are shown, or that locations indicated are accurate. Utilities are piping, conduits, wire, cable, ducts, manholes, pull boxes and the like, located at the project site.
- B. Check on Locations (Potholing): Hire a private utility company and coordinate with public utilities to locate the respective utilities prior to the start of "potholing" procedures.
- C. Clearly paint the location of all affected utility underground pipes, conduits and other utilities on the pavement or identify the location with suitable markers if not on pavement. In addition to the location of metallic pipes and conduits, non-metallic pipe, ducts, and conduits shall also be similarly located using surface indicators and shall then be similarly marked.

- D. After the utility survey is completed, commence "potholing" to determine the actual location and elevation of all utilities where crossings, interferences, or connections to new pipelines or other facilities are shown on the Drawings, marked by the utility companies, or indicated by surface signs. Prior to the preparation of piping shop drawings, or the excavating for any new pipelines or structures, the Contractor shall locate and uncover these existing utilities to a point 1 foot below the utility. Submit a report identifying each underground utility and its depth and location. Any variation in the actual elevations and the indicated elevations shall be brought to the Engineer's attention.
- E. Excavations around underground electrical ducts and conduits shall be performed using extreme caution to prevent injury to workmen or damage to electrical ducts or conduits. Similar precautions shall be exercised around gas lines, telephone, and television cables. Backfill after completing potholing.
- F. Interferences: If interferences occur at locations other than shown on the Drawings, the Contractor shall notify the Engineer, and a method for correcting said interferences shall be supplied by the Engineer. Payment for interferences that are not shown on the plans, nor which may be inferred from surface indications, shall be in accordance with the provisions of the General Conditions. If the Contractor does not expose all required utilities prior to shop drawing preparation, the Contractor shall not be entitled to additional compensation for work necessary to avoid interferences, nor for repair to damaged utilities.
- G. Any necessary relocations of utilities, whether shown on the Drawings or not, shall be coordinated with the affected utility. The Contractor shall perform the relocation only if instructed to do so in writing from the utility and the Engineer.
- H. Shutdowns: Planned utility service shutdowns shall be accomplished during period of minimum use. In some cases, this may require night or weekend work. Such work shall be at no additional cost to the Port. Program work so that service will be restored in the minimum possible time and shall cooperate with the utility companies in reducing shutdowns of utility systems to a minimum.
 - 1. Disconnections: No utility shall be disconnected without prior written approval from the utility owner. When it is necessary to disconnect a utility, the Contractor shall give the utility owner not less than 72 hours' notice when requesting written approval. The Contractor shall program his work so that service will be restored in the minimum possible time.
- I. Overhead Facilities: There are existing overhead electric and telephone transmission lines at the site. These overhead utilities may not be shown on the Drawings. Extreme caution shall be used when working in the vicinity of overhead utilities to prevent injury to workmen or damage to the utilities. The Contractor shall be required to comply with the applicable provisions of the WAC 296-24-960 when working anywhere on this project.

3.02 GENERAL CONSTRUCTION REQUIREMENTS

- A. Barriers: Barriers shall be placed at each end of all excavations and at such places along excavations as may be necessary to warn all pedestrian and vehicular traffic of such excavations.
- B. Demolition of Pavement: Where trenching or excavation occurs in paved areas, the pavement shall be scored and broken ahead of the trenching or excavation operation. The extent of paving removed shall be limited to the minimum necessary for the excavation.
- C. Dust Control: Take proper and efficient steps to control dust.

- D. Permits: Refer to General Conditions.
- E. Storage of Materials: Neatly place excavated materials far enough from the excavation to prevent stability problems. Keep the materials shaped so as to cause the least possible interference with plant operations and drainage.
- F. Existing Facilities: Maintain access to existing facilities to permit continued operation. Maintain access for fire-fighting equipment and to fire hydrants.

3.03 COMPACTION

- A. Add water to the backfill material or dry the material as necessary to obtain moisture content within 2% of optimum as determined by laboratory testing results. Employ such means as may be necessary to secure a uniform moisture content throughout the material of each layer being compacted.
- B. After the material has been moisture conditioned, compact it with compaction equipment appropriate for the use to achieve specified compaction. Maximum 12-inch lifts are recommended for hand tamping and maximum 2-foot lifts are recommended for track-hoe plate compactors. Hoe-mounted compactors may not be used within 5 feet of embedded walls or structures.
- C. If the backfill material becomes saturated from rains or any other source because it was not compacted to the specified density or was not backfilled and compacted to surface grade, through negligence or otherwise, remove the faulty material and replace it with suitable material compacted to the specified density. No additional payment will be made for doing such work or removal and replacement.
- D. Compaction of backfill materials by flooding, ponding or jetting is not permitted.
- E. When densities of compacted materials do not meet the requirements, remove and/or recompact the material until the requirements are met. If the Engineer determines that the nature of the ground in which the trench lies precludes compaction of the backfill to the specified density, compact the backfill to the maximum practicable density. The Contractor will be backcharged the cost of retesting all failing tests, including the initial retest. Such backcharges will be deducted from the Contractor's Progress Payments.

F. Material Requirements

- 1. Foundation Granular Base Course: Compact to a minimum 95 percent of maximum density, in accordance with ASTM D698.
- 2. Structural Backfill: Compact to a minimum 95 percent of maximum density, in accordance with ASTM D698 for the upper 4 feet. Compact to a minimum 90 percent maximum density below 4 feet below grade.
- Pipe Zone Material: Compact by hand methods under the haunches of the pipe and in areas not accessible to mechanical tampers unless otherwise specified or shown on the Drawings.

G. Testing Frequency:

- 1. Trench Backfill: Test every 200 feet of trench.
- 2. Earthwork: Test every 500 square feet for each 2 feet of fill.
- 3. Structural Backfill: Test every 200 square feet

3.04 TRENCH EXCAVATION

- A. Excavation for pipe and other utilities shall be supported with shoring. The trench shall be as wide as necessary for sheeting and bracing and the proper performance of the work up to the maximum width permitted by the typical cross-sections shown on the Drawings. The sides of the trenches shall be vertical. The bottom of the trench shall be constructed to the grades and shapes indicated on the Drawings. Should the Contractor desire to use other equivalent methods, the method of construction shall be submitted to the Engineer for approval prior to its use.
- B. Take care not to overexcavate. Accurately grade the bottom of the trenches to provide uniform bearing and support for each section of the pipe or conduit at every point along its entire length, except for the portions of the pipe sections where it is necessary to excavate for bell holes and for the proper sealing of pipe joints, and as hereinafter specified. Dig bell holes and depressions for joints after the trench bottom has been graded. In order that the pipe rest on the bedding for as nearly its full length as practicable, bell holes and depressions shall be only of such length, depth and width as required for properly making the joint. Remove stones as necessary to avoid point bearing. If unstable soil conditions are encountered at the bottom of the excavation, notify the Port. It may be necessary to overexcavate and install 12 inches of bottom stabilization material, at the Port's discretion.
- C. Backfill and compact overexcavations in accordance with the requirements of Part 3.04 with bedding material. There shall be no additional payment to the Contractor for overexcavations not directed by the Engineer. Remove unsatisfactory material encountered below the grades shown as directed by the Engineer and replace with bedding material. Payment for removal and replacement of such unsatisfactory material directed by the Engineer shall be made in accordance with the provisions of the General Conditions.
- D. Grade trenches so that they are uniformly sloped between the pipe elevations shown on the Drawings. Provide a minimum of 3 feet of cover over pipes. Comply with the minimum and maximum trench widths shown on the Drawings. Notify the Engineer if the trench width exceeds the maximum allowable width for any reason.
- E. For all piping or conduits to be placed in any excavated and backfilled area, such as at manholes or for building connections, the structural backfill shall be first compacted to a level at least 3 feet from the top of the piping or conduit elevation and then retrenched to pipe grade.
- F. Provide ladders for access to the trench by construction and inspection personnel.

3.05 EXCAVATION FOR STRUCTURES

- A. All excavation for structures shall be done to the dimensions and levels indicated on the Drawings or specified herein. Excavate to such width outside the lines of the structure to be constructed as may be required for proper working methods, the erection of forms and the protection of the work.
- B. Take care to preserve the foundation surfaces in an undisturbed condition. If the Contractor overexcavates or disturbs the foundation surfaces without written authorization of the Engineer, he shall replace such foundations with concrete fill or other material approved by the Engineer in a manner that will show by test an equal bearing value with the undisturbed foundation material. No additional payment will be made for the added quantity of concrete fill or other material used because of overexcavation.

- C. Inspection of Excavation: Notify the Engineer when excavation for the structure is complete. No forms, reinforcing steel, concrete, or precast structure shall be placed until the excavation has been inspected by the Engineer.
- D. Where unsatisfactory material is encountered below the grades shown for structural excavations, it shall be removed and replaced as directed by the Engineer and compacted. Payment for removal and replacement of such unsatisfactory material directed by the Engineer shall be made in accordance with the provisions of the General Conditions.

3.06 SUPPORT OF EXCAVATIONS

- A. Adequately support excavation for trenches and structures to meet all applicable requirements in the current rules, orders and regulations. Excavation shall be adequately shored, braced and sheeted so that the earth will not slide or settle and so that all existing structures and all new pipe and structures will be fully protected from damage. Keep vehicles, equipment, and materials far enough from the excavation to prevent instability.
- B. Take all necessary measures to protect excavations and adjacent improvements from running, caving, boiling, settling, or sliding soil resulting from the high groundwater table and the nature of the soil excavated.
- C. The support for excavation shall remain in place until the pipeline or structure has been completed. During the backfilling of the pipeline or structure, the shoring, sheeting and bracing shall be carefully removed so that there shall be no voids created and no caving, lateral movement or flowing of the subsoils.

3.07 TRENCH BACKFILL

- A. Place bedding and backfill materials true to the lines, grades, and cross-sections indicated on the Drawings and compacted to the degree specified on the Drawings. Place bedding and backfill materials in horizontal lifts not to exceed 6 inches in thickness measured before compaction. The difference in level on either side of a pipe shall not to exceed 4 inches.
- B. Backfill material shall not be placed over the pipe or conduit until after the joints have been completed and inspected by the Engineer.
- C. It shall be incumbent upon the Contractor to protect the pipe or conduit from damage during the construction period. It shall be the Contractor's responsibility to repair broken or damaged pipe at no extra cost to the Port. Carefully place backfill around and over the pipe. Tamping of backfill over the pipe shall be done with tampers, vibratory rollers and other machines that will not injure or disturb the pipe.
- D. Do not allow construction traffic nor highway traffic over the pipe trench until the trench backfill has been brought back even with existing adjacent grade.

3.08 TEMPORARY TRENCH COVER

- A. To maintain vehicular traffic at and around trench work, provide temporary steel plate trench covers of thickness to support AASHTO H-20 loading as present at the site based on span dimension across trenches.
- B. Remove temporary trench covers as soon as underground utility work is completed to allow backfill and compaction work.

3.09 STRUCTURAL BACKFILL

- A. Foundation Stabilization: Place a layer of aggregate base, compacted in accordance with the requirements of Section 3.04, under structures to the lines, grades and minimum thicknesses shown on the Drawings.
- B. Backfill Adjacent to Structures:
 - 1. Backfill shall be per Part 2.01B compacted in accordance with the requirements of Section 3.04.
 - 2. Do not place backfill against structures until the concrete has been patched and cured.
 - 3. Do not place backfill against hydraulic structures until the structure has passed the specified leakage tests.
 - 4. Place backfill in uniform, level layers.

3.10 PAVEMENT SUBGRADE PREPARATION

- A. Preparation of Subgrade: Immediately prior to placement of surfacing materials, clean the entire width of the area of all debris and dispose of as directed by the Engineer. All depressions or ruts which contain storm water shall be drained.
 - 1. Shape the entire subgrade to a smooth uniform surface.
 - 2. Compact the subgrade material for a depth of 6 inches below the subgrade to 95% of the maximum dry density as determined by compaction test ASTM D698.
 - 3. If soft or spongy material underlying the upper six inches of the area being prepared precludes satisfactory compaction of the upper six inches, loosen, aerate, or excavate, replace and compact to the required density as directed by the Engineer.
 - 4. Remove and dispose of excess material which cannot be disposed of by normal drifting to low spots during blading and shaping operations or by placing in subgrade areas deficient in materials or by wasting, all as directed by the Engineer.
 - 5. Bring subgrade areas deficient in materials to grade by importing suitable materials from other subgrade areas or other sources as directed by the Engineer.
 - 6. Water materials added to subgrade areas deficient in materials and compact as necessary to yield a true finished subgrade as described above.
 - 7. Once it is prepared, maintain the subgrade for surfacing in the finished condition until the first course of surfacing has been placed.
- B. Finishing Subgrades: Before any paving material is placed, bring the subgrade to the proper line, grade and cross section and maintain until the base course and paving is placed.
 - 1. Compact the subgrade for pavement to 95% of maximum dry density as defined for Compaction Control Density, Article "Compaction Control Tests" of these Specifications, to a minimum depth of six inches and to a width that will accommodate the paving equipment.
- C. Subgrade Protection: Take all precautions necessary to protect the subgrade from damage; hauling over the finished subgrade shall be limited to that which is essential for construction purposes.

- 1. Equipment used for hauling over the prepared subgrade which, in the opinion of the Engineer, is causing undue damage to the prepared subgrade or to the underlying materials, shall be removed from the work at the request of the Engineer.
- 2. Repair at the Contractor's expense all cuts, ruts and breaks in the surface of the subgrade prior to placing surfacing, treated base, or paving materials.
- 3. Protect the prepared subgrade from both the Contractor's traffic and public traffic and maintain the subgrade by blading and rolling as frequently as may be necessary to preserve the subgrade in a completely satisfactory condition.

3.11 AUTHORIZED OVEREXCAVATION AND BACKFILL

- A. The Contractor shall not excavate or backfill beyond the lines and grades shown in the Contract Documents unless authorized by the Engineer. Unauthorized overexcavation and backfill shall be at the Contractor's expense.
- B. Overexcavation and backfill that is required to repair deteriorated grades, as a result of the Contractor's operations will not be considered authorized overexcavation and backfill work.
- C. Authorized overexcavation and backfill may be directed by the Engineer for trench foundation grade conditions.
- D. The Engineer will direct the Contractor to excavate beyond the lines and grades shown on the Contract Documents and to backfill the authorized overexcavation with Gravel Borrow or Excavation Stabilization Material, depending on subsurface conditions. Overexcavation and backfill may be required in the following cases:
 - 1. Unsuitable soil materials exposed at required trench excavations.
 - 2. Unsatisfactory soils due to excessive moisture in native soils located at required trench excavations, or seepage in native soils.
- E. Authorized overexcavation and backfill quantities shall be quantified as excavation cubic yards. The Contractor and the Engineer shall agree in writing to the in-place, neat line, field measured overexcavation quantity. The Contractor shall backfill the overexcavation with specified materials. Refer to Section 01 20 00 for price and payment procedure.
- F. The Contractor shall record all authorized overexcavation and backfill locations on the Record Drawings.

3.12 FINISH GRADING

A. Except where shown otherwise in the Drawings, restore the finish grade to the original contours and to the original drainage patterns. Grade surfaces to drain away from structures. The finished surfaces shall be smooth and compacted.

3.13 REGULATED MATERIALS IN SOIL

A. Contractor shall monitor soils and groundwater by instructing workers in observing and reporting questionable materials, odors, oily sheen or color on soils and water, and oily or chemical odors. If unexpected regulated materials are encountered, Contractor shall stop work in that area immediately and notify the Port. Refer to Section 31 23 19 for additional requirements for groundwater.

3.14 EXCAVATED MATERIAL CHARACTERIZATION AND DISPOSAL

- A. Material to be exported from the site must be stockpiled and characterized prior to offsite disposal. The Contractor will stockpile material at a location on-site as directed by the Engineer. Stockpiled material shall be placed onto plastic sheeting, covered and anchored to prevent rainwater from contacting material. Refer to Section 02 40 00 and Section 01 74 16 for characterization and disposal requirements. Contractor shall base their bid on the assumption that excavated material is not regulated.
- B. Segregate and stockpile material for Port examination, identification, and testing.
 - 1. Notify the Port when materials are ready for testing.
 - 2. Contractor will allow 21 days for characterization of stockpiled materials
 - 3. Port of Tacoma will pay for and conduct testing of excavated materials.
 - 4. Port of Tacoma will be responsible for identifying whether material is regulated or non-regulated solid waste under this contract.
- C. Under this contract, material will be considered non-regulated solid waste if Port assessments indicate that concentrations are equal to or below concentrations identified in WAC 173-340-900 Table 740-1 (Method A Soil Cleanup Levels for Unrestricted Land Use) and if material is not designated as dangerous waste per WAC 173-303. The Port may base its identification of regulated or non-regulated material on one, several, or all of the parameters listed in WAC 173-340-900 Table 740-1 and WAC 173-303 (Dangerous Waste Regulations), at its own discretion.
 - Further management, handling, and disposal of material identified by the Port to be nonregulated shall be the responsibility of the Contractor. Contractor shall be responsible for the performance and cost of any additional characterization of non-regulated material that may be required for Contractor's choice of disposal locations.
 - 2. Further management of regulated material through loading of the material into transport equipment/vehicles will be the responsibility of the Contractor at no additional cost to the Port. The Port will arrange for the appropriate transport and disposal of regulated material.
 - 3. Regulated material: Quantity shall be quantified as cubic yards. The Contractor and Engineer shall agree in writing to the in-place, neat line, field measured quantity. Refer to Section 01 20 00 for price and payment procedure.
- D. Clean excess soils generated during site activities may be used for backfill and other fills associated with the work, as approved by the Engineer.

3.15 IMPORT MATERIAL CHARACTERIZATION TESTING, REPORTING, AND CERTIFICATION

- A. Provide characterization and testing as described below for all off-site borrow materials.
- B. The Contractor is responsible for all testing costs associated with characterization of off-site borrow materials. The chemical testing laboratory shall be certified under WAC Chapter 173-50.
- C. Provide the following information with each sample submitted:
 - 1. Material source
 - 2. Proposed on-site use
 - 3. Sampling dates
 - 4. Chain of custody

- 5. Sampling locations
- 6. Contractor's certification that the samples submitted are representative of the materials that shall be reused at the site.
- D. Characterization Testing shall include:
 - 1. Grain Size Distribution (ASTM D 422)
 - 2. Maximum Dry Density (ASTM D698)
 - 3. Weight per unit volume of uncompacted material (ASTM C 29)
 - 4. Priority Pollutant Metals (EPA SW 846 6010/6020/ 7041)
 - 5. Volatile Organic Compounds (EPA SW 846 8260)
 - 6. Semi-volatile Organic Compounds (EPA SW 846 8270)
 - 7. PCBs and Pesticides (EPA SW 846 8080)
 - 8. Petroleum Hydrocarbons (NWTPH-HCID)

EPA methods are available through SW-846 online. http://www.epa.gov/osw/hazard/testmethods/sw846/online/index.htm

E. Chemical Standards for Import Material: The chemical criteria identified in WAC 173-340-900 Table 740-1 (Method A Cleanup Levels for Unrestricted Land Use).

END OF SECTION THIS PAGE INTENTIONALLY LEFT BLANK END OF SECTION

PART 1 GENERAL

1.01 SUMMARY:

A. Section Includes:

1. Requirements for selection and installation of a nonwoven geotextile. Refer to drawings for placement and dimensions of product.

B. Related Sections:

1. Section 31 23 33: Earthwork

1.02 REFERENCES

- A. Stormwater Management Manual for Western Washington, Volume V: Runoff Treatment BMPs, 2019 or latest edition. Prepared by the Washington State Department of Ecology Water Quality Program. Publication No: 12-10-030.
- B. AASHTO M288.

1.03 DEFINITIONS

A. Nonwoven geotextile: fabric or synthetic material placed between the soil and a pipe, gabion, retaining wall, or two soil layers to enhance water movement, retard soil movement, and act as a blanket to add reinforcement and separation. Produced by needle punching synthetic staple fibers in a random network to form a high strength dimensionally stable fabric.

1.04 SUBMITTALS

- A. Comply with Section 01 30 00, Submittal Procedures.
- B. Product Data: Submit manufacturer's product data for the geotextile, including generic description, complete technical data, site preparation, and installation instructions.
- C. Warranty: Submit manufacturer's standard warranty.

1.05 QUALITY ASSURANCE

- A. Provide products of a manufacturer who has been regularly engaged in the design and manufacture of the product.
- B. Demonstrate to the satisfaction of the Engineer that the quality is equal to the product made by those manufacturers specifically named herein, if an alternate product manufacturer is proposed.
- C. Material shall be new and supplied by one manufacturer.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying:
 - 1. Material name.
 - Manufacturer.
 - Batch or lot number.
 - Date of manufacture.
 - 5. Installation instructions.

PART 2 PRODUCTS

2.01 NONWOVEN GEOTEXTILE

- A. Geotextile Fabric:
 - 1. AASHTO M288 Class 2 nonwoven geotextile.
 - a. Apparent Opening Size (AOS): 0.43 mm.
 - b. Water Flow: 110 gpm/sqft.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine areas and conditions under while the geotextile is to be applied. Inform Engineer of areas or conditions not acceptable. Do not begin installation until unacceptable areas or conditions have been corrected.

3.02 INSTALLATION

- A. Location: refer to Drawings for placement of the geotextile.
- B. Overlapping: each roll shall have at least a 1-inch overlap with adjacent rolls.

3.03 FIELD QUALITY CONTROL

- A. Inspector's Services:
 - 1. Verify all materials are as specified.
 - 2. Verify that installation is performed as specified.
 - 3. Report:
 - a. Submit written reports describing inspections made and actions taken to correct nonconforming work.
 - b. Report nonconforming work not corrected.
 - c. Submit copies to Port, Engineer and Contractor.

END OF SECTION

PART 1 GENERAL

1.01 SUMMARY

- A. Furnishing all labor, material, equipment, tools, and services required for the placing and compacting of asphalt concrete pavement at the site to the lines, grades, and dimensions shown on the Drawings and as specified herein.
 - Also included shall be the repair and resurfacing of existing paving damaged or removed during construction.

1.02 REFERENCE SPECIFICATIONS

- A. Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge and Municipal Construction 2012 (or latest edition).
- B. American Society for Testing and Materials (ASTM) Standard Specifications:
 - 1. ASTM D75 Sampling Aggregates
 - 2. ASTM D242 Mineral Filler for Bituminous Paving Mixtures
 - 3. ASTM D422: Test Method for Particle-Size Analysis for Soils
 - ASTM D1556: Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
 - 5. ASTM D2027: Specification for Cutback Asphalt (Medium Curing Type)
 - 6. ASTM D2922: Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
 - 7. ASTM D4791 Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate
- C. American Association of State Highway and Transportation Officials (AASHTO):
 - 1. AASHTO M 17 Mineral Filler for Bituminous Paving Mixtures
 - AASHTO M 320 Performance-Graded Asphalt Binder
 - 3. AASHTO T 11 Materials Finer Than 75 µm (No. 200) Sieve in Mineral
 - a. Aggregates by Washing
 - 4. AASHTO T 27 Sieve Analysis of Fine and Coarse Aggregates
 - 5. AASHTO T 89 Determining the Liquid Limit of Soils
 - 6. AASHTO T 90 Determining the Plastic Limit and Plasticity Index of Soils
 - AASHTO T 96 Resistance to Degradation of Small-Size Coarse Aggregate and Impact in the Los Angeles Machine
 - 8. AASHTO T 104 Soundness of Aggregate by Use of Sodium Sulfate or
 - a. Magnesium Sulfate
 - 9. AASHTO T 112 Clay Lumps and Friable Particles in Aggregate
 - 10. AASHTO T164 Quantitative Extraction of Asphalt Binder from Hot Mix Asphalt (HMA)
 - 11. AASHTO T 176 Plastic Fines in Graded Aggregates and Soils by Use of the Sand

- a. Equivalent Test
- 12. AASHTO T 283 Resistance of Compacted Hot-Mix Asphalt (HMA) Mixtures to Moisture-Induced Damage
- 13. AASHTO T 304 Uncompacted Void Content of Fine Aggregate
- 14. AASHTO T308 Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA)
 - a. by the Ignition Method
- 15. AASHTO T 335 Determining the Percentage of Fracture in Coarse Aggregate

1.03 SUBMITTALS

- A. Submit in accordance with Section 01 33 00, Submittal Procedures.
- B. Submit the following:
 - 1. Samples: Furnish, without additional cost to the Port, such quantities of construction materials as may be required by the Engineer for test purposes. The Contractor shall cooperate with the Engineer and furnish necessary facilities for sampling and testing of all materials and workmanship. All materials furnished and all work performed shall be subject to rigid inspection, and no materials shall be used in the construction work until it has been inspected by the Engineer.
 - 2. Submit a signed verification from each source of supply for each construction material employed on this project indicating that the materials meet the Specification requirements.
 - 3. Mix design for asphalt concrete.
 - 4. Submit manufacturer's certification of the actual volatile organic compound (VOC) content for all pavement paints and bituminous pavement sealers proposed for use on this project. Submit certification of the actual VOC content for coatings manufactured after 1 September 1987. For coatings manufactured before 1 September 1987, submit VOC content and date of manufacture. VOC content shall be measured in grams per liter by weight of coating as applied excluding water and color added to the tint base.
 - 5. Submit verification to local air pollution authorities and the State Department of Ecology that bituminous pavement sealers and paint products furnished meet applicable regulations as to allowable VOC content for the time and place of application and use intended.

1.04 QUALITY ASSURANCE

- A. Comply with quality control and quality standards of Standard Specifications for Road, Bridge and Municipal Construction by the Washington Department of Transportation (WSDOT), 2012.
- B. The Port will provide inspection services to the satisfaction of the Engineer. Sampling and testing for compliance shall be in accordance with the applicable reference standards using certified technicians and accredited independent testing laboratories.
- C. Sampling and testing for compliance with the Contract provisions shall be in accordance with Section 01 33 00 Submittal Procedures and Section 01 45 00 Quality Control.
- D. The Contractor may obtain copies of results of tests performed by the Port from the office of the Port, at no cost. Tests conducted for the sole benefit of the Contractor, shall be at the Contractor's expense.

E. All pavement stripe painting shall be performed by competent and experienced Equipment operators and painters using proper equipment, tools, stencils, templates, and shields in a workmanlike manner.

1.05 REGULATORY REQUIREMENTS

A. All work, material, procedures and practices under this Section shall conform to all rules of local air pollution authorities. If there are none, air-quality rules of the State Department of Ecology shall govern the Work.

PART 2 PRODUCTS

2.01 ASPHALT CONCRETE

- A. Asphalt Concrete shall be 1/2-inch Class B mix and conform to the applicable requirements of Sections 4-06 and 9-02 of the WSDOT Standard Specifications.
- B. Only Performance Graded Asphalt Binder: Asphalt shall conform to the requirements of AASTHO M 320 and the elastic recovery requirements of WSDOT Standard Specification Section 9-02.1(4) for HMA Class ½ inch PG 64-22.
- C. The Asphalt Supplier of Performance Graded Asphalt Binder (PGAB) shall have a Quality Control Plan (QCP) in accordance with WSDOT QC 2 "Standard Practice for Asphalt Suppliers That Certify Performance Graded and Emulsified Asphalts". The Asphalt Supplier's QCP shall be submitted and approved by the WSDOT State Materials Laboratory.

2.02 AGGREGATES FOR ASPHALT CONCRETE

A. General Requirements

Aggregates for asphalt concrete shall be manufactured from ledge rock, talus, or gravel. The material from which they are produced shall meet the following requirements:

Los Angeles Wear, 500 Rev.	30% max
Degradation Factor, Wearing Course	30 min.
Degradation Factor, Other Courses	20 min.

It shall be uniform quality, substantially free from wood, roots, bark, extraneous materials, and adherent coatings. The presence of a thin, firmly adhering film of weathered rock will not be considered as coating unless it exists on more than 50 percent of the surface area of any size between consecutive laboratory sieves.

Aggregate removed from deposits contaminated with various types of wood waste shall be washed, processed, selected, or otherwise treated to remove sufficient wood waste so that the oven-dried material retained on a 1/4-inch square sieve shall not contain more than 0.1 percent by weight of material with a specific gravity less than 1.0.

B. Test Requirements

Aggregate for asphalt concrete shall meet the following test requirements:

- 1. Minimum 37% Sand Equivalent
- 2. The fracture requirements are at least one fractured face on 75 percent of the material retained on each specification sieve size No. 10 and above, if that sieve retains more than 5 percent of the total sample.

3. When material is being produced and stockpiled for use on a specific contract or for a future contract, the fracture and sand equivalent requirements shall apply at the time of stockpiling. When material is used from a stockpile that has not been tested as provided above, the requirements for fracture and sand equivalents shall apply at the time of its introduction to the cold feed of the mixing plant. The properties of the aggregate in a preliminary mix design for asphalt concrete shall be such that, when it is combined within the limits set forth in Section 2.02 F. and mixed in the laboratory with the designated grade of asphalt, mixtures with the following test values can be produced:

4. Class of Asphalt Concrete

Stabilometer Min. Value	35
Cohesiometer Min. Value	100
Percent Air Voids	2-4.5
Modified Lottman Stripping Test	Pass

C. Grading

1. Gradation

a. The Contractor may furnish aggregates for use on the same contract from a single stockpile or from multiple stockpiles. The gradation of the aggregates shall be such that the completed mixture complies in all respects with the pertinent requirements of Section 2.02 F. Acceptance of the aggregate gradation shall be based on samples taken from the final mix.

2. Gradation - Recycled Asphalt Pavement and Mineral Aggregate

- a. Asphalt concrete planings or old asphalt concrete utilized in the production of asphalt concrete shall be sized prior to entering the mixer so that a uniform and thoroughly mixed asphalt concrete is produced in the mixer. If there is evidence of the old asphalt concrete not breaking down during the heating and mixing of the asphalt concrete, the Engineer may elect to modify the maximum size entering the mixer. No contamination by deleterious materials will be allowed in the old asphalt concrete used.
- b. The gradation for the new aggregate used in the production of the asphalt concrete shall be the responsibility of the Contractor, and when combined with recycled material the combined material shall meet the gradation specification requirements for the specified Class ACP as listed in Section 2.02 F. and 2.02 G. or as shown in the Special Provisions. The new aggregate shall meet the general requirements listed in Section 2.02 A. and shall meet the appropriate fracture and sand equivalent requirements as listed in Section 2.02 B.

D. Blending Sand

- In the production of aggregate for asphalt concrete, there is often a deficiency of material
 passing the U.S. No. 40. When this occurs, blending sand in an amount specified by the
 Engineer may be used to make up this deficiency, provided that a satisfactory final mix is
 produced, including fracture requirements.
- 2. Blending sand shall be clean, hard, sound material, either naturally occurring sand or crusher fines, and must be material which will readily accept an asphalt coating. The exact grading requirements for the blending sand shall be such that, when it is mixed with an aggregate, the combined product shall meet the requirements of Section 2.02 F for the class of material involved. Blending sand shall meet the following quality requirement:

Sand Equivalent 27 min.

E. Mineral Filler

Mineral filler, when used in ACP mix, shall conform to the requirements of AASHTO M17.

F. Proportions of Materials

- 1. The materials of which asphalt concrete is composed shall be of such sizes, gradings, and quantities that, when proportioned and mixed together, they will produce a well graded mixture within the requirements listed in the following table.
- 2. The percentages of aggregate refers to completed dry mix, and includes mineral filler when used.

Sieve Size	Class
3/4"	100
1/2"	90-100
3/8"	75-90
1/4"	55-75
No. 10	30-42
No. 40	11-24
No. 200	3.0-7.0

3. For asphalt concrete produced using recycled asphalt materials and placed in areas other than the wearing course of the traveled lane, the gradation for the No. 200 Sieve is revised as follows:

	Maximum Passing 0.075 mm
50% - 60% Recycled Material	8.0 %
61% - 70% Recycled Material	9.0 %

G. Basis of Acceptance

I. Asphalt concrete will be accepted based on its conformance to the project job mix formula (JMF). For the determination of a project JMF, the Contractor shall submit to the Engineer, representative samples of the various aggregates, blending sand, and recycled asphalt pavement (RAP) to be used along with the gradation data showing the various aggregate stockpile averages and the proposed combining ratios and the average gradation of the completed mix. Based on this submittal from the Contractor the Engineer will determine the asphalt content, anti-strip requirement, and asphalt retention factor in the mix design process. Using the representative samples submitted and proposed proportion of each, trial mix tests will be run to determine the percentage of asphalt, by weight, to be added. The JMF thus established shall be changed only upon order of the Engineer.

The intermingling of asphalt concrete mixtures produced from more than one JMF is prohibited. Each strip of asphalt concrete pavement placed during a working shift shall conform to a single JMF established for the class of asphalt concrete specified unless there is a need to make an adjustment in the JMF.

No mixture shall be produced for use on the project until the amount of asphalt material and anti-strip additive to be added has been established.

2. Job Mix Formula – Statistical Acceptance

- a. The average gradation of the completed asphalt concrete mix submitted by the Contractor in the mix design proposal, as required in Section 2.02 F. and the resulting Mix Design Recommendations, shall be the JMF. Any change or adjustment of percentages in any constituent of the JMF creates a new JMF.
- 3. Job Mix Formula Tolerances and Adjustments
 - a. Tolerances Statistical Acceptance. After the JMF is determined, the several constituents of the mixture at the time of acceptance shall conform to the following tolerances:

Constituent of Mixture	Tolerance Limits
	The tolerance limit for each mix constituent shall not exceed the broad band specification limits specified in Section 2.02 F, except the tolerance limits for sieves designated as 100% passing will be 99-100.
Aggregate passing 1", 5/8", ½", 3/8" sieve	Broad band specification limits Section 2.02 F.
Aggregate passing ¼" sieve	± 6%
Aggregate passing No. 10 sieve	± 5%
Aggregate passing No. 40 sieve	± 4%
Aggregate passing No. 200 sieve	± 2.0% Note 1
Asphalt cement	± 0.5% Note 2

For open graded mix: Tolerance limits shall be aggregate gradation only and shall be as specified in Section 2.02 F.

Note 1 - 2.0% if less than 50% RAP, 2.5% for 50% RAP or more.

Note 2 - 0.5% if less than 20% RAP, 0.7% for 20% and over RAP, but less than 50% RAP, 1.0% for 50% RAP or greater.

These tolerance limits constitute the allowable limits as described in Section 1-06.2.

- a. Tolerances Nonstatistical Acceptance. After the JMF is determined, the constituents of the mixture at the time of acceptance shall conform to the range of the proportion specified in the broad band specifications of Section 2.02 F. for gradation and the design mix asphalt content plus or minus 0.7%.
- b. Adjustments

- Aggregates. Upon written request from the Contractor, the Project Engineer may approve field adjustments to the JMF including the Contractor's proposed combining ratios for mineral aggregate stockpiles, blend sand, and RAP. The maximum allowed gradation change shall be 2 percent for the aggregate retained on the No. 10 sieve and above, 1 percent for the aggregate passing the No. 10 and No. 40 sieves, and 0.5 percent for the aggregate passing the No. 2.00 sieve. Blend sand may be changed a maximum of 5 percent. The above adjustments and/or any further adjustments as ordered by the Engineer will be considered as a new JMF. Adjustments beyond these limits will require development of a new JMF. The adjusted JMF plus or minus the allowed tolerances shall be within the range of the broad band specifications.
- 2) Asphalt Content. The Project Engineer may order or approve the Contractor's request to change asphalt content a maximum of 0.3 percent from the approved JMF. No field adjustments of the JMF relative to the asphalt cement content exceeding 0.3 percent from the initial JMF will be made without the approval of the Materials Engineer.

1.02 TACK COAT

A. Unless otherwise approved by the Engineer, the tack coat shall be CSS-1, CSS-1h, or STE-1 emulsified asphalt. The CSS-1 and CSS-1h emulsified asphalt may be diluted with water at a rate not to exceed one part water to one part emulsified asphalt. The tack coat shall not exceed the maximum temperature recommended by the emulsified asphalt manufacturer. Refer to WSDOT Standard Specifications Section 5-04.3(5)A for all applicable requirements.

1.03 PRIME COAT (PENETRATION TREATMENT)

A. Material for prime coat shall be liquid asphalt conforming to the requirements of Section 5-02.3 of the WSDOT Standard Specifications and ASTM D2027.

1.04 STRIPES

A. Parking stripes paint shall be non-reflective Sherwin Williams Series 338-116(W), 338-117(Y) and 338-333(B), or Pervo Paint Company No. 4773-A(W), 4473-4A(Y) and 473-5A(B). Paint shall be stored at the project site in the manufacturer's sealed and labeled containers. Labels shall clearly identify the manufacturer, specification number, batch number, intended use, quantity and contract number.

1.05 TEMPORARY PAVEMENT (COLD MIX)

A. Temporary pavement shall consist of No. 4 sieve maximum aggregate size, graded in accordance with Section 9-03 of the WSDOT Standard Specifications. The aggregate shall be blended with 5-8% liquid asphalt that conforms to ASTM D2026.

PART 3 EXECUTION

2.01 GENERAL

- A. This Specification shall cover newly paved areas as well as existing pavement restoration.
- B. Where trenching or other construction activity has resulted in damage to a localized area of pavement, the damaged pavement shall be cut back 6 inches and shall be removed and replaced.
- C. Where the damaged area extends over more than 50% of the paved area, as determined by the Engineer, the full pavement width or area shall be cut away, removed and repaired.

- D. Structures such as valve boxes, manhole frames and covers, and electrical vaults shall be adjusted to grade as necessary within paved areas.
- E. Existing asphalt pavement islands of 50 ft² or less and strips 18 inches or less in width shall be removed and replaced.
- F. Adjust existing manholes, meter boxes, cleanouts, etc. to match the new grade.

2.02 PAVEMENT CUTTING

- A. After backfilling and prior to paving, proper tools and equipment shall be used in marking and breaking so that the pavement shall be cut accurately and on neat lines parallel to the trench. The asphalt pavement shall be saw cut (using a concrete saw) to full depth. The pavement shall be cut back 6 inches on each side of the trench or excavation wall. Any pavement damaged outside these lines shall be re-cut and restored at the expense of the Contractor. Should voids develop under existing pavements during construction, those affected pavements shall be neatly saw cut in straight lines and replaced after the voids have been filled.
- B. Construct joints between successive runs vertical and at right angles to the line of the improvement. Exercise care in construction of all joints to ensure that the surface of the pavement is true to grade and cross-section. Lapped joints will not be permitted.

2.03 PRIME COAT APPLICATION

- A. Prime Coat: In advance of spreading paving materials, a prime coat of liquid asphalt shall be applied to all base course surface areas to be covered with asphaltic concrete.
 - 1. Preparation of Base Course: Immediately before applying the prime coat, the area to be surfaced shall be cleaned of all loose material by means of hand brooms.
 - 2. Application: Liquid asphalt shall be applied by pressure distributors at a temperature between 125 and 200°F. The Engineer reserves the right to require an adjustment of the temperature of the liquid asphalt at the time of placement. The rate of application shall be between 2/10 and 3/10 gallon per square yard. Excess liquid asphalt, which has failed to penetrate the base, shall be covered with fine sand. All loose sand shall be removed from the treated areas before placing any surfacing material thereon. Liquid asphalt shall not be applied when the atmospheric temperature is below 50°F. The prime coat shall be applied at least 24 hours in advance of paving. Immediately in advance of paving asphalt concrete surfacing, additional prime coats shall be applied, as directed by the Engineer, to areas where the prime coat has been damaged.

2.04 TACK COAT APPLICATION

- A. Tack Coat: In advance of spreading bituminous material upon an existing bituminous or portland cement concrete surface, a tack coat shall be applied to all areas to be surfaced and to all vertical surfaces of existing pavement, curb, walls and construction joints in the surfacing against which additional material is to be placed. When two or more lifts of asphaltic concrete are required, a tack coat shall be applied between each lift.
 - 1. Preparation: Immediately before applying a tack coat, the area to be surfaced shall be cleaned of all loose material.

2. Application: The tack coat shall be applied by means of pressure distributors by pressure hand-spray equipment. The rate of application shall be 1/20 gallon per square yard. Emulsified asphalt shall not be applied when the atmospheric temperature is below 40°F. If emulsified asphalt Type CSS-1 is used, it may be diluted with an equal part of water. The rate of application of the dilution shall be such that the rate of application of undiluted emulsion shall be within the tolerances specified.

2.05 PLACEMENT OF ASPHALT CONCRETE

- A. Delivery and Spreading: Bituminous mixtures shall be delivered to the roadbed at temperatures specified in the WSDOT Standard Specifications. Spreading of the mixture shall be in accordance with Section 5-04.3(9) of the WSDOT Standard Specifications. All loads shall be covered with tarpaulin or other material during transportation. The top layer of asphalt concrete shall not exceed 3 inches in compacted thickness. The next lower layer shall not exceed 3 inches in compacted thickness, and any lower layers shall not exceed 3 inches in compacted thickness.
- B. Compaction: Initial or breakdown rolling and the final rolling of the uppermost layer of the asphalt concrete shall be compacted in accordance with Sections 5-04.3(9) and 5-04.3(10) of the WSDOT Standard Specifications. Compaction by vehicular traffic shall not be permitted. The Engineer reserves the right to require an adjustment of the temperature of the asphalt concrete at the time of placement.
- C. Pavement Thickness: Pavement shall match the existing adjoining pavement in thickness, or as indicated on the Drawings, or as specified, whichever is greater.
- D. Joining Pavement: The joints between old and new pavements or between successive days' work shall be carefully made in such manner as to ensure a continuous bond between old and new sections of the course. Edges of existing pavement shall be exposed and cleaned and edges cut to straight, vertical surfaces. All joints shall be painted with a uniform coat of tack coat before the fresh mixture is applied.
- E. Protection of Pavement: After final rolling, no vehicular traffic of any kind shall be permitted on the pavement until it has cooled and hardened and in no case less than 6 hours.

2.06 PAVEMENT RESTORATION

A. Final pavement restoration shall be made as soon as practicable after backfilling. In that period of time between backfilling and final pavement restoration, the trench shall be maintained level with the adjacent pavement and shall be covered with a 1-inch minimum layer of cutback. Prior to placing the final pavement, the temporary pavement shall be removed, the aggregate base excavated to the lines indicated on the Drawings, and the existing pavement edges saw cut as herein specified. The final asphalt pavement shall not be placed before the primed aggregate base surface is approved by the Engineer.

2.07 PAVEMENT MARKINGS

- A. Preparation: Immediately before applying the paint, the pavement surface shall be thoroughly cleaned of all dust, dirt, scale, curing compound, oil, grease, or other objectionable matter as directed by the Engineer. Solvent material that will damage the pavement shall not be used as a cleaning agent.
- B. Tolerances: Marking and striping shall be within 2 inches of the correct alignment. Dimensions of marking and striping shall be within ½-inch.

- C. Mixing: Mechanical mixers shall be used to mix paint. Prior to applying, the paint shall be mixed a sufficient length of time to thoroughly mix the pigment and vehicle together, and shall be kept thoroughly agitated during its application.
- D. Application: Pavement marking shall be applied only on dry surfaces and only during periods of favorable weather. Painting shall not be performed when the atmospheric temperature is below 40°F when using solvent-borne paint or below 50°F when using water borne paint; when freshly painted surfaces may become damaged by rain, fog, or condensation; nor when it can be anticipated that the atmospheric temperature will drop below said 40°F or 50°F temperatures during the drying period.
 - 1. Immediately following the preparation of the pavement, the paint shall be applied. The paint shall be applied at the rate of 100 to 110 square feet per gallon of paint. The stripe painting machine shall have a compressor capacity of at least 105 cubic feet per minute and be capable of operating at an air pressure of 125 psi. The paint shall be mechanically agitated while the machine is in operation. The striping machine shall be equipped with a guide post so designed that the machine will hold exactly to the alignment. The propelling vehicle shall be equipped with a guide post so designed that the machine will hold exactly to the alignment. The propelling vehicle shall be equipped with a speedometer or tachometer, and with a suitable device for determining the quantity of paint in the container. The paint container and spray nozzles on the machine shall be thoroughly cleaned before starting each day's work. The stripe shall be of the required width, with clean, true edges and without sharp breaks.
 - 2. Allow 10 days between the application of a bituminous seal coat and the permanent pavement marking. The paint shall not bleed, curl or discolor when applied to bituminous surfaces. If bleeding or discoloring occurs, apply an additional coat of paint.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

- 1. Precast reinforced concrete cylindrical sectional manholes, complete with openings, inserts, ladder rungs (where specifically called for), hardware, drains, covers and frames.
- 2. Precast reinforced concrete manhole bases and tops.

B. Related Sections:

- 1. Section 02 11 00: Piping, Valves and Accessories
- Section 31 23 33: Earthwork
- 3. Section 33 49 20: Precast Concrete Utility Vaults

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. ASTM A36: Structural Steel
 - 2. ASTM A48: Gray Iron Castings
 - 3. ASTM C478: Precast Reinforced Concrete Manhole Sections
- B. Federal Specification: SS-S-210: Sealing Compound, Preformed Plastic, for Expansion Joints and Pipe Joints.

1.03 SUBMITTALS

- A. Submit in accordance with Section 01 33 00, Submittal Procedures.
- B. Product Data:
 - 1. Descriptive details of the manufacturer's proposed standard products, including:
 - Precast manhole sections.
 - b. Precast roof slab or cone section.
 - c. Precast base slab.
 - d. Steps, ladder rungs and other hardware.
 - e. Minimum concrete 28-day compressive strength.
 - f. Cement certification.
 - g. Manhole cover and frame.
 - 2. Shop drawings, including:
 - Signed and sealed design calculations performed by a Civil or Structural Engineer registered in the State of Washington.
 - b. Reinforcing steel location and concrete cover.
 - c. Layout of all inserts, attachments and openings.
 - d. Location and type of joints.

1.04 QUALITY ASSURANCE

- A. Provide products of a manufacturer who has been regularly engaged in the design and manufacture of the product.
- B. Demonstrate to the satisfaction of the Engineer that the quality is equal to the product made by those manufacturers specifically named herein, if an alternate product manufacturer is proposed.

PART 2 - PRODUCTS

2.01 DESIGN CRITERIA

- A. General: ASTM C478, and also:
 - Backfill material: Structural backfill.
 - 2. Buoyancy: Design manhole for groundwater up to finish grade.
 - 3. Structure live load: AASHTO H-20 Vehicle Loading

2.02 PRECAST SECTIONS

A. General:

- 1. Manhole cone section: Eccentric taper.
- 2. Cement: ASTM C150, Type II, low alkali.
- 3. Roof slab opening: Size to support the manhole cover frame and loading.
- 4. Manhole sections shall be delivered to the site with cast pipe penetrations and pipe connections installed.
- 5. Lifting eyes: Provide for each section.
- B. Manufacturer: Oldcastle Precast, Auburn, WA; or equal.

2.03 SEALANT GASKETS

- A. Type: Preformed, continuous rope form plastic material, protected by removable two-piece wrapper.
- B. Sealing Compound: Reinforced hydrocarbon resins blended with plasticizing compounds and reinforced with inert mineral filler. No solvents, irritating fumes or obnoxious odors.
- C. Adhesive and Cohesive Strength: Not dependent on oxidizing, evaporating, or chemical action.
- D. Conform to Federal Specification SS-S-210.
- E. Provide: RAM-NEK as manufactured by K. T. Snyder Company, Inc., Houston, TX; QUIKSEAL as supplied by Associated Concrete Products, Santa Ana, CA; or equal.

2.04 FRAMES AND COVERS

- A. Material: Cast iron; ASTM A48, Class 30B.
- B. Marking: In raised letters, as specified, on manhole cover. Covers shall be marked "STORM."
- C. Coating: Bituminous paint, black.
- D. Size: 24-inch-diameter cover.
- E. Pick Hole: 1-3/8 inch.

- F. Seal: Provide continuous 1/4-inch-diameter neoprene "o" ring between frame and cover.
- G. Manufacturer: D&L Foundry, Moses Lake, WA; Olympic Foundry, Seattle, WA; or equal.
- H. Rated to resist live loading noted in Part 2.01.

2.05 LADDER RUNGS

- A. General: ASTM C478.
- B. Material: Copolymer polypropylene plastic molded on galvanized steel reinforcing bar ASTM A36.

2.06 SOURCE QUALITY CONTROL

- A. Precast Sections:
 - Verify concrete compressive strength test results are satisfactory for the sections supplied.
 - 2. State the curing method. Identify the start and end dates for the sections supplied.
- B. Frames and Covers:
 - 1. Verify cast test bar tensile strengths are satisfactory.

2.07 PIPE-TO-STRUCTURE CONNECTIONS

- A. Provide water-tight flexible pipe-to-structure connector where pipe is shown to penetrate structures on the Drawings. Product shall be compatible with pipe system and pipe size specified. Product shall meet the requirements of ASTM C923. Product material of construction shall be resistant to hydrocarbons. Provide all appurtenances and accessories including 316L stainless steel band clamps and fasteners.
- B. Manufacturer: Trelleborg NPC Kor-N-Seal; or equal.

PART 3 - EXECUTION

3.01 OPENINGS AND EMBEDMENTS

- A. The contractor and precaster shall be responsible for the integration of embedded items in the quantity, materials, elevations, and locations required.
- B. Embedded plates, grates, hatches, angle frames, and other items intended to provide a working surface shall be installed flush to the surface unless noted otherwise.
- C. Openings in the structure shall be placed integrally at the time of casting. Unreinforced knockouts may be provided for post installed opening if approved by the Engineer. Openings shall not be placed by coring or cutting through reinforced concrete after the item has been cast.

3.02 INSTALLATION

- A. Compact subgrade to 95% relative density for 6-inch minimum depth.
- B. Provide a 24-inch quarry spall layer and encase in geotextile.
- C. Provide a 6-inch granular base course layer under the base slab and compact to 95% relative density prior to placement.
- D. Set precast manhole sections in a concrete base joint groove, formed in the cast-in-place concrete base slab.

- E. Apply primer to joint surfaces in accordance with manufacturer's instructions. Make all joints watertight with sealant gaskets.
- F. Backfill around the manhole with Structural Backfill material. Compact the backfill material to 95% of relative density from the pipe bedding and base slab up to final finish grade, over an area defined as being within a distance of 4 feet from the exterior walls of the manhole.
- G. Accurately locate and place the manhole frames to within 1/8-inch vertical elevation in paved areas and to 1/2-inch in other areas. Coordinate the activities of all trades so that this tolerance is achieved.
- H. Install the manhole cover in the frame. Machine the cover if necessary to obtain a solid fit, without rattling under load.

3.03 INSTALLATION OF PIPE-TO-STRUCTURE CONNECTIONS

A. Connect pipes to the structure through the precast opening. Use specified flexible pipe connector and mortar grout connection as necessary to form a tight seal. Place pipe ends flush or cut off flush with the inside face of the structure.

3.04 FIELD QUALITY CONTROL

- A. Verify all precast sections are continuously sealed with gaskets.
- B. Verify all manhole covers fit quietly in the frames.

3.05 TEST FOR MANHOLES

- A. Furnish and dispose of water used for testing.
- B. Hydraulically test all manholes installed.
- C. After all pipe has been laid, backfilling has been completed, and after the testing of the pipes, plug the end of the pipe stubs in each manhole with flexible-joint caps, or acceptable alternate, securely fastened.
- D. Fill the manhole with water and measure leakage over a period of not less than one hour.
- E. Allowable Leakage: less than one (1) gallon per hour per 10-foot depth of manhole.
- F. When leakage from the manhole exceeds the above amount, determine the source or sources of the leakage, and repair or replace defective materials and workmanship.
- G. The completed pipe and manhole installation shall pass this test before the project can be accepted.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Precast reinforced concrete box structures for utility service, complete with openings, inserts, ladder rungs (where specifically called for), hardware and sumps.
 - 2. Manhole covers and frames.
- B. Related Sections:
 - 1. Section 33 49 13: Precast Concrete Manholes
 - 2. Section 31 23 33: Earthwork

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - ASTM A36: Structural Steel
 - 2. ASTM A48: Gray Iron Castings
 - 3. ASTM C150: Portland Cement
 - 4. ASTM C857: Minimum Structural Design Loading for Underground Precast Concrete Utility Structures
 - 5. ASTM C858: Underground Precast Concrete Utility Structures
- B. Federal Specification: SS-S-210: Sealing Compound, Preformed Plastic, for Expansion Joints and Pipe Joints.

1.03 SUBMITTALS

- A. Submit in accordance with Section 01 33 00, Submittal Procedures.
- B. Product Data:
 - Descriptive details of the manufacturer's proposed standard products, including:
 - a. Precast utility boxes.
 - b. Precast tank sections.
 - c. Steps, ladder rungs and other hardware.
 - d. Minimum concrete 28-day compressive strength.
 - e. Cement certification.
 - f. Utility box cover and frame.
 - 2. Shop drawings, including:
 - a. Signed and sealed design calculations prepared by a Civil or Structural Engineer registered in the State of Washington.
 - b. Reinforcing steel location and concrete cover.
 - c. Layout of all inserts, attachments and openings.
 - d. Location and type of joints.

1.04 QUALITY ASSURANCE

A. Provide products of a manufacturer who has been regularly engaged in the design and manufacture of the product.

PART 2 - PRODUCTS

2.01 DESIGN CRITERIA

- A. General: ASTM C857, C858, and also:
 - Backfill material: Structural backfill.
 - 2. Buoyancy: Design structure for groundwater up to finished grade.
 - 3. Structural live load: AASHTO H-20 Vehicle Loading
 - 4. Handling and installation loads.
 - 5. External soil surcharge pressure of 200 psf extending from grade to 7 feet below grade.
 - 6. Internal hydrostatic pressure of 62.4 pcf distributed from maximum wetted elevation shown on Drawings to lowest point in vault. This load case shall be considered separately from the external loads. Soil and hydrostatic loads shall not be considered such that they offset one another.

2.02 PRECAST SECTIONS

A. General:

- 1. Cement: ASTM C150, Type II, low alkali.
- 2. Roof slab openings: Size to support the noted hatches or openings and support live load.
- 3. Roof slab openings: Size to support cover frame.
- 4. Lifting eyes: Provide for each section.
- 5. Type: Provide "LA" style.
- B. Manufacturer: Christy Concrete/Oldcastle Precast, Auburn, WA; or equal.

2.03 SEALANT GASKETS

- A. Type: Preformed, continuous rope form plastic material, protected by removable two-piece wrapper.
- B. Sealing Compound: Reinforced hydrocarbon resins blended with plasticizing compounds and reinforced with inert mineral filler. No solvents, irritating fumes or obnoxious odors.
- C. Adhesive and Cohesive Strength: Not dependent on oxidizing, evaporating, or chemical action.
- D. Conform to Federal Specification SS-S-210.
- E. Provide: QUIKSEAL as supplied by Associated Concrete Products, Santa Ana, CA; RAM-NEK as manufactured by K. T. Snyder Company, Inc., Houston, TX; or equal.

2.04 HATCHES

A. Minimum clear opening dimensions of each hatch shall be as shown on the Drawings. Provide single, double or triple leaf hatches as indicated on the drawings.

- B. Live load: Provide hatches to withstand the loads indicated in the design criteria above.
- C. Door Leaves: ¼ inch minimum (6.35 mm) thick aluminum, diamond pattern, reinforced as required to withstand the specified loads.
- D. Frame: ¼ inch (6.35 mm) minimum thick aluminum channel with anchor flange around perimeter for embedment into concrete. Frame shall allow water to drain to space below freely without ponding either on the surface of the hatch or at the frame elevation. Doors shall allow water to pass at the edges of the door or through ¼ inch maximum width slots provided for drainage.
- E. Doors shall open to 90 degrees and shall include an automatic hold-open arm with a positive automatic latch that will secure the door in the open position until the release handle is activated. Provide stainless steel hold-open pin through holes in hold-open arms to insure against accidental hatch closure. Attach pin to hatch with a short stainless-steel chain to prevent loss. Submit details of latch for review. Door hinges shall be recessed or flush.
- F. Lift-Assist Mechanism: Provide stainless steel compression spring(s) or pneumatic spring(s) enclosed in sealed telescoping tube(s).
- G. Safety Chain: For double leaf doors, provide a stainless-steel safety chain between doors at the opposite end from the latch to form a barrier when the doors are locked in the open position.

2.05 FRAMES AND COVERS

- A. Material: Cast iron; ASTM A48, Class 30B.
- B. Marking: In raised letters, as specified, on manhole cover. Electrical vault covers shall be labeled "STORM."
- C. Coating: Bituminous paint, black.
- D. Manufacturer: D&L Foundry, Moses Lake, WA; Olympic Foundry, Seattle, WA; or equal.
- E. Rated to resist live loading noted in Part 2.01.

2.06 LADDER RUNGS

- A. Material: Copolymer polypropylene plastic molded on galvanized steel reinforcing bar ASTM A36
- B. Conform to Washington Department of Labor and Industries Division of Occupational Safety and Health (DOSH) requirements.

2.07 SOURCE QUALITY CONTROL

- A. Precast Sections:
 - 1. Verify concrete compressive strength test results are satisfactory for the sections supplied.
 - 2. State the curing method. Identify the start and end dates for the sections supplied.
- B. Frames and Covers:
 - 1. Verify cast test bar tensile strengths are satisfactory.

2.08 PIPE-TO-STRUCTURE CONNECTIONS

- A. Provide water-tight flexible pipe-to-structure connector where pipe is shown to penetrate structures on the Drawings. Product shall be compatible with pipe system and pipe size specified. Product shall meet the requirements of ASTM C923. Product material of construction shall be resistant to hydrocarbons. Provide all appurtenances and accessories including 316L stainless steel band clamps and fasteners.
- B. Manufacturer: Trelleborg NPC Kor-N-Seal; or equal.

PART 3 - EXECUTION

3.01 OPENINGS AND EMBEDMENTS

- A. The contractor and precaster shall be responsible for the integration of embedded items in the quantity, materials, elevations, and locations required.
- B. Embedded plates, grates, hatches, angle frames, and other items intended to provide a working surface shall be installed flush to the surface unless noted otherwise.
- C. Openings in the structure shall be placed integrally at the time of casting. Unreinforced knockouts may be provided for post installed opening if approved by the Engineer. Openings shall not be placed by coring or cutting through reinforced concrete after the item has been cast.

3.02 INSTALLATION

- A. General: ASTM C891 and also:
 - 1. Compact subgrade to 95% relative density for 6-inch minimum depth.
 - 2. Provide a 24-inch quarry spall layer and encase in geotextile.
 - 3. Provide a 6-inch granular base course layer under the base slab and compact to 95% relative density prior to placement.
 - 4. Apply primer to joint surfaces in accordance with manufacturer's instructions. Make all joints watertight with sealant gaskets.
 - 5. Accurately locate and place the manhole frames to within 1/8-inch vertical elevation in paved areas and to 1/2-inch in other areas. Coordinate the activities of all trades so that this tolerance is achieved.
 - 6. Install the manhole cover in the frame. Machine the cover if necessary to obtain a solid fit, without rattling under load.

3.03 INSTALLATION OF PIPE-TO-STRUCTURE CONNECTIONS

A. Connect pipes to the structure through the precast opening. Use specified flexible pipe connector and mortar grout connection as necessary to form a tight seal. Place pipe ends flush or cut off flush with the inside face of the structure.

3.04 FIELD QUALITY CONTROL

- A. Verify all precast sections are continuously sealed with gaskets.
- B. Verify all manhole covers fit quietly in the frames.

END OF SECTION

Appendix A – US Army Corps Clean Water Act Section 404 and Rivers and Harbor Act Section 10



DEPARTMENT OF THE ARMY

U.S. ARMY CORPS OF ENGINEERS, SEATTLE DISTRICT 4735 EAST MARGINAL WAY SOUTH, BLDG 1202 SEATTLE, WA 98134-2388

Regulatory Branch

April 10, 2024

Port of Tacoma Ms. Kristin Evered One Sitcum Plaza Tacoma, Washington 98401

Reference: NWS-2023-964-WRD

Tacoma, Port of

(Parcel 86 Stormwater

Improvements)

Dear Ms. Evered:

We have reviewed your application to excavate and place fill in West Hylebos Waterway to replace a stormwater outfall at Tacoma, Pierce County, Washington. Based on the information you provided to us, Nationwide Permit (NWP) 7, *Outfall Structures and Associated Intake Structures* (Federal Register December 27, 2021, Vol. 86, No. 245), authorizes your proposal as depicted on the enclosed drawings dated April 2, 2024. In order for this authorization to be valid, you must ensure the work is performed in accordance with the enclosed *NWP 7, Terms and Conditions* and the following special conditions:

- a. The permittee must install and maintain sediment and erosion controls during construction at the site until all disturbed soils have been revegetated or otherwise stabilized.
- b. In order to meet the requirements of the Endangered Species Act (ESA) and the Magnuson Stevens Fishery Conservation and Management Act (MSA), you must implement and abide by the applicable terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" and the applicable Essential Fish Habitat Conservation Recommendations as set forth in the Salish Sea Nearshore Programmatic (SSNP) Biological Opinion (BO) (National Marine Fisheries Service (NMFS) Reference Number WCRO-2019-04086) dated June 29, 2022 and U.S. Fish and Wildlife Service (USFWS) Reference Number FWS/R1/2022-0048454 dated July 29, 2022). The specific General Construction Measures, Project Design Criteria, Essential Fish Habitat Conservation Measures, and monitoring and/or reporting requirements applicable to this permit are identified in the enclosed Notification Summary Sheet dated February 20, 2024 (NMFS Reference Number

WCRO-2019-04086-6914). The BO is available on the U.S. Army Corps of Engineers (Corps) website (https://www.nws.usace.army.mil/Missions/Civil-Works/Regulatory/Permit-Guidebook/Endangered-Species/). You must provide the Corps and NMFS the information requested in the enclosed Notification Summary Sheet. All information must prominently display the reference number NWS-2023-964. Failure to comply with these requirements constitutes non-compliance with the ESA and your Corps permit. The NMFS and USFWS is the appropriate authority to determine compliance with the terms and conditions of their BO and with the ESA. If you cannot comply with the terms and conditions of this programmatic consultation, you must, prior to commencing construction, contact the Corps, Seattle District, Regulatory Branch for an individual consultation in accordance with the requirements of the ESA and/or the MSA.

c. In order to meet the requirements of the Endangered Species Act you may conduct the authorized activities waterward of the highest astronomical tide line (13.65 feet MLLW datum) from Jul 15th through February 15th in any year this permit is valid. You shall not conduct work authorized by this permit from February 16th through July 14th in any year this permit is valid.

We have reviewed your project pursuant to the requirements of the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act and the National Historic Preservation Act. We have determined this project complies with the requirements of these laws provided you comply with all of the permit general and special conditions.

Please be reminded that Special Condition "b" of your permit requires that you implement and abide by the Endangered Species Act (ESA) requirements set forth in the programmatic Biological Opinion (BO) for this project. In particular, note that the BO requires you submit the enclosed *Certificate of Compliance with Department of the Army Permit*, and submission of a report, including before and after photographs, of the debris removal action, to confirm that the applicant-led mitigation is performed as documented. All documents must be submitted to the Corps at nws.compliance@usace.army.mil, NMFS at consultationupdates.wcr@noaa.gov, and USFWS at SSNP_WA@fws.gov. Failure to comply with the commitments above constitutes non-compliance with the ESA and with this authorization.

Please note that National General Condition 21, *Discovery of Previously Unknown Remains and Artifacts*, found in the *Nationwide Permit Terms and Conditions* enclosure, details procedures that must be followed should an inadvertent discovery occur. You must ensure that you comply with this condition during the construction of your project.

The authorized work complies with the Washington State Department of Ecology's (Ecology) Water Quality Certification (WQC) requirements and Coastal Zone Management (CZM) consistency determination decision for this NWP. No further coordination with Ecology for WQC and CZM is required.

The West Hylebos Waterway is a water of the U.S. The Section 10 jurisdictional boundaries are shown on the enclosed permit drawings. If you believe these boundaries are inaccurate, you may request a preliminary or approved jurisdictional determination (JD). If one is requested, please be aware that we may require the submittal of additional information to complete the JD and work authorized in this letter may not occur until the JD has been completed.

Our verification of this NWP authorization is valid until March 14, 2026, unless the NWP is modified, reissued, or revoked prior to that date. If the authorized work for the NWP authorization has not been completed by that date and you have commenced or are under contract to commence this activity before March 14, 2026, you will have until March 14, 2027, to complete the activity under the enclosed terms and conditions of this NWP. Failure to comply with all terms and conditions of this NWP verification invalidates this authorization and could result in a violation of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act. You must also obtain all local, State, and other Federal permits that apply to this project.

You are cautioned that any change in project location or plans will require that you submit a copy of the revised plans to this office and obtain our approval before you begin work. Deviating from the approved plans could result in the assessment of criminal or civil penalties. Please note that we may need to reinitiate consultation with the National Marine Fisheries Service and/or U.S. Fish and Wildlife Service in order to authorize any work not already included in the enclosed plans.

Upon completing the authorized work, you must fill out and return the enclosed *Certificate of Compliance with Department of the Army Permit*. All compliance reports should be submitted to the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch electronically at nws.compliance@usace.army.mil. Thank you for your cooperation during the permitting process. We are interested in your experience with our Regulatory Program and encourage you to complete a customer service survey. Referenced documents and information about our program are available on our website at www.nws.usace.army.mil, select "Regulatory Permit Information".

A copy of this letter with enclosures will be furnished to Ms. Sasha Ertl of Grette and Associates at sashae@gretteassociates.com. If you have any questions, please contact me at randel.j.perryy@usace.army.mil or (360) 393-2867.

Sincerely,

Randel Perry, Project Manager

Regulatory Branch

Enclosures



NATIONWIDE PERMIT 7 Terms and Conditions



2021 NWPs - Final 41; Effective Date: February 25, 2022

- A. Description of Authorized Activities
- B. U.S. Army Corps of Engineers (Corps) National General Conditions for All Final 41 NWPs
- C. Seattle District Regional General Conditions
- D. Seattle District Regional Specific Conditions for this Nationwide Permit (NWP)
- E. 401 Water Quality Certification (401 WQC) for this NWP
- F. Coastal Zone Management Consistency Response for this NWP

In addition to any special condition that may be required on a case-by-case basis by the District Engineer, the following terms and conditions must be met, as applicable, for a Nationwide Permit (NWP) authorization to be valid in Washington State.

A. DESCRIPTION OF AUTHORIZED ACTIVITIES

7. <u>Outfall Structures and Associated Intake Structures</u>. Activities related to the construction or modification of outfall structures and associated intake structures, where the effluent from the outfall is authorized, conditionally authorized, or specifically exempted by, or otherwise in compliance with regulations issued under the National Pollutant Discharge Elimination System Program (Section 402 of the Clean Water Act). The construction of intake structures is not authorized by this NWP unless they are directly associated with an authorized outfall structure.

<u>Notification</u>: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 32.) (Authorities: Sections 10 and 404)

B. CORPS NATIONAL GENERAL CONDITIONS FOR ALL 2021 NWPs - FINAL 41

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

- 1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.
- (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
- (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

- 2. <u>Aquatic Life Movements</u>. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.
- 3. <u>Spawning Areas</u>. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. <u>Migratory Bird Breeding Areas</u>. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. <u>Shellfish Beds</u>. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
- 6. <u>Suitable Material</u>. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).
- 7. <u>Water Supply Intakes</u>. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. <u>Adverse Effects From Impoundments</u>. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. <u>Management of Water Flows</u>. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
- 10. <u>Fills Within 100-Year Floodplains</u>. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- 11. <u>Equipment</u>. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. <u>Soil Erosion and Sediment Controls</u>. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.
- 13. <u>Removal of Temporary Structures and Fills</u>. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

- 14. <u>Proper Maintenance</u>. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
- 15. <u>Single and Complete Project</u>. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
- 16. <u>Wild and Scenic Rivers</u>. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.
- (b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.
- (c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.
- 17. <u>Tribal Rights</u>. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."
- (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened

species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

- (d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.
- (e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- (f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.
- (g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/respectively.
- 19. <u>Migratory Birds and Bald and Golden Eagles</u>. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.
- 20. <u>Historic Properties</u>. (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

- (b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.
- (d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.
- 21. <u>Discovery of Previously Unknown Remains and Artifacts</u>. Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity

authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

- 22. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
- (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.
- 23. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require preconstruction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.
- (d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).
- (e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection

- (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.
- (f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.
- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.
- (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)
- (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.
- (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.
- (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).
- (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).
- (g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any

NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

- (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.
- 24. <u>Safety of Impoundment Structures</u>. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. <u>Water Quality</u>. (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.
- (b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.
- (c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
- 26. <u>Coastal Zone Management</u>. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

- 27. <u>Regional and Case-By-Case Conditions</u>. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.
- 28. <u>Use of Multiple Nationwide Permits</u>. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:
- (a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
- (b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.
- 29. <u>Transfer of Nationwide Permit Verifications</u>. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)			
(Date)			

- 30. <u>Compliance Certification</u>. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:
- (a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(I)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

- 31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.
- 32. <u>Pre-Construction Notification</u>. (a) *Timing*. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information neceded to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:
- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
- (b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:
- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed activity;
- (3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

- (4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.
- (ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.
- (iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);
- (5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
- (6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.
- (7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;
- (8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;
- (9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river

is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

- (10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.
- (c) Form of Pre-Construction Notification: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.
- (d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.
- (2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.
- (3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the preconstruction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.
- (4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.
- (5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of preconstruction notifications to expedite agency coordination.
- C. SEATTLE DISTRICT REGIONAL GENERAL CONDITIONS: The following conditions apply to the 2021 NWPs Final 41 NWPs for the Seattle District in Washington State, as applicable.

RGC 1, Project Drawings

Drawings must be submitted with pre-construction notification (PCN). Drawings must provide a clear understanding of the proposed project, and how waters of the United States will be affected. Drawings must be originals and not reduced copies of large-scale plans. Engineering drawings are not required. Existing and proposed site conditions (manmade and landscape features) must be drawn to scale.

RGC 2, Aguatic Resources Requiring Special Protection

A PCN is required for activities resulting in a loss of waters of the United States in wetlands in dunal systems along the Washington coast, mature forested wetlands, bogs and peatlands, aspen-dominated wetlands, alkali wetlands, vernal pools, camas prairie wetlands, estuarine wetlands, and wetlands in coastal lagoons.

RGC 3, New Bank Stabilization in Tidal Waters of Puget Sound

Activities involving new bank stabilization in tidal waters in Water Resource Inventory Areas (WRIAs) 8, 9, 10, 11 and 12 (within the areas identified on Figures 1a through 1e) cannot be authorized by NWP.

RGC 4, Commencement Bay

No permanent losses of wetlands or mudflats within the Commencement Bay Study Area may be authorized by any NWP (see Figure 2).

RGC 5. Bank Stabilization

All projects including new or maintenance bank stabilization activities in waters of the United States where salmonid species are present or could be present, requires PCN to the U.S. Army Corps of Engineers (Corps) (see NWP general condition 32).

For new bank stabilization projects only, the following must be submitted to the Corps:

- The cause of the erosion and the distance of any existing structures from the area(s) being stabilized.
- b. The type and length of existing bank stabilization within 300 feet of the proposed project.
- A description of current conditions and expected post-project conditions in the waterbody.
- d. A statement describing how the project incorporates elements avoiding and minimizing adverse environmental effects to the aquatic environment and nearshore riparian area, including vegetation impacts in the waterbody.

In addition to a. through d., the results from any relevant geotechnical investigations can be submitted with the PCN if it describes current or expected conditions in the waterbody.

RGC 6, Crossings of Waters of the United States

Any project including installing, replacing, or modifying crossings of waters of the United States, such as culverts or bridges, requires submittal of a PCN to the U.S. Army Corps of Engineers (see NWP general condition 32).

If a culvert is proposed to cross waters of the U.S. where salmonid species are present or could be present, the project must apply the stream simulation design method from the Washington Department of Fish and Wildlife located in the *Water Crossing Design Guidelines* (2013), or a design method which provides passage at all life stages at all flows where the salmonid species would naturally seek passage. If the stream simulation design method is not applied for a culvert where salmonid species are present or could be present, the project proponent must provide a rationale in the PCN sufficient to establish one of the following:

- a. The existence of extraordinary site conditions.
- b. How the proposed design will provide equivalent or better fish passage and fisheries habitat benefits than the stream simulation design method.

Culverts installed under emergency authorization that do not meet the above design criteria will be required to meet the above design criteria to receive an after-the-fact nationwide permit verification.

RGC 7, Stream Loss

A PCN is required for all activities that result in the loss of any linear feet of streams.

RGC 8, Construction Boundaries

Permittees must clearly mark all construction area boundaries within waters of the United States before beginning work on projects that involve grading or placement of fill. Boundary markers and/or construction fencing must be maintained and clearly visible for the duration of construction. Permittees should avoid and minimize removal of native vegetation (including submerged aquatic vegetation) to the maximum extent possible.

RGC 9, ESA Reporting to NMFS

For any nationwide permit that may affect threatened or endangered species; Incidents where any individuals of fish species, marine mammals and/or sea turtles listed by National Oceanic and Atmospheric Administration Fisheries, National Marine Fisheries Service (NMFS) under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the U.S. or structures or work in navigable waters of the U.S. authorized by this Nationwide Permit verification shall be reported to NMFS, Office of Protected Resources at (301) 713-1401 and the Regulatory Office of the Seattle District of the U.S. Army Corps of Engineers at (206) 764-3495. The finder should leave the animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure or some unnatural cause. The finder may be asked to carry out instructions provided by the NMFS to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.

D. SEATTLE DISTRICT REGIONAL SPECIFIC CONDITIONS FOR THIS NWP: None

E. 401 WATER QUALITY CERTIFICATION: Depending on the geographic region of the work authorized by this verification, the appropriate 401 certifying authority has made the following determinations:

Washington Department of Ecology (Ecology) (Projects in all areas except as described for the other certifying agencies listed below): General and Specific WQC Conditions

A. State General Conditions for all Nationwide Permits

In addition to all of the U.S. Army Corps of Engineers' (Corps) national and Seattle District's regional permit conditions, the following state general Water Quality Certification (WQC) conditions **apply to all NWPs whether granted or granted with conditions** in Washington where Ecology is the certifying authority.

Due to the lack of site specific information on the discharge types, quantities, and specific locations, as well as the condition of receiving waters and the quantity of waters (including wetlands) that may be lost, Ecology may need to review the project if one of the following stategeneral conditions is triggered.

This case-by-case review may be required, and additional information regarding the project and associated discharges may be needed, to verify that the proposed project would comply with state water quality requirements and if an individual WQC is required or if the project meets this programmatic WQC.

1. In-water construction activities. Ecology WQC review is required for projects or activities authorized under NWPs where the project proponent has indicated on the Joint Aquatic Resource Permit Application (JARPA) question 9e that the project or activity will not meet State water quality standards, or has provided information indicating that the project or activity will cause, or may be likely to cause or contributeto an exceedance of a State water quality standard (Chapter 173-201A WAC) or sediment management standard (Chapter 173-204 WAC).

Note: In-water activities include any activity within a jurisdictional wetland and/orwaters.

2. **Projects or Activities Discharging to Impaired Waters**. Ecology WQC review is required for projects or activities that will occur in a 303(d) listed segment of a waterbody or upstream of a listed

segment and may result in further exceedances of the specific listedparameter to determine if the project meets this programmatic WQC or will require individual WQC.

To determine if your project or activity is in a 303(d) listed segment of a waterbody, visitEcology's Water Quality Assessment webpage for maps and search tools.

3. Aquatic resources requiring special protection. Certain aquatic resources are unique and difficult-to-replace components of the aquatic environment in Washington. Activities that would affect these resources must be avoided to the greatest extent practicable. Compensating for adverse impacts to high value aquatic resources is typically difficult, prohibitively expensive, and may not be possible in some landscapesettings.

Ecology WQC review is required for projects or activities in areas identified below to determine if the project meets this programmatic WQC or will require individual WQC.

- a. Activities in or affecting the following aquatic resources:
 - Wetlands with special characteristics (as defined in the Washington State Wetland Rating Systems for western and eastern Washington, Ecology Publications #14-06-029 and #14-06-030):
 - Estuarine wetlands.
 - Wetlands of High Conservation Value.
 - Bogs
 - Old-growth forested wetlands and mature forested wetlands.
 - Wetlands in coastal lagoons.
 - Wetlands in dunal systems along the Washington coast.
 - Vernal pools.
 - Alkali wetlands.
 - ii. Fens, aspen-dominated wetlands, camas prairie wetlands.
 - iii. Category I wetlands.
 - iv. Category II wetlands with a habitat score ≥ 8 points.
- b. Activities in or resulting in a loss of eelgrass (Zostera marina) beds.

This state general condition does not apply to the following NWPs:

NWP 20 - Response Operations for Oil and Hazardous Substances

NWP 32 - Completed Enforcement Actions

NWP 48 - Commercial Shellfish Mariculture Activities

- **4.** Loss of More than **300** Linear Feet of Streambed. For any project that results in the lossof more than 300 linear feet of streambed Ecology WQC review is required to determine the project meets this programmatic WQC or will require individual WQC.
- **5. Temporary Fills.** For any project or activity with temporary fill in wetlands or other waters for more than six months Ecology WQC review is required to determine if the project meets this programmatic WQC or will require individual WQC.
- **6. Mitigation.** Project proponents are required to show that they have followed the mitigation sequence and have first avoided and minimized impacts to aquatic resourceswherever practicable. For projects requiring Ecology WQC review or an individual WQC with unavoidable impacts to aquatics resources, a mitigation plan must be provided.

- Wetland mitigation plans submitted for Ecology review and approval shall be based on the most current guidance provided in Wetland Mitigation in Washington State, Parts 1 and 2 (available on Ecology's website) and shall, at aminimum, include the following:
 - A description of the measures taken to avoid and minimize impacts to wetlands and other waters of the U.S.
 - ii. The nature of the proposed impacts (i.e., acreage of wetlands and functions lost or degraded).
 - iii. The rationale for the mitigation site that was selected.
 - iv. The goals and objectives of the compensatory mitigation project.
 - v. How the mitigation project will be accomplished, including construction sequencing, best management practices to protect water quality, proposed performance standards for measuring success and the proposed buffer widths.
 - vi. How it will be maintained and monitored to assess progress toward goals and objectives. Monitoring will generally be required for a minimum of five years. For forested and scrub-shrub wetlands, 10 years of monitoring will often be necessary.
 - vii. How the compensatory mitigation site will be legally protected for the long term.

Refer to Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Ecology Publication #06-06-011b) and Selecting Wetland Mitigation Sites Using a Watershed Approach (Ecology Publications #09-06-032 (Western Washington) and #10-06-007 (Eastern Washington)) for guidance on selecting suitable mitigation sites and developing mitigation plans.

Ecology encourages the use of alternative mitigation approaches, includingcredit/debit methodology, advance mitigation, and other programmatic approaches such as mitigation banks and in-lieu fee programs. If you are interested in proposing use of an alternative mitigation approach, consult with the appropriate Ecology regional staff person. Information on alternative mitigation approaches is available on Ecology's website.

- b. Mitigation for other aquatic resource impacts will be determined on a case-by-case basis.
- **7. Stormwater Pollution Prevention**. All projects involving land disturbance or impervious surfaces must implement stormwater pollution prevention or control measures to avoiddischarge of pollutants in stormwater runoff to waters.
 - a. For land disturbances during construction, the applicant must obtain and implement permits (e.g., Construction Stormwater General Permit) where required and follow Ecology's current stormwater manual.
 - b. Following construction, prevention or treatment of on-going stormwater runofffrom impervious surfaces shall be provided.

Ecology's Stormwater Management and Design Manuals and stormwater permitinformation are available

on Ecology's website.

- 8. **Application**. For projects or activities that will require Ecology WQC review, or anindividual WQC, project proponents must provide Ecology with a JARPA or the equivalent information, along with the documentation provided to the Corps, as described in national general condition 32, Pre-Construction Notification (PCN), including, where applicable:
 - a. A description of the project, including site plans, project purpose, direct and indirect adverse environmental effects the project discharge(s) would cause, best management practices (BMPs), and proposed means to monitor the discharge(s).
 - b. List of all federal, state or local agency authorizations required to be used for anypart of the proposed project or any related activity.
 - c. Drawings indicating the OHWM, delineation of special aquatic sites, and other waters of the state. Wetland delineations must be prepared in accordance with thecurrent method required by the Corps and shall include Ecology's Wetland Rating forms. Wetland Rating forms are subject to review and verification by Ecology staff.

Guidance for determining the OHWM is available on Ecology's website.

- d. A statement describing how the mitigation requirement will be satisfied. A conceptual or detailed mitigation or restoration plan may be submitted. See stategeneral condition 5.
- e. Other applicable requirements of Corps NWP general condition 32, Corps regional conditions, or notification conditions of the applicable NWP.

Ecology grants Water Quality Certification for this NWP provided that individual WQC review is not required per the state general conditions (see above).

Environmental Protection Agency (EPA) (on Tribal Lands where Tribes Do Not Have Treatment in a Similar Manner as a State and Lands with Exclusive Federal Jurisdiction in Washington): General and Specific 401 Conditions

On behalf of the 28 tribes that do not have treatment in a similar manner as a state and for exclusive federal jurisdiction lands located within the state of Washington, EPA Region 10 has determined that CWA Section 401 WQC for the following proposed NWPs is granted with conditions. EPA Region 10 has determined that any discharge authorized under the following proposed NWPs will comply with water quality requirements, as defined at 40 C.F.R. § 121.1(n), subject to the following conditions pursuant to CWA Section 401(d).

General Conditions:

EPA General Condition 1 – Aquatic Resources of Special Concern

Activities resulting in a point source discharge in the following types of aquatic resources of special concern shall request an individual project-specific CWA Section 401 WQC: mature forested wetlands; bogs, fens and other peatlands; vernal pools; aspen-dominated wetlands; alkali wetlands; camas prairie wetlands; wetlands in dunal systems along the Oregon or Washington Coast; riffle-pool complexes of streams; marine or estuarine mud-flats; salt marshes; marine waters with native eelgrass or kelp beds; or marine nearshore forage fish habitat. To identify whether a project would occur in any of these aquatic resources of special concern, project proponents shall use existing and available information to identify the location and type of resources, including using the U.S. Fish and Wildlife Service's online digital National Wetland Inventory maps, identifying project location on topographical maps, and/or providing on-site determinations as required by the Corps. When a project requires a Pre-

Construction Notification (PCN) to the Corps, project proponents shall work with the Corps to identify whether the project is in any of these specific aquatic resources of special concern.

EPA General Condition 2 – Soil Erosion and Sediment Controls

Turbidity shall not exceed background turbidity by more than 50 Nephelometric Turbidity Units (NTU) above background instantaneously or more than 25 NTU above background for more than ten consecutive days.⁸ Projects or activities that are expected to exceed these levels require an individual project-specific CWA Section 401 WQC.

The turbidity standard shall be met at the following distances from the discharge:

Wetted Stream Width at Discharge Point	Approximate Downstream Point to Sample to Determine Compliance
Up to 30 feet	50 feet
>30 to 100 feet	100 feet
>100 feet to 200 feet	200 feet
>200 feet	300 feet
Lake, Pond, Reservoir	Lesser of 100 feet or maximum surface distance

For Marine Water	Point of Compliance for Temporary Area of Mixing
	Radius of 150 feet from the activity causing
Estuaries or Marine Waters	the turbidity exceedance

Measures to prevent and/or reduce turbidity shall be implemented and monitored prior to, during, and after construction. Turbidity monitoring shall be done at the point of compliance within 24 hours of a precipitation event of 0.25 inches or greater. During monitoring and maintenance, if turbidity limits are exceeded or if measures are identified as ineffective, then additional measures shall be taken to come into compliance and EPA shall be notified within 48 hours of the exceedance or measure failure.

EPA General Condition 3 - Compliance with Stormwater Pollution Prevention and the National Pollutant Discharge Elimination System Permit Provisions

For land disturbances during construction that 1) disturb one or more acres of land, or 2) will disturb less than one acre of land but are part of a common plan of development or sale that will ultimately disturb one or more acres of land, the permittee shall obtain and implement Construction Stormwater General Permit requirements, 9 including:

- 1. The permittee shall develop a Stormwater Pollution Prevention Plan (SWPPP)¹⁰ and submit it to EPA Region 10 and appropriate Corps District; and
- 2. Following construction, prevention or treatment of ongoing stormwater runoff from impervious surfaces that includes soil infiltration shall be implemented.

EPA General Condition 4 – Projects or Activities Discharging to Impaired Waters
Projects or activities are not authorized under the NWPs if the project will involve point source
discharges into an active channel (e.g., flowing or open waters) of a water of the U.S. listed as
impaired under CWA Section 303(d) and/or if the waterbody has an approved Total Maximum Daily
Load (TMDL) and the discharge may result in further exceedance of a specific parameter (e.g., total
suspended solids, dissolved oxygen, temperature) for which the waterbody is listed or has an
approved TMDL. The current lists of impaired waters of the U.S. under CWA Section 303(d) and

waters of the U.S. for which a TMDL has been approved are available on EPA Region 10's web site at: https://www.epa.gov/tmdl/impaired-waters-and-tmdls-region-10.

EPA General Condition 5 – Notice to EPA

All project proponents shall provide notice to EPA Region 10 prior to commencing construction activities authorized by a NWP. This will provide EPA Region 10 with the opportunity to inspect the activity for the purposes of determining whether any discharge from the proposed project will violate this CWA Section 401 WQC. Where the Corps requires a PCN for an applicable NWP, the project proponent shall also provide the PCN to EPA Region 10. EPA Region 10 will provide written notification to the project proponent if the proposed project will violate the water quality certification of the NWP.

EPA General Condition 6 – Unsuitable Materials

The project proponent shall not use wood products treated with leachable chemical components (e.g., copper, arsenic, zinc, creosote, chromium, chloride, fluoride, pentachlorophenol), which result in a discharge to waters of the U.S., unless the wood products meet the following criteria:

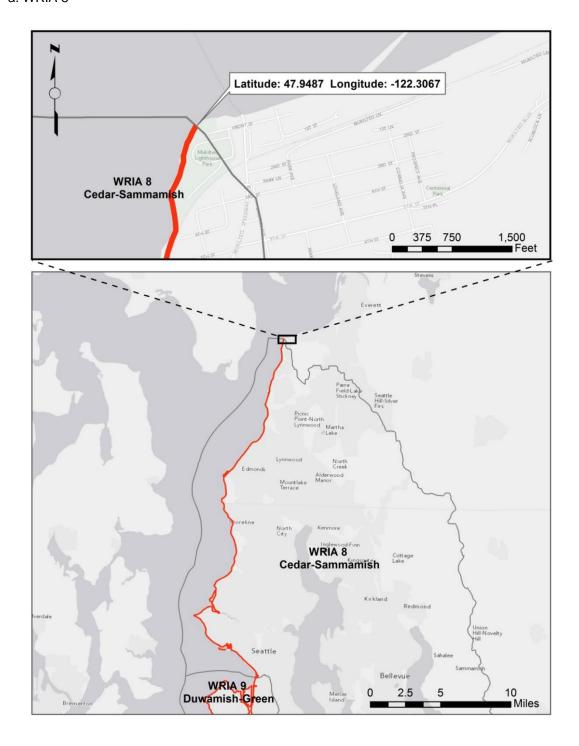
- Wood preservatives and their application shall be in compliance with EPA label requirements and criteria of approved EPA Registration Documents under the Federal Insecticide, Fungicide, and Rodenticide Act;
- 2. Use of chemically treated wood products shall follow the Western Wood Preservatives Institute (WWPI) guidelines and BMPs to minimize the preservative migrating from treated wood into the aquatic environment;
- 3. For new or replacement wood structures, the wood shall be sealed with non-toxic products such as water-based silica or soy-based water repellants or sealers to prevent or limit leaching. Acceptable alternatives to chemically treated wood include untreated wood, steel (painted, unpainted or coated with epoxy petroleum compound or plastic), concrete and plastic lumber; and
- 4. All removal of chemically treated wood products (including pilings) shall follow the most recent "EPA Region 10 Best Management Practices for Piling Removal and Placement in Washington State."

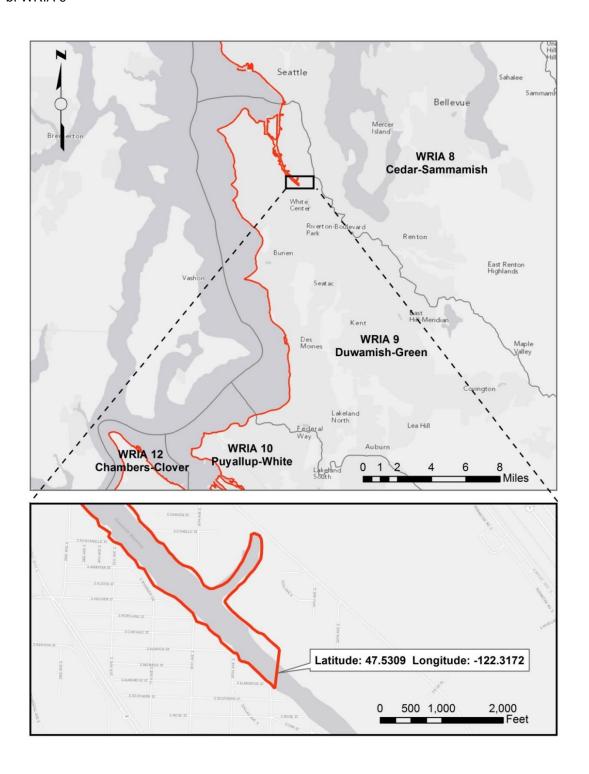
Specific Tribes with Certifying Authority (Projects in Specific Tribal Areas):

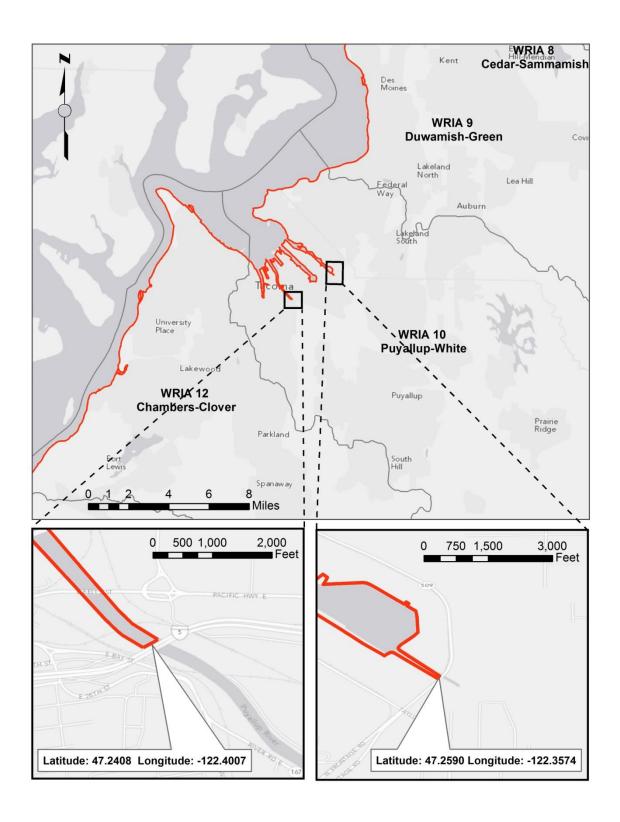
WQC was issued by the Swinomish Indian Tribal Community. WQC was waived by the Confederated Tribes of the Chehalis Reservation and Colville Indian Reservation, Kalispel Tribe of Indians, Port Gamble S'Klallam Tribe, Quinault Indian Nation, and the Spokane Tribe of Indians. WQC was denied by the Lummi Nation, Makah Tribe, Puyallup Tribe of Indians, and the Tulalip Tribes; therefore, individual WQC is required from these tribes.

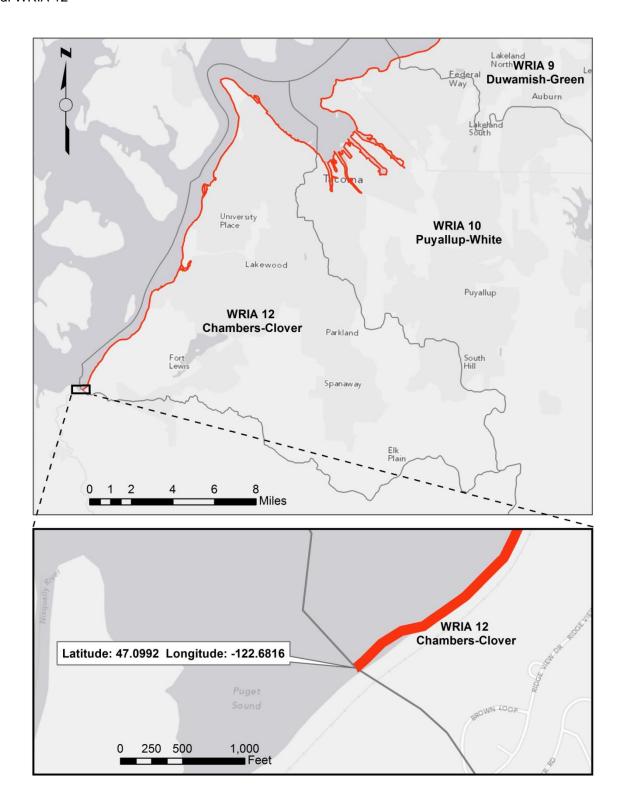
F. COASTAL ZONE MANAGEMENT ACT (CZMA) CONSISTENCY RESPONSE FOR THIS NWP:

Ecology's determination is that they concur that this NWP is consistent with CZMA.









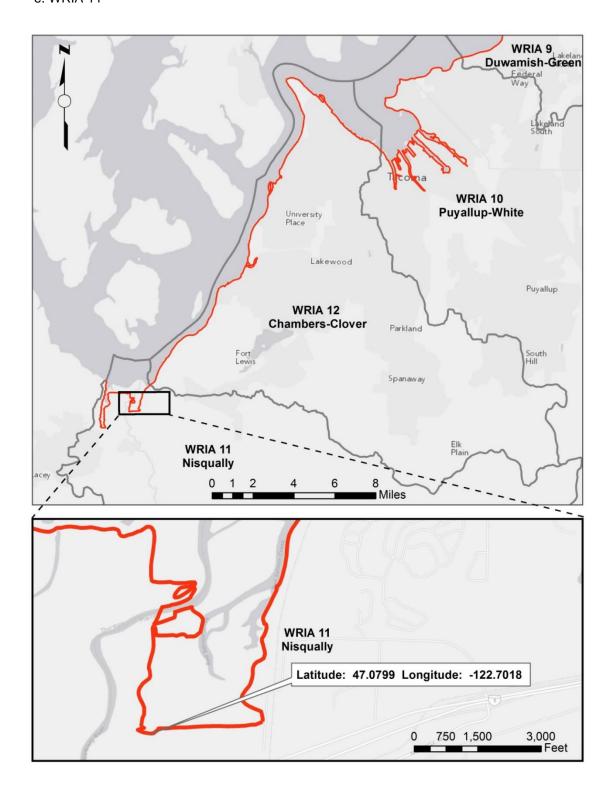
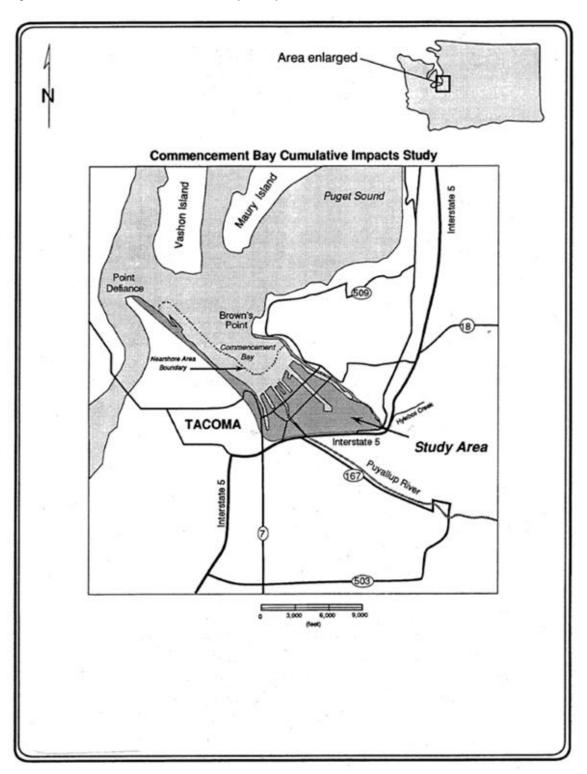


Figure 2. RGC 4 - Commencement Bay Study Area



Appendix B – Shoreline Substantial Development Permit LU23-0046



SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT FOR:

File No. LU23-0046

Kristin Evered, Port of Tacoma PO Box 1837 Tacoma. WA 98401

SUMMARY OF REQUEST:

A Shoreline Substantial Development Permit (SSDP) to repair and stabilize the slope under the existing pier and abutment and to provide stormwater improvements at Parcel 86, the former Pony Lumber Dock site. The site is located within the Port Maritime Industrial (PMI) District, the S-10 Port Industrial Area District, and the S-13 Marine Waters of the State Shoreline District.

LOCATION:

3701 Taylor Way, Parcel Number 0321364024

DECISION:

The requested permit is Approved, subject to conditions.

NOTE: Last day to request a reconsideration is on September 12, 2024.

This decision will be final on <u>September 13, 2024,</u> and will be transmitted to the Department of Ecology (Ecology) at that time, provided no requests for reconsideration are timely filed as identified in RECONSIDERATION/APPEAL PROCEDURES of this Report and Decision. Upon receipt by Ecology, a 21-day appeal period will begin.

The Director has jurisdiction in this matter under Tacoma Municipal Code (TMC) 13.05.080.A.7. and Tacoma Shoreline Master Program (TSMP) 19.02.020.A.1.a. and b.

The applicant bears the burden of proof to demonstrate the proposal is consistent with the provisions of the TMC, the applicable provisions and policies of the City's Comprehensive Plan, the TSMP, the Washington Administrative Code (WAC), the Revised Code of Washington (RCW) and other applicable ordinances of the City.

For additional information concerning this land use permit please contact:

Shanta Frantz, Senior Planner
Planning and Development Services Department
747 Market Street, Room 345, Tacoma, WA 98402
sfrantz@cityoftacoma.org | (253) 260-0769

SUMMARY OF RECORD

The following exhibits and attachments constitute the administrative record:

Attachments

Attachment A: Project Drawings

Attachment B: Technical Memorandum from Karla Kluge, Senior Environmental Specialist

Exhibits¹

Exhibit A: Joint Aquatic Resources Permit Application (JARPA)

Exhibit B: State Environmental Policy Act (SEPA) Determinations and Environmental

Checklists for both the Pony Dock and Stormwater Improvements

Exhibit C: Port of Tacoma Pony Dock Maintenance and Parcel 86 Stormwater

Conveyance Improvements Critical Area Report, prepared by Grette

Associates and dated September 2023

Exhibit D: Port of Tacoma Pony Dock Maintenance and Parcel 86 Stormwater

Conveyance Improvements Project Technical Memorandum - Shoreline

Consistency Narrative, prepared by Grette Associates and dated

September 13, 2023

Exhibit E: Port of Tacoma Pony Dock Maintenance Project: Washington Department of

Fish and Wildlife (WDFW) Mitigation Plan, prepared by Grette Associates and

January 26, 2023

Exhibit F: Port of Tacoma, Pony Dock Maintenance Project Biological Evaluation,

prepared by Grette Associates and dated August 2022

Exhibit G: Hydraulic Project Approval, WDFW, dated January 27, 2023 (for the Pony

Dock Project)

Exhibit H: Hydraulic Project Approval, WDFW, dated February 16, 2024 (for the

Stormwater Conveyance Project)

Exhibit I: Nationwide Permit (NWS-2023-964-WRD) Army Corps of Engineers, dated

April 10, 2024 (for the Stormwater Conveyance Project)

Exhibit J: Inadvertent Discovery Plan and Puyallup Tribe Comments

Exhibit K: City Staff Advisory Comments

The Director of Planning and Development Services (Director) enters the following Findings and Conclusions based upon the applicable criteria and standards set forth in the TMC, TSMP, Comprehensive Plan, WAC, RCW, as well as the attachments and exhibits listed above.

File No. LU23-0046 - SSDP Port of Tacoma - Parcel 86 Pony Dock Repairs and Stormwater Improvements Page 2

¹ All exhibits are contained within Planning and Development Services Department File No. LU23-0046. They are referenced and incorporated herein as though fully set forth.

FINDINGS

Proposal:

- 1. This SSDP application proposes to repair and stabilize the slope under the existing pier and abutment and provide stormwater improvements at Parcel 86, the former Pony Lumber Dock site.
- 2. There are two parts for this proposal: Pony Dock Maintenance and Stormwater Conveyance Improvements. See Attachment A.
- 3. Under the Pony Dock Maintenance (Pony Dock proposal), the Port of Tacoma (Port) proposes to conduct maintenance and repairs on the slope and pier-supporting abutment at Parcel 86, located along the Hylebos Waterway.
 - This work will be conducted as part of a larger pier maintenance project being done under the Port's existing programmatic maintenance agreements with the U.S. Army Corps of Engineers (USACE, NWS-2011-0089-WRD), the City of Tacoma (City; SSDP Exemption File No. LU18-0303), and the WDFW Hydraulic Project Approval (WDFW; Hydraulic Project Approval (HPA) Permit Number 2021-6-79+01).
 - The Pony Dock proposal is to repair an existing facility, new riprap and grout will be placed within 200 feet of the ordinary high-water mark (OHWM) of the Hylebos Waterway; thus, a SSDP is required pursuant to the TSMP.
- 4. Under the Stormwater Conveyance Improvements (Stormwater proposal), the Port proposes to plug and decommission the stormwater conveyance system associated with Outfall 12314 and reroute this stormwater to the conveyance system located directly to the west associated with Outfall 11193 as identified by the Port. The stormwater system associated with Outfall 12314 is crushed in several locations, full of debris, has resulted in drainage issues and altered stormwater sampling results, and is under the environmental cap on the site.
 - The conveyance system to the west will be replaced to accommodate the increase in flow from combining two systems. Replacement of this system will increase the pipe diameter and lower the elevation of Outfall 11193 to reestablish proper drainage to the site, improve water quality in the nearby environment, and allow the Port to maintain compliance with their stormwater permit. The proposed stormwater outfall will be installed at a lower invert elevation within 200 feet of the OHWM of the Hylebos Waterway; thus, a SSDP is required pursuant to the TSMP.
- 5. While the Pony Dock proposal does not extend within 300 feet of any streams, there is a Category II estuarine wetland located approximately 60 feet east of the Pony Dock. Although the Pony Dock proposal will occur within the wetland's 100-foot buffer, it involves placement of material on an existing unvegetated shoreline beneath a solid-decked industrial pier. This will have no effect on the buffer or wetland functions. After removal of shoreline debris of concrete, wood, etc. at a 1:1 impact-to-debris removal ratio, the proposed Pony Dock proposal will result in no net loss of shoreline ecological function of wetlands or their buffers.
- 6. The Stormwater proposal will include work within 300 feet of Hylebos Creek along the Hylebos Waterway shoreline to install the outfall. All work will occur outside of the 150-foot Hylebos Creek buffer and no impacts to Hylebos Creek are anticipated since all excavation and turbidity impacts will be short and temporary during installation. The installation of a new stormwater system and outfall will also enhance water quality in the area.

- Therefore, the Stormwater proposal will result in no stream impacts, and no net loss of shoreline ecological function of streams or their buffers.
- 7. Mitigation for the Pony Dock and Stormwater proposals will be provided for the impacts to the intertidal area of Commencement Bay through removal of concrete and wooden debris along the adjacent shoreline areas at a 1:1 ratio based on impact area.
- 8. The Port is using the High Tide Line (HTL) rather than the OHWM for the Pony Dock proposal due to limitations in surveying under the dock and guidance from the Army Corps of Engineers. The City will accept this delineation for both projects.
- 9. The project drawings are appended to this report and decision as Attachment A and all critical area reports and evaluations are located within Exhibits A I.

Project Site:

- 10. The property is owned by the Port and the upland portion of the site is fully paved and developed with buildings, truck access and parking, and storage areas for the Quigg Brothers, Inc. (marine and industrial construction), Keen Transport (heavy equipment transport), and Wallenius Wihelmsen (loading and unloading of marine cargo, berthing commercial barges and marine vessels).
- 11. The project site occurs along the Hylebos Waterway marine shoreline and extends upland above the OHWM. The beach at the site is oriented northwest to southeast and consists of a sand and gravel-dominated substrate with concrete and wood debris.
- 12. The Hylebos Waterway flows northwest into Commencement Bay and the Puget Sound. The Puget Sound and Commencement Bay are designated as shorelines of statewide significance under RCW 90.58.30(2)(f).
- 13. The site is located within the PMI District, the S-10 Port Industrial Area District, and the S-13 Marine Waters of the State Shoreline District which is a Fish and Wildlife Habitat Conservation Area (FWHCA). The S-10 District has a 50-foot marine buffer that extends from the OHWM onto the subject site.
- 14. The intent of the S-10 District is to allow the continued development of the Port Industrial Area, with an increase in the intensity of development and a greater emphasis on terminal facilities within the city. See TMC 19.09.120.
- 15. The site is also located within an area classified as a high-intensity environment by the TSMP. The purpose of this environment is to provide for high-intensity, water-dependent and water-oriented mixed-use commercial, transportation, and industrial uses while protecting existing ecological functions and restoring ecological functions in areas that have been previously degraded. See TMC 19.05.050.E.
- 16. The Pony Dock is a port/industrial use and the new stormwater outfall is a utility use. Both are water-dependent uses and are permitted within the site's S-10 District High Intensity Environment designations.
- 17. The site is also located within the Coastal AE Federal Emergency Management Agency (FEMA) floodplain boundary. However, since Commencement Bay does not lack flood storage capacity, the proposed actions will have no effect to the mapped floodplain.
- 18. The WDFW Priority Species and Endangered Species Act (ESA) species that may occur within the vicinity of the work include, but are not limited to: bald eagle (Haliaeetus leucocephalus), peregrine falcon (Falco peregrinus), cormorants (Phalacrocorax spp.), alcids, great blue heron (Ardea herodias), steller sea lion (Eumetopias jubatus), dungeness crab (Cancer magister), surf smelt (Hypomesus pretiosus), coho (Oncorhynchus kisutch)

and chum (O. keta) salmon, chinook salmon (Oncorhynchus tshawytscha), steelhead trout (Oncorhynchus mykiss), and bull trout (Salvelinus confluentus).

Salmonids may be present at or near the site as they traverse the Hylebos Waterway to Hylebos Creek. Piscivorous birds, migratory birds, and songbirds may also be found at or near the site as they forage/hunt or migrate along the Pacific Flyway.

However, the industrialized areas of the lower Hylebos Creek do not provide quality habitat for migratory bird species. Likewise, bocaccio, yelloweye rockfish, southern resident killer whales, humpback whales, and marbled murrelets are not likely to be at or near the site due to a lack of suitable habitat.

Surrounding Area:

- 19. The site is located within the southeastern part of the Port, adjacent to SR-509 and railroad tracks to the east and south, the Hylebos Waterway to the northeast, and Hylebos Creek to the southeast. The adjacent uses within the Port are port, maritime and/or industrial uses. Typically, those uses along a shoreline, are also water-related, water-oriented, or water-dependent uses.
- 20. The site is surrounded by the S-13 Marine Waters of the State Shoreline District, S-10 District, S-12 Hylebos Creek District, and M-2 Heavy Industrial District, with corresponding natural and high intensity environment designations under the TSMP or heavy industrial under the Comprehensive Plan.
- 21. Adjacent areas along the shoreline of the project site are significantly developed. The immediate intertidal areas located on either side of the Pony Dock are sparsely vegetated and contain a lot of wood and concrete debris which is proposed to be removed for mitigation.
- 22. Himalayan blackberry (Rubus bifrons), scotch broom (Cytisus scoparius), and other miscellaneous herbaceous plants were the dominant upland vegetation along the shoreline. To the west of the project area, some rockweed (Fucus vesiculosus) was observed on the beach. No eelgrass or kelp were present. Approximately 60 feet east of the project area, a five to six-foot wide strip of Salicornia sp. extends to the east towards Hylebos Creek along the shoreline. Two bunches of common rush (Juncus effusus) were also observed approximately 125 feet east of the project area.
- 23. Red alder (Alnus rubra), black cottonwood (Populus trichocarpa), and paper birch trees (Betula papyrifera) are present along the east edge of the adjacent property to the west of the subject site.

Additional Information:

- 24. This original application for the Pony Dock portion of the project was on March 13, 2023. Around this time, staff was also reviewing a site development permit application for the stormwater improvements, for which a SSDP would be required. As such, this application was on hold for about seven months so the Port could update this application to include both proposals. Thus, the application was determined to be technically complete on October 17, 2023.
- 25. The Port, as the SEPA Lead Agency for this proposal, issued its Determination of Non-Significances (DNS) for the Pony Dock and Stormwater Conveyance proposals on September 2, 2022, and July 28, 2023, respectively. The DNS and environmental checklist for each are contained within Exhibit B.

26. An Inadvertent Discovery Plan (IDP) for the potential uncovering of cultural and historic resources at the site was submitted. Staff received comments from the City's Historic Preservation Officer and the Puyallup Tribe. Conditions have been added for this report and decision that are consistent with the preservation requirements for archaeological, cultural and historic resources under TSMP 19.06.030. See Exhibits J and K.

Notification and Comments:

- 27. Public notice was sent to all occupants/property owners within 400 feet of the site, as well as qualified neighborhood groups, local, State, and federal resource agencies on October 30, 2023, and two public notification signs were posted within seven days of the start of the 30-day comment period.
- 28. No public or outside agency comments were received as a result of the public notice.
- 29. The following City staff reviewed the application: Carleen Bruner and Britany Avila, Real Property Services Division; Lucas Shadduck, Building Code; Karla Kluge, Land Use/Critical Areas; Chris Seaman, Tacoma Fire Department; Joy Rodriguez, Site Development; Dan Reed, Tacoma Power; Heather Croston, Tacoma Water; Vicki Marsten and Jennifer Kammerzell, Traffic Engineering; Lyle Hauenstein, Solid Waste Review; Reuben McKnight, Historic Preservation; and Craig Kuntz, Geotechnical Review.

The Director gives substantial weight to the City and outside agency reviewers, as they are the subject matter experts for each of their respective disciplines and jurisdiction.

All comments from staff received are provided as either conditions for this report and decision or contained as City Staff Advisory Comments within Exhibit K.

Applicable Regulations and Analysis:

- 30. With regards to critical areas and marine shoreline protection, the proposal, critical area reports and project documents were reviewed by Karla Kluge, the City's Senior Environmental Specialist and the subject matter expert for critical area review within Planning and Development Services (PDS). In addition to reviewing the application materials, Ms. Kluge visited the site and its surrounding area. Ms. Kluge provided a comprehensive technical memorandum indicating that the proposal, if conditioned as recommended, complies with the requirements of TSMP.
- 31. The Director notes that substantial weight is given to Ms. Kluge's review of the proposal for potential impacts to the shoreline and its critical areas. Her comments are included in Attachment B and in some cases, are repeated verbatim herein.

32. WAC 173-27-140 allows that:

- (1) No authorization to undertake use or development on shorelines of the state shall be granted by the local government unless upon review the use or development is determined to be consistent with the policy and provisions of the Shoreline Management Act (SMA) and the master program.
- (2) No permit shall be issued for any new or expanded building or structure of more than 35 feet above average grade level on shorelines of the state that will obstruct the view of a substantial number of residences on areas adjoining such shorelines except where a master program does not prohibit the same and then only when overriding considerations of the public interest will be served.
- <u>Staff Analysis</u>: The applicant has followed all procedural requirements for the SSDP application and has demonstrated compliance with applicable regulations and policies as

analyzed below. The permit review will ensure consistency with both the SMA and TSMP. All proposed structures and development activity will be at-grade or underground. See Attachment A.

33. WAC 173-27-150 allows that:

- (1) A substantial development permit shall be granted only when the development proposed is consistent with:
 - (a) The policies and procedures of the act;
 - (b) The provisions of this regulation; and
 - (c) The applicable master program adopted or approved for the area. Provided, that where no master program has been approved for an area, the development shall be reviewed for consistency with the provisions of Chapter 173-26 WAC, and to the extent feasible, any draft or approved master program which can be reasonably ascertained as representing the policy of the local government.
- (2) Local government may attach conditions to the approval of permits as necessary to assure consistency of the project with the act and the local master program.
- <u>Staff Analysis</u>: The proposal was designed and will be developed to meet all requirements, as conditioned, of the TMC and TSMP.

The applicant requested the SSDP to repair the existing Pony Dock with new rip rap and grout and a new stormwater outfall to be located within 200 feet of the OHWM of the Hylebos Waterway.

The Director notes that the priorities of the SMA are for water-dependent, water-related and water-oriented development, public access, and ecological restoration. With regards to the goals of the SMA, the proposal will increase the ecological function of the shoreline and mitigate for impacts to the intertidal area of Commencement Bay through removal of concrete and wood debris along the adjacent shoreline areas at a 1:1 ratio based on impact area. See Attachment B.

As noted earlier, the TSMP states that the intended purpose of the S-10 District is to allow the continued development of the Port Industrial Area. This is balanced by the purpose of the high-intensity environment, which is to provide for high-intensity water-dependent and water-oriented mixed-use commercial, transportation, and industrial uses while protecting existing ecological functions and restoring ecological functions in areas that have been previously degraded.

The proposal will ensure that the permitted upland industrial uses may be maintained. Further, the shoreline area itself will be improved with the removal of concrete and woody debris at a 1:1 ratio and additional clean up area within the intertidal shoreline area. Both mitigation proposals have be approved by WDFW through the HPAs issued for this application. See Attachment B and Exhibits E, G, and H.

34. The modification of a shoreline and/or marine buffer is subject to the site review regulations and policies within the following TSMP sections:

TSMP 19.06.040.D. - Critical Areas and Marine Shoreline Protection.

1. General Regulations.

- a. Shoreline use and development shall be carried out in a manner that prevents or mitigates adverse impacts so that no net loss of existing ecological functions occurs; in assessing the potential for net loss of ecological functions or processes, project specific and cumulative impacts shall be considered.
- b. Any shoreline development proposal that includes modification in or adjacent to a critical area or buffer is subject to the review process in TSMP Section 19.02.040.B.

Staff Analysis: For the Pony Dock proposal, the applicant argues, and staff agrees, that impacts to the shoreline cannot be fully avoided, that the proposed slope repair and abutment reinforcement is designed to minimize potential direct and indirect impacts and will improve the habitat on the project site at the head of the Hylebos Waterway. The design follows the mitigation sequence outlined in the State of Washington's Hydraulic Code. Project components have been incorporated to enhance biological and ecological functions while also improving the safety of the facility. When coupled with the proposed debris removal from the project site, it is anticipated that the proposal will result in no net loss of habitat functions and values in compliance with the Hydraulic Code. The biological evaluation determined that the project will not adversely affect salmon, groundfish and coastal pelagic essential fish habitat.

For the stormwater proposal, the applicant argues, and staff agrees, that the proposal will allow for improved treatment and flow of existing stormwater and allow a crushed and blocked conveyance to be capped and decommissioned. This work will result in improvements to water quality, while minimally altering the upper nearshore. Temporal impacts from extending the life of an approximately 36-square-foot section of riprap will be mitigated with the debris removal at a 1:1 ratio. The four-foot by two-foot section of trenching (approximately eight square feet) that will occur below OHWM on the degraded slope will be refilled as soon as pipe work is complete. This will result in only a short-term disturbance of the shoreline. This portion of shoreline is armored and overgrown with blackberry.

The stormwater proposal is also within the S-10 District which supports continued use by the Port's tenants. Disturbance in the upland will occur only in the paved, heavily used, industrial lot. Within the shoreline buffer, a four-foot by 50-foot trench (approximately 200 square feet) will be excavated in the asphalt parking lot (that runs perpendicular to the shoreline) to access the pipes. This trench will be filled and re-paved to return the lot to the existing condition and will not alter the shoreline buffer function. The treatment system will be placed further than 50 feet from the shoreline. The new system will result in improved water quality of effluent exiting the outfall. This proposal is consistent with the intent of the S-10 District shoreline designation. The stormwater project will result in no net loss of ecological function of the marine environment.

2. Critical Area and Buffer Modification.

- a. Modification of a critical area or buffer is prohibited except when:
- Modification is necessary to accommodate an approved water-dependent or public access use, including trails and/or pedestrian/bicycle paths; provided, that such development is operated, located, designed and constructed to minimize and, where

possible, avoid disturbance to shoreline functions and native vegetation to the maximum extent feasible; or....

3. General Mitigation Requirements and Mitigation Sequencing.

- a. If modification to a critical area or buffer is unavoidable, the alteration shall be mitigated so as to result in no net loss of shoreline ecological functions and/or critical area functions or processes.
- c. Type and Location of Mitigation
 - (4) High-Intensity and Downtown Waterfront Environments:
 - (a) The preference for compensatory mitigation is for innovative approaches that would enable the concentration of mitigation into larger habitat sites in areas that will provide greater critical area or shoreline function.

TSMP 19.06.040.E. - Marine Shorelines.

1. Classification.

a. Marine shorelines include all marine "shorelines of the state", including commencement Bay and the Tacoma Narrows, as defined in RCW 90.58.030 within the City of Tacoma.

2. Marine Shoreline Buffers.

- a. A buffer area shall be maintained on all marine shorelines for all non-water-dependent and public access uses adjacent to the marine shoreline to protect and maintain the integrity, functions, and processes of the shoreline and to minimize risks to human health and safety. The buffer shall be measured horizontally from the edge of the ordinary high-water mark landward.
- b. Buffers shall consist of an undisturbed area reserved for the protection of existing native vegetation or areas reserved for priority uses (water-dependent uses and public access), including restoration established to protect the integrity, functions, and processes of the shoreline. Required buffer widths shall reflect the sensitivity of the shoreline functions and the type and intensity of human activity proposed to be conducted nearby.
- c. Buffer widths shall be established according to Table 6-1.

Table 6-1. Standard Marine Buffers

Marine Habitat Area	Buffer Width (feet)
S-1a, S1b	50
S-2	115
S-3, S-4	200
S-5, S-6, S-6/7, S-7	115
S-8, S-10	50
S-11	115
S-12	200
S-15	50

3. Marine Shoreline Buffer Reductions.

- a. All uses and development within a reduced buffer remain subject to mitigation sequencing and any unmitigated impacts resulting from a buffer reduction are required to be compensated pursuant to TSMP Section 19.06.040.D.1 through 5 to achieve no net loss of ecological functions.
- b. In all shoreline designations, water-dependent and public access uses and development may reduce the standard buffer such that direct water access is provided.
- e. 'High-Intensity' and 'Downtown Waterfront' Designated Shorelines: Buffer reductions for water-related and water-enjoyment uses, including water-oriented portions of mixed-use development, shall not exceed one half (1/2) the standard buffer width. Further reductions shall only be allowed through a shoreline variance.
- f. The remaining buffer on-site shall be enhanced or restored to provide improved function and protection.

4. Marine Shoreline Mitigation Requirements.

a. All marine shoreline buffer mitigation shall comply with applicable mitigation requirements specified in TSMP Sections 19.06.040.D.3 and 4 and 19.06.040.E.4 and 5 including, but not limited to, mitigation plan requirements, monitoring and bonding.

5. Marine Shoreline Mitigation Ratios.

- a. The following mitigation ratios are required for impacts to the marine shoreline buffer. The first number specifies the area of replacement shoreline buffer area, and second specifies the area of altered shoreline buffer area.
- (1) 1:1 for areas on the parcel or on a parcel that abuts the ordinary high watermark within one quarter (1/4) mile along the shoreline from where the vegetation removal, placement of impervious surface or other loss of habitat occurred.

<u>Staff Analysis</u>: Modification to the marine buffer is permitted for both proposals as they are both water-dependent uses. The site is located within the S-10 Shoreline District which has a required 50-foot marine buffer.

The proposal provides for the required 1:1 on-site marine shoreline buffer mitigation ratio. While the application initially proposed using the Port's advance mitigation credits from its Place of Circling Waters site to offset impacts from the Pony Dock proposal under TMC 19.06.040.D.3.c.(4)(a) and as noted within the Biological Evaluation (Exhibit F), this was not pursued as it was found that on-site cleanup of the adjacent shoreline and intertidal shoreline area will meet the required 1:1 on-site mitigation ratio for both proposals.

- 35. TSMP 19.06.050.D. and TSMP 19.07.060.B. Public Access and Port/Industrial Use Regulations. Under these sections, port/industrial uses shall include public access to shorelines.
 - Staff Analysis: Since most of the Port of Tacoma contains heavy industrial, cargo, and shipping terminal uses, the public is generally not allowed near its shoreline for safety and security reasons. However, the Port and the City signed an interlocal agreement, under City Council Resolution No. 38706, to provide a Public Access Alternatives Plan consistent with WAC 173-26-221(4)(c). This agreement provides public access in locations that are consistent with the community vision, promote public safety and natural resource preservation, and protect the future land supply and operations of water-oriented industrial uses.

- In this case, public access is available upstream at the Place of Circling Waters and across Hylebos Creek at the Mowitch Restoration Area.
- 36. The Stormwater proposal will comply with the applicable regulations for utilities under TSMP 19.07.130.B.1.
 - a. Utility development shall, through coordination with local government agencies and utility providers, allow for compatible, multiple uses of sites and right-of-ways.
 - b. Utilities shall be designed and installed to meet future needs when possible.
 - <u>Staff Analysis</u>: The applicant argues, and staff agrees, that the new conveyance system is located on a private parcel but consolidates two conveyances into one. The parcel is already fully paved with multiple conveyances for stormwater, so no new needs are anticipated in the near future. The new system is larger than the original, so it can accommodate more flow if the need were to arise.
- 37. The stormwater proposal will comply with the applicable regulations for utilities under TSMP 19.07.130.B.2.
 - c. Minor utilities are allowed as a permitted use, provided that within the Natural Designation, it has been determined that no other feasible alternative exists.
 - <u>Staff Analysis</u>: The applicant argues, and staff agrees, that the proposed stormwater proposal is a replacement of a single stormwater conveyance, not a main or a larger system. Because the site is water-dependent, the stormwater gathered is routed to the nearby Hylebos Waterway. To avoid new impacts of creating new systems, replacement within the same trench as the existing pipe is the best alternative.
- 38. The stormwater proposal will comply with the applicable regulations for utilities under TSMP 19.07.130.B.3.
 - a. New distribution lines or extension of existing distribution lines shall only be permitted underground, unless otherwise specified, or where the applicant can demonstrate that, due to economic, technical, environmental, or safety considerations, placing utilities underground is infeasible.
 - d. Utilities shall be located within roadway and driveway corridors and right-of-ways wherever feasible. Joint use of right-of-ways and corridors is encouraged.
 - <u>Staff Analysis</u>: The applicant argues, and staff agrees, that the replacement conveyance will be installed underground under a fully paved, industrial lot. The conveyance will consolidate stormwater from two existing conveyances at the site.
- 39. Finally, the proposed stormwater proposal will comply with the following applicable regulations concerning environmental protection listed in the TSMP 19.07.130.B.4.
 - a. The design, location, and maintenance of utilities shall be undertaken in such a manner as to assure no net loss of ecological functions, preserve the natural landscape, and minimize conflicts with present and planned land and shoreline uses.
 - b. Utilities shall be installed in such a manner that all banks are restored to a stable condition, replanted, and provided maintenance care until the newly planted vegetation is established. Plantings shall be native species or be similar to vegetation in the surrounding area.
 - c. Construction of new storm drains or other outfalls into water bodies and improvements to existing facilities shall be accomplished to meet all applicable standards of water quality.

- d. Outfalls shall be located and constructed in accordance with regulations of Ecology, the U.S. Environmental Protection Agency and any other agency having regulatory jurisdiction.
- e. To protect the aesthetic qualities of the shoreline, new utility lines including electricity, communications, and fuel lines shall be located underground, unless otherwise specified, or where the applicant can demonstrate that, due to economic, technical, environmental, or safety considerations, placing utilities underground is infeasible.
- Utility developments shall be located and designed so as to avoid, to the extent practicable, the need for any structural or artificial shoreline modification works for the life of the project.
- k. Installation of utilities shall assure the prevention of siltation or beach erosion.

<u>Staff Analysis</u>: The applicant argues, and staff agrees, that the Stormwater proposal has been designed for no net loss of ecological function by minimizing the size of the impact to the critical area to only 36 square feet and by offsetting that impact through debris removal at a 1:1 ratio.

Upland disturbance will be limited to a paved, heavily trafficked, industrial lot. The bank will be restored to stable condition through placement of riprap, which will also protect against scour. Some Himalayan blackberry may be removed during trenching for pipe placement, but impacts of this will be temporary as blackberry is quick to revegetate. Also, native plants planted within the seven-foot, three-inch stretch of heavily overgrown blackberry bushes will be quickly outcompeted by the blackberry. A small strip of saltmarsh vegetation may also be removed if present within the footprint of the excavation/riprap area.

Offsets to these impacts will be completed through removal of debris on the shoreline at a 1:1 ratio of saltmarsh vegetation to debris. The new conveyance and outfall will be lower than existing, but will result in improved water quality, and will be constructed in accordance with all agencies having jurisdiction. The system will be located underground, though the existing aesthetic along the portion of shoreline that is heavily industrial, and the new stormwater system will not alter the aesthetic.

The riprap replacement surrounding the outfall has been designed to avoid the need for structural or artificial shoreline modification for the life of the project. The outfall will be outfitted with an inline check valve to reduce seawater intrusion into the conveyance system, and riprap will be placed to protect and support the outfall and provide scour protection from the treated effluent exiting the outfall. During construction, contractors will adhere to best management practices (BMPs) to prevent siltation and beach erosion. Shoreline work will be conducted in the dry season, whenever possible.

- 40. The mitigation proposal to provide restoration within a degraded intertidal area for the small upland area impacted within the marine buffer is an on-site, out-of-kind mitigation proposal that would provide greater benefits to the marine species present within the area. The Himalayan blackberry will continue to provide a vegetated shrub layer, is self-restoring, and will repopulate the impacted area quickly.
- 41. The Pony Dock proposal will comply with the applicable regulations for Shoreline Stabilization under TSMP 19.08.030.C.1.
 - a. Shoreline stabilization shall be designed, located, and mitigated to achieve no net loss of ecological functions.

- <u>Staff Analysis</u>: The applicant argues, and staff agrees, that the stabilization will be placed over an existing engineered slope beneath a working industrial pier. The riprap will be above +9 feet Mean Low Low Water (MLLW) and will be in the dry for much of the day. To offset any impacts from this, debris from lower down in the shoreline will be removed at a 1:1 ratio, and thus the Pony Dock proposal will result in no net loss of ecological function.
- b. Shoreline stabilization shall be permitted only where appropriate to the specific type of shoreline and environmental conditions for which it is proposed.
- <u>Staff Analysis</u>: The applicant argues, and staff agrees, that the environmental conditions at the Pony Dock location are consistent with the site's S-10 District, High Intensity shoreline designations: 1) the engineered slope with debris underneath an existing solid pier and abutment; and 2) the proposed slope protection is consistent with the existing and expected uses of the facility, which includes barging equipment and materials to and from the site.
- c. All shoreline stabilization measures shall be constructed to minimize damage to fish and shellfish habitat and shall conform to the requirements of the WDFW Hydraulics Code.
- Staff Analysis: The applicant argues, and staff agrees, that the stabilization will be constructed at +9 feet MLLW and higher over an existing engineered/degraded slope underneath a solid pier and abutment. This area does not provide suitable habitat for fish and shellfish. Debris will be removed along the adjacent shoreline and at lower tidal elevations at a 1:1 ratio to offset any minor impacts of riprap placement above +9 feet MLLW.
- f. Shoreline stabilization structures shall not be permitted for the direct or indirect purpose of creating land by filling behind the structure.
- <u>Staff Analysis</u>: The applicant argues, and staff agrees, that the proposal is a maintenance project involving an existing Port industrial pier. The proposed riprap is intended to support the pier and abutment. No land will be created, directly or indirectly, through completion of the Pony Dock proposal.
- h. New structural shoreline armoring may be permitted, and existing structural shoreline armoring may be expanded when one or more of the following apply:
 - (3) When necessary to protect public transportation infrastructure or essential public facilities and other options are infeasible.
- <u>Staff Analysis</u>: The applicant argues, and staff agrees, that the existing pier is used for offloading construction materials at a Port-owned facility. This is the most feasible location for this project to occur because it is maintenance and reinforcement of an existing facility, and thus, no new impacts are anticipated.
- i. Proposals for new, expanded, or replacement structural shoreline armoring permitted under this program shall clearly demonstrate all of the following:
 - (1) The erosion is not being caused by upland conditions, such as the loss of vegetation and drainage;
 - (2) Nonstructural measures, such as placing the development further from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient:
 - (3) The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report. The damage must be caused by natural processes, such as tidal action, currents, and waves;

- (4) The erosion control structure will not result in a net loss of shoreline ecological functions.
- <u>Staff Analysis</u>: The applicant argues, and staff agrees, that the erosion at the site was caused by undermining underneath the existing abutment. It has occurred from years of tidal action and prop wash from maneuvering vessels wearing away the sediment from the waterward side. Vegetation and drainage conditions have not changed since the facility was constructed.

Nonstructural measures are not feasible for the Pony Dock proposal. Placement of the development further from the shoreline would require full replacement of the facility - demolition of the existing abutment and reconstruction of the abutment and pier structure. The existing infrastructure is in good condition. Therefore, demolition and reconstruction would be wasteful, both economically and environmentally, as that would be a considerably larger, more damaging undertaking than this repair and stabilization proposal.

A Facility Condition Assessment Report (FCAR) was prepared in 2021 by engineers at Moffat & Nichol (Moffatt & Nichol 2021). The assessment of the abutment states: "Major undermining 30-feet wide by nine-feet deep by four-feet high was observed from 0:B.5 to 0:E, as shown in Photo 34 in the report. The undermining has not resulted in a reduction in structural capacity of the abutment since the abutment is fully supported by the timber batter piles, however, continued undermining may result in sinkholes in the upland paved area." The repair recommendation is to "Install slope protection to prevent further undermining of the abutment." The Pony Dock proposal aims to fulfill this recommendation.

Finally, the riprap that will be placed at and above +9 feet MLLW on an existing degraded, engineered slope, is scattered with debris and is located largely under a solid pier and abutment. The riprap will not result in a net loss of shoreline ecological function.

- j. When evaluating the need for new, expanded, or replacement structural shoreline armoring, the Director shall require the applicant to examine and implement alternatives to structural shoreline armoring in the following order of preference:
 - (1) No action (allow the shoreline to retreat naturally);
 - (2) Increased building setbacks and/or relocated structures;
 - (3) Use of flexible/natural materials and methods, vegetation, beach nourishment, protective berms or bioengineered shoreline stabilization.
- <u>Staff Analysis</u>: The applicant argues, and staff agrees, that allowing the shoreline to continue to erode would render this existing work pier unfit for use, thus removing a Port facility. Further erosion would cause the abutment to collapse into the water and threaten the upland facility, while causing significant environmental damage.

Relocating the structure would require all new impacts at a new facility. The Pony Dock proposal would maintain an existing facility at a disturbed site, thus allowing undisturbed areas to remain undisturbed.

Hard armoring is required for stabilization at this site due to its use for offloading construction materials. Stabilization must be robust enough to support the abutment plus the loads being transported on and off the pier, as well as potential prop wash and wave action from industrial uses on the waterway.

k. The City shall require applicants for new, expanded, or replacement structural shoreline armoring to provide credible evidence of erosion as the basis for documenting that the

- primary structure is in imminent danger from shoreline erosion caused by tidal action, currents, or waves. The evidence shall:
- (1) Demonstrate that the erosion is not due to landslides, sloughing or other forms of shoreline erosion unrelated to water action at the toe of the slope; and
- (2) Include an assessment of on-site drainage and vegetation characteristics and their effects on slope stability.
- <u>Staff Analysis</u>: The applicant argues, and staff agrees, that the 2021 FCAR (Moffatt & Nichol 2021) site photos contained within the critical area report show the erosion is caused by undermining from tidal and wave action and not from landslides, sloughing or other forms of shoreline erosion.
 - The area to be reinforced is mostly under an existing pier and abutment with no vegetation present. Current drainage for the pier is through a catchment basin which . leads to an outfall located adjacent to the dock, but outside the Pony Dock proposal area. The abutment is a connector between the paved upland site and the pier/dock. There is no upland vegetation at that portion of the Pony Dock proposal area. Upland vegetation immediately adjacent to the abutment is Himalayan blackberry and scotch broom.
- n. Geotechnical reports pursuant to this section that address the need to prevent potential damage to a primary structure shall address the necessity for shoreline stabilization by estimating time frames and rates of erosion and report on the urgency associated with the specific situation. As a general matter, hard armoring solutions should not be authorized except when a report confirms that there is a significant possibility that a structure will be damaged within three years as a result of shoreline erosion in the absence of such hard armoring measures, or where waiting until the need is that immediate, would foreclose the opportunity to use measures that avoid impacts on ecological functions. All geotechnical reports shall also identify any potential impacts to downstream structures.
- Staff Analysis: The applicant notes, and staff agrees, that the 2021 FCAR recommends a two-year inspection cycle for all components of the Pony Dock facility. The report states: "Repair recommendations, based on observations from the 2021 facility condition assessment effort, are provided below: ...Install slope protection to prevent further undermining of the abutment." The structure is on a two-year inspection cycle so should be reinspected this year.
- Shoreline stabilization structures shall be limited to the minimum size necessary.
- <u>Staff Analysis</u>: The applicant argues, and staff agrees, that the design of the Pony Dock proposal limits the coverage of riprap to the minimum size necessary to support the abutment and stabilize the slope. Riprap will cover a 60.5- foot by 17-foot section of shoreline at and above +9 feet MLLW. Total area of coverage is 1,030 square feet.
- 42. The Pony Dock proposal will comply with the applicable regulations for Fill and Excavation under TSMP 19.08.040.B.1.
 - a. Fill placed waterward of the OHWM is prohibited except for the following instances: (1) Water-dependent use.
 - d. Fill and excavation shall be considered only where such construction can be integrated with the existing shoreline.

- e. Fill and excavation shall not be authorized unless a specific use for the site has been evaluated and permitted; speculative fill and excavation shall be prohibited in all Shoreline Districts.
- f. Applications for fill or excavation shall address methods which will be used to minimize damage of the following types:
 - (1) Biota:
 - (a) Reduction of habitat;
 - (b) Reduction of feeding areas for shellfish, fishlife, and wildlife;
 - (c) Reduction of shellfish, fishlife, and wildlife reproduction areas; and
 - (d) Reduction of fish migration areas.
- g. All perimeters of fills shall use vegetation, retaining walls, or other means for erosion control.
- h. Only materials that comply with State Water Quality Standards may be used in permitted fill projects.
- i. Dust control measures, including plants and vegetation where feasible, shall be taken in all fill and excavation projects.

<u>Staff Analysis</u>: The applicant argues, and staff agrees, that proposal will occur at an existing water-dependent use facility.

The fill will be placed to restore the original grade of the shoreline underneath the pier and abutment. The fill will not project beyond +9 feet MLLW for either project or create an obstruction to water flow or fish migration. Debris will be removed from the site's shoreline at a 1:1 ratio of riprap to debris removal.

The site is a working pier and lot used for offloading construction materials. Fill would be used to stabilize the existing slope in order to allow for continued use of Pony Dock and to protect the replaced outfall and the shoreline from erosion; therefore, it is not speculative.

The Pony Dock proposal will reinforce and stabilize an existing degraded, engineered slope scattered with debris. The slope is positioned mostly underneath a pier and abutment, and the work would occur at and above +9 feet MLLW. The Stormwater proposal will also improve stormwater treatment at the site.

Although there is a small amount of saltmarsh vegetation, the project areas are heavily silted and littered with debris on an engineered slope, and thus do not contain suitable habitat for feeding or reproduction for shellfish, fish life, and wildlife. Further, the combination of the high elevation in the intertidal and the location underneath a solid pier/abutment of the Pony Dock, minimizes the likelihood of it being used by fish migrating between Hylebos Creek and Puget Sound.

However, to offset any possible impacts to habitat, including feeding, reproduction, or migration areas, debris will be removed at a 1:1 ratio of square footage of riprap placed to debris removal. Debris removal will occur along the site's shoreline, much of which occurs in more tidally inundated areas than the riprap. Construction work will be done during in-water work windows to further minimize any disturbance to the aquatic environment. BMPs, as outlined in the Critical Areas Report by Grette Associates in 2022, will be closely followed. This includes work that will be conducted in the dry from a floating barge or from the beach using small equipment, and barges will not ground out.

The graded slope and gravel will be topped with riprap, which will control for erosion. The size of the material has been engineered for the purpose of erosion prevention. Fill will be clean and comply with State Water Quality Standards.

Finally, riprap will be used so dust will not be an issue for Pony Dock proposal and the Stormwater proposal will implement dust control measures. Both will follow all applicable construction BMPs.

43. The TSMP and Comprehensive Plan provide the following policy guidance for sites with critical areas and adjacent to the Puget Sound/Commencement Bay shorelines:

TSMP 19.04.040 - Policies for Shorelines of Statewide Significance.

- A. The statewide interest should be recognized and protected over the local interest in shorelines of statewide significance.
- B. To ensure that statewide interests are protected over local interests, the City shall review all development proposals within shorelines of statewide significance for consistency with RCW 90.58.020 and the following policies:
- 1. Redevelopment of shorelines should be encouraged where it restores or enhances shoreline ecological functions and processes impaired by prior development activities.
- 2. Ecology, the Puyallup Tribe, and other resource agencies should be consulted for development proposals that could affect anadromous fisheries.
- 3. The range of options for shoreline use should be preserved to the maximum possible extent for succeeding generations. Development that consumes valuable, scarce, or irreplaceable natural resources should not be permitted if alternative sites are available.
- 4. Potential short term economic gains or convenience should be measured against potential long term and/or costly impairment of natural features.
- 5. Protection or enhancement of aesthetic values should be actively promoted in new or expanding development.
- 6. Resources and ecological systems of shorelines of statewide significance should be protected.
- 7. Those limited shorelines containing unique, scarce and/or sensitive resources should be protected to the maximum extent feasible.
- 8. Erosion and sedimentation from development sites should be controlled to minimize adverse impacts on ecosystem processes. If site conditions preclude effective erosion and sediment control, excavations, land clearing, or other activities likely to result in significant erosion should not be permitted.
- 9. Public access development in extremely sensitive areas should be restricted or prohibited. All forms of recreation or access development should be designed to protect the resource base upon which such uses in general depend.
- 10. Public and private developments should be encouraged to provide trails, viewpoints, water access points and shoreline related recreation opportunities whenever possible. Such development is recognized as a high priority use.
- 11. Development not requiring a waterside or shoreline location should be located upland so that lawful public enjoyment of shorelines is enhanced.
 - **Policy EN-1.5** Protect the quantity, quality and function of high value environmental assets identified in the City's natural resource inventories, including:

- a. Rivers, lakes, streams and associated riparian uplands.
- h. Shorelines.
- i. Native and other vegetation species and communities that provide habitat value.
- j. Habitat complexes and corridors, rare and declining habitats such as wetlands, native oak and habitats that support special-status or at-risk plant and wildlife species.
- k. Other natural resources as identified.
- **Policy EN-1.6** Direct development activities away from critical natural features such as steep slope areas and unstable soils, wooded areas, shorelines, aquatic lands, and other unique and high value natural areas when planning for growth.
- **Policy EN-1.17** Assess and periodically review the best available science for managing critical areas and natural resources and utilize the development of plans and regulation while also taking into consideration Tacoma's obligation to meet urban-level densities under the Growth Management Act.
- **Policy EN-1.29** Protect processes and functions of Tacoma's environmental assets (wetlands, streams, lakes) in anticipation of climate change impacts.
- **Policy EN-3.1** Ensure that the City achieves no-net-loss of ecological functions over time.
- **Policy EN-3.19** Protect and retain wetland, rivers, streams, and lakes through use of BMPs, managing and treating stormwater runoff, protecting adjacent native vegetation, removing invasive plant species and limiting the use of fertilizers/pesticides or other chemicals.

In addition, the proposal is consistent with the following applicable policies for general Port/Industrial and utility uses and under TSMP 19.07.060.A.1. and 19.07.130.A.

TSMP 19.07.060.A.1. - Port/Industrial Use.

- c. Public access and ecological restoration should be considered as potential mitigation of impacts to shoreline resources for all water-related and -dependent port and industrial uses consistent with all relevant constitutional and other legal limitations on the regulation of private property, per TSMP Section 19.06.050, Public Access.
- d. Expansion or redevelopment of water-dependent port and industrial facilities and areas should be encouraged, provided it results in no net loss of shoreline functions.
- g. The cooperative use of docking, parking, cargo handling and storage facilities should be strongly encouraged in waterfront industrial areas.
- Port and industrial uses should be encouraged to permit viewing of harbor areas from viewpoints, and similar public facilities, which would not interfere with operations or endanger public health and safety.

TSMP 19.07.130.A. - Utilities.

- 1. Design, location, and maintenance of utilities is required to assure no net loss of ecological functions.
- 4. Prohibit utilities in wetlands and other critical areas unless no other practicable alternative exists.

- 5. Ensure that whenever utilities must be placed in a shoreline area, the location is chosen to:
 - a. Meet the needs of future populations in areas planned to accommodate this growth. Utilize existing transportation and utility sites, right-of-ways, and corridors, whenever possible.
 - b. Encourage joint use of right-of-ways and corridors.
 - c. Preserve scenic views and aesthetic qualities of the shoreline area.
 - d. Be located such that shoreline armoring and defense works will not be required for the life of the project.
 - e. Non-water-oriented parts of wastewater treatment, water reclamation, desalinization, and power plant facilities shall be located outside shoreline jurisdiction, unless it can be demonstrated that no other feasible option is available.
- 6. Utilities within shorelines should be under-grounded where practicable.
- 7. Upon completion of utility installation/maintenance projects on shorelines, banks should be restored to pre-project configuration, replanted, and provided maintenance care until the newly planted vegetation is established. Plantings should be native species and/or be similar to vegetation in the surrounding area.
- 9. Placement of utilities in shoreline areas should be planned and designed to avoid degradation of the shorelines and shoreline views during and after installation.

CONCLUSIONS²

- 1. Provided the conditions of approval are met, the proposal meets the criteria identified in WAC 173-27-150 for approval of a Shoreline Substantial Development Permit as follows:
 - a. The proposal, as conditioned, has been found to be consistent with the policies and procedures of the SMA.
 - b. The proposal, as conditioned, has been found to be consistent with the provisions of WAC 173-27-150.
 - c. The proposal, as conditioned, has been found to be consistent with the TSMP.
- 2. The Director concludes that the Pony Dock and stormwater proposals have met the shoreline requirements under the TSMP and the avoidance and minimization requirements regarding anticipated impacts to the intertidal area and marine buffer.

The applicant cannot avoid all impacts, nor minimize further and meet the requirements to maintain the safe use of the Pony Dock or provide a fully functioning and water quality compliant system to the subject site. Likewise, the applicant cannot completely avoid the impacts for the stormwater proposal because the site is providing the natural discharge point

² Conclusions are based upon the applicable criteria and standards set forth in the TMC, the policies of the Comprehensive Plan, and the attachments, exhibits, and Findings of Fact listed herein. Any conclusion of law hereinafter stated which may be deemed a finding of fact herein is hereby adopted as such.

- for collected terrestrial surface water runoff. However, the project will improve environmental conditions through improved water quality to the marine waters.
- 3. Both proposals are designed to minimize and mitigate in-water and marine buffer impacts to the greatest extent possible, and to compensate for the impacts that cannot be avoided. The compensatory mitigation actions that are proposed and in compliance with the HPA BMPs are anticipated to result in a net gain of ecological functions primarily through cleaning up nearshore habitats that are currently degraded or low functioning. The existing intertidal areas will be restored and enhanced through the removal of concrete and other assorted debris littering the intertidal habitat area.
- 4. The project as proposed is consistent with the S-13 and S-10 Shoreline Districts and the high intensity environment designations.
- 5. The applicant has met the shoreline requirements under the TSMP for the avoidance and minimization requirements regarding anticipated impacts to the FWHCA, wetland, and marine buffer.
- 6. The FWHCA includes all areas covered by the water within Commencement Bay including intertidal areas. These areas will be preserved and protected through design components and best available science construction practices, protection of salmonids under the approved fish windows, and with the cleanup of concrete rubble and debris within intertidal areas all required by the HPAs issued for the Pony Dock and stormwater proposals.
- 7. The removal of debris within intertidal habitat areas will provide functional habitat improvements for the native fauna that inhabit the shoreline area along the project areas which will provide more available functional habitat for benthic invertebrates and forage fish.
 - All impacts associated with the Pony Dock and stormwater proposals will be fully mitigated exceeding the required 1:1 mitigation ratio for a total of 7683.2 square feet restored for both projects combined.
- 8. No significant long-term negative habitat effects to the designated species and habitats are anticipated. Overall, the project effects will improve the benthic and intertidal habitat along the shoreline where debris will be removed promoting a healthy shoreline area that will result in ecological improvement within the vicinity of the project.
- 9. The project areas lie within identified floodplain areas; however, there is no risk of flooding within the Commencement Bay waters, the project does not affect negatively affect shoreline vegetated habitat along Commencement Bay, and no priority species are expected to be affected.
- 10. Based on the above findings and compliance with the proposed construction BMPs and mitigation, the requested proposal is consistent with the provisions and regulatory requirements of the TSMP and if properly conditioned, should not result in a loss of critical area functions and values. See Attachments A and B, Exhibits A J, and Findings 1 43.

DECISION

Based upon the above findings and conclusions, the request for a Shoreline Substantial Development Permit is **Approved**, subject to the following conditions:

Conditions:

1. An IDP for the potential uncovering of cultural and historic resources at the site was submitted. The applicant shall provide evidence to the City and the Puyallup Tribe that the excavation of native sediments will be monitored by a qualified archaeologist.

In addition, the IDP shall be updated with the following contact information:

- Department of Archaeology and Historic Preservation Stephanie Jolivette (360) 628-2755
- City of Tacoma Historic Preservation Susan Johnson (253) 281-7445
- The applicant shall conduct mitigation in accordance with the "Technical Memorandum, Port of Tacoma Pony Dock Maintenance Project: WDFW Mitigation Plan," Grette Associates, January 26, 2023, and the WDFW HPA's approved mitigation for the Stormwater Conveyance System Project.
- 3. The applicant shall inform the City when the debris is being removed. The applicant shall provide photographic evidence (before and after photographs) of the beach area that is cleaned up demonstrating a total of 7683.2 square feet was cleaned up along the beach.
- 4. The applicant shall comply with the project minimization measures, BMPs, and required mitigation contained within the HPAs issued for both the Pony Dock and stormwater proposals.
- 5. The applicant shall provide a copy of the Army Corps of Engineers permit for the Pony Dock proposal prior to any development permits being issued for the site.

Advisory Notes:

The notes below are meant to provide additional information to the applicant relative to the specific development proposal. These notes are not conditions of the permit, nor do they constitute a complete review of the project.

- The decision set forth herein is only applicable to the proposed project as described above and based upon representations made and information submitted to the Director. Modifications to this proposal and future activities or development within the regulated buffers may be subject to further review and additional permits as required in accordance with the TMC.
- 2. City staff advisory comments for the development permit(s) for this proposal are contained within Exhibit K.
- 3. Any substantial change(s) or deviation(s) in such development plans, proposals, or conditions of approval imposed shall be subject to the approval of the Director and may require additional permitting and public notification and comment.
- 4. The applicant must obtain other approvals prior to obtaining permits for construction from the City as required by other local, state, and federal agencies. The City of Tacoma is not the only reviewing agency with jurisdiction over the project area. The Army Corps of Engineers and WSDFW have requirements regarding work within regulated waters that may be applicable to the project.

- 5. The authorization(s) granted herein is/are subject to all applicable federal, state, and local laws, regulations, and ordinances. By accepting this/these approvals, the applicant represents that the developments and activities allowed will comply with such laws, regulations, and ordinances. If, during the term of the approvals granted, the developments and activities permitted do not comply with such laws, regulations, or ordinances, the applicant agrees to promptly bring such developments or activities into compliance.
- 6. This permit may be rescinded pursuant to RCW 90.58.140(8) of the Shoreline Management Act of 1971 and Section 19.02.090 of the TMC in the event the permittee fails to comply with any condition thereof.
- 7. Construction shall commence within two years after the effective date of the permit. Local government may, however, authorize a single extension for a period not to exceed one year based on reasonable factors if a request for extension has been filed before the expiration date. Authorization to conduct development activities shall terminate five years after the effective date of a shoreline permit, however, a single extension for a period not to exceed one year may be granted by local government if a request for extension has been filed before the expiration date.
- 8. Construction pursuant to this permit will not begin or is not authorized until 21 days from the "date of filing" with Ecology as that term is defined in WAC 173-27-130, or until all review proceedings initiated within 21 days from the "date of filing" have been terminated.

ENDANGERED SPECIES ACT WARNING:

The holder of this shoreline permit is responsible for compliance with the applicable provisions of the Endangered Species Act of 1973 (ESA) (16 U.S.C. 1531 et seq.), and this shoreline permit includes no representation or warranty of ESA compliance.

ORDERED this 29th day of August, 2024

PETER HUFFMAN, DIRECTOR

PLANNING AND DEVELOPMENT SERVICES DEPARTMENT

FULL DECISION TRANSMITTED by e-mail to the following:

Applicant Team: Kristin Evered - <u>kevered@portoftacoma.com</u>, Stanley Sasser - <u>ssasser@portoftacoma.com</u>, Sasha Ertl, Grette Associates - <u>sashae@gretteassociates.com</u>

Pierce County Office of the Assessor-Treasurer: Delane Hand - delane.hand@piercecountywa.gov Neighborhood Planning Team Members: Carol Wolfe, Shari Hart, Mary Henley, Pat Beard, and neighborhoodcouncils@cityoftacoma.org

Puyallup Tribe: <u>SEPAReview@puyalluptribe-nsn.gov</u>, <u>Brandon.Reynon@PuyallupTribe-nsn.gov</u>, <u>Mike.Shong@PuyallupTribe-nsn.gov</u>, <u>Jennifer.M.Keating@puyalluptribe-nsn.gov</u>, <u>Andrew.Strobel@PuyallupTribe-nsn.gov</u>

City Review Team: Carleen Bruner and Britany Avila, Real Property Services Division; Lucas Shadduck, Building Code; Karla Kluge, Land Use/Critical Areas; Chris Seaman, Tacoma Fire Department; Joy Rodriguez, Site Development; Dan Reed, Tacoma Power; Heather Croston, Tacoma Water; Vicki Marsten and Jennifer Kammerzell, Traffic Engineering; Lyle Hauenstein, Solid Waste Review; Reuben McKnight, Historic Preservation; and Craig Kuntz, Geotechnical Review.

SUMMARY OF DECISION TRANSMITTED by e-mail or first-class mail to the following:

All property owners within 400 feet of the subject site

North East Neighborhood Council

Railroads - pygbuhay@up.com, kkellem@cityoftacoma.org, scott.huston@bnsf.com,

perry.weinberg@soundtransit.org, steve.kennedy@soundtransit.org

WA Dept of Transportation - Dale Severson

City of Fife - claysoffife.org; jrice@cityoffife.org; jrice@cityoffife.org; jrice@cityoffife.org; jrice@cityoffife.org; jrice@cityoffife.org; jrice@cityoffife.org; jrice@cityoffife.org

Metro Parks - joeb@tacomaparks.com, martys@tacomaparks.com, alisa.ohanlonregala@tacomaparks.com

WA Dept of Fish and Wildlife - R6SSplanning@dfw.wa.gov

PC Assessor-Treasurer - delane.hand@piercecountywa.gov

Port of Tacoma - twarfield@portoftacoma.com, dwilson@nwseaportalliance.com

U.S. Army Corps of Engineers (Pierce County West) - halie.endicott@usace.army.mil

TPCHD - sepa@tpchd.org

WA Dept of Ecology - zmey461@ecy.wa.gov

WA DNR - elyse.weaver@dnr.wa.gov

EPA - barton.justine@epa.gov

Puyallup Tribe of Indians, 3009 East Portland Avenue, Tacoma, WA 98404 U.S. Fish & Wildlife Service, Attn Judy Lantor, 510 Desmond Drive SE #102, Lacey, WA 98503 Tahoma Audubon Society, Attn Stuart Earley, PO Box 64068, University Place, WA 98464-0068 Communities for a Healthy Bay, 535 Dock Street, Suite 213, Tacoma, WA 98402

PURSUANT TO RCW 36.70B.130, YOU ARE HEREBY NOTIFIED THAT AFFECTED PROPERTY OWNER(S) RECEIVING THIS NOTICE OF DECISION MAY REQUEST A CHANGE IN VALUATION FOR PROPERTY TAX PURPOSES CONSISTENT WITH PIERCE COUNTY'S PROCEDURE FOR ADMINISTRATIVE APPEAL. TO REQUEST A CHANGE IN VALUE FOR PROPERTY TAX PURPOSES YOU MUST FILE WITH THE PIERCE COUNTY BOARD OF EQUALIZATION ON OR BEFORE JULY 1ST OF THE ASSESSMENT YEAR OR WITHIN 30 DAYS OF THE DATE OF NOTICE OF VALUE FROM THE ASSESSOR-TREASURER'S OFFICE. TO CONTACT THE BOARD, CALL (253) 798-7415 OR WWW.CO.PIERCE.WA.US/BOE.

RECONSIDERATION/APPEAL PROCEDURES

RECONSIDERATION:

Any person having standing under the ordinance governing this application and feeling that the decision of the Director is based on errors of procedure or fact may make a written request for review by the Director within 14 days of the issuance of the written order. The fee for reconsideration is **\$320.00**. This request shall set forth the alleged errors, and the Director may, after further review, take such further actions as deemed proper, and may render a revised decision.

A request for RECONSIDERATION of the Director's decision in this matter must be filed in writing by e-mail to sfrantz@cityoftacoma.org. Filing of the reconsideration shall not be complete until both the reconsideration request and required filing fee are received. THE FEE SHALL BE REFUNDED SHOULD TO THE REQUESTOR, SHOULD THE REQUESTOR PREVAIL.

Should no reconsideration be requested, this Decision will be considered final and will be transmitted to Ecology on <u>September 13</u>, 2024.

APPEAL TO SHORELINE HEARINGS BOARD:

The decision of the Director may be appealed by any person aggrieved by the granting, denying, or rescinding of a permit on shorelines of the state pursuant to RCW 90.58.140, who may seek review from the shorelines hearings board by filing a petition for review within 21 days of the date of filing of the decision as defined in RCW 90.58.140(6), which states that the "date of filing" is "the date of actual receipt" by the department of the local government's decision".

Information on filing an appeal of a Shoreline Substantial Development Permit may be obtained by contacting the State of Washington's Environmental and Land Use Hearings Office at https://eluho.wa.gov/, or PO Box 40903, Olympia WA 98504-0903, (360) 664-9160, email: eluho@eluho.wa.gov.

Appendix C – WDFW Hydraulic Project Approval 2024-6-55+01



Washington Department of Fish & Wildlife PO Box 43234 Olympia, WA 98504-3234

(360) 902-2200

Issued Date: February 16, 2024 Permit Number: 2024-6-55+01
Project End Date: February 15, 2026 FPA/Public Notice Number: N/A

Application ID: 33762

PERMITTEE	AUTHORIZED AGENT OR CONTRACTOR
Port of Tacoma	
ATTENTION: Kristin Evered	
1 Sitcum Plaza	
Tacoma, WA 98421	

Project Name: Port of Tacoma Parcel 86 Stormwater Conveyance Improvements

Project Description: Project proposes to replace an existing stormwater outfall along the shoreline of the Hylebos

Waterway. Replacement of this system will increase the pipe diameter from 10" to 15" and lower the elevation of the outfall from +14 ft to +10 ft to reestablish proper drainage, improve water quality in the nearby environment, and allow the Port to maintain compliance with their stormwater permit. New outfall to include a rock energy dissipation pad and tideflex valve to

prevent fish entry.

PROVISIONS

AUTHORIZED WORK TIMES

- 1. TIMING LIMITATION: You may begin the project immediately, and you must complete the project by February 15, 2026. To protect fish and shellfish habitats at the job site, work below the ordinary high water line must occur from July 15 and February 15 of any year.
- 2. APPROVED PLANS: You must accomplish the work per plans and specifications submitted with the application and approved by the Washington Department of Fish and Wildlife, entitled, "JARPA Drawings_Parcel 86 Stormwater_091923.pdf," uploaded to APPS January 2, 2024, "PoT_Parcel 86 Stormwater_JARPA_092123.pdf," uploaded to APPS January 2, 2024, except as modified by this Hydraulic Project Approval. You must have a copy of these plans available on site during all phases of the project construction.

NOTIFICATION

- 3. PRE- AND POST-CONSTRUCTION NOTIFICATION: You, your agent, or contractor must contact the Washington Department of Fish and Wildlife by e-mail at HPAapplications@dfw.wa.gov; mail to Post Office Box 43234, Olympia, Washington 98504-3234; or fax to (360) 902-2946 at least three business days before starting work, and again within seven days after completing the work. The notification must include the permittee's name, project location, starting date for work or date the work was completed, and the permit number. The Washington Department of Fish and Wildlife may conduct inspections during and after construction; however, the Washington Department of Fish and Wildlife will notify you or your agent before conducting the inspection.
- 4. PHOTOGRAPHS: You, your agent, or contractor must take photographs of the job site after the work is completed. You must upload the photographs to the post-permit requirement page in the Aquatic Protection Permitting System (APPS) or mail them to Washington Department of Fish and Wildlife at Post Office Box 43234, Olympia, Washington 98504-3234 within 30-days after the work is completed.
- 5. FISH KILL/ WATER QUALITY PROBLEM NOTIFICATION: If a fish kill occurs or fish are observed in distress at the job site, immediately stop all activities causing harm. Immediately notify the Washington Department of Fish and Wildlife of the problem. If the likely cause of the fish kill or fish distress is related to water quality, also notify the Washington Military Department Emergency Management Division at 1-800-258-5990. Activities related to the fish kill



Washington Department of Fish & Wildlife PO Box 43234 Olympia, WA 98504-3234

(360) 902-2200

Issued Date: February 16, 2024 Permit Number: 2024-6-55+01
Project End Date: February 15, 2026 FPA/Public Notice Number: N/A

Application ID: 33762

or fish distress must not resume until the Washington Department of Fish and Wildlife gives approval. The Washington Department of Fish and Wildlife may require additional measures to mitigate impacts.

COMPENSATORY MITIGATION

6. Compensatory mitigation associated with this project entails the removal of all trash and unauthorized fill, including concrete blocks or pieces, bricks, asphalt, metal, treated wood, glass, floating debris, paper, and scattered riprap (including quarry spalls) found within a 600 linear foot section of shoreline adjacent to the project area, as shown on page 6 of 6 of the approved plans entitled, "JARPA Drawings_Parcel 86 Stormwater_091923.pdf," uploaded to APPS January 2, 2024. This mitigation must be completed with 30 days of the completion of stormwater outfall replacement work.

STAGING, JOB SITE ACCESS AND EQUIPMENT

- 7. Establish the staging area (used for activities such as equipment storage, vehicle storage, fueling, servicing, and hazardous material storage) in a location and manner that will prevent contaminants like petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials from entering waters of the state.
- 8. Clearly mark boundaries to establish the limit of work associated with site access and construction.
- 9. Limit the removal of native bankline vegetation to the minimum amount needed to construct the project.
- 10. Retain all natural habitat features on the beach larger than twelve inches in diameter including trees, stumps, logs, and large rocks. These natural habitat features may be moved during construction but they must be placed near the preproject location before leaving the job site.
- 11. Confine the use of equipment to specific access and work corridor shown in the approved plans.
- 12. Check equipment daily for leaks and complete any required repairs before using the equipment in or near the water.
- 13. Do not operate motorized equipment on the beach below the ordinary high water line (ordinary high water line).
- 14. Do not stockpile construction material waterward of the ordinary high water line.

CONSTRUCTION-RELATED SEDIMENT, EROSION AND POLLUTION CONTAINMENT

- 15. Do not conduct project activities when the work area is inundated by tidal waters.
- 16. Prevent contaminants from the project, such as petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials, from entering or leaching into waters of the state.

CONSTRUCTION MATERIALS

- 17. Do not use native bed material for project construction or fills.
- 18. Do not use wood treated with oil-type preservative (creosote, pentachlorophenol) in any hydraulic project. Wood treated with waterborne preservative chemicals (ACZA, ACQ) may be used if the Western Wood Preservers Institute has approved the waterborne chemical for use in the aquatic environment. The manufacturer must follow the Western Wood Preservers Institute guidelines and the best management practices to minimize the preservative migrating from treated wood into aquatic environments. To minimize leaching, wood treated with a preservative by someone other than a manufacturer must follow the field treating guidelines. These guidelines and best management practices are available at www.wwpinstitute.org.

OUTFALL

19. Remove any riprap associated with the existing outfall that is scattered, or abandoned outside the original design footprint from the bed and deposit it an upland area above the limits of extreme high tidal water.



Washington Department of Fish & Wildlife PO Box 43234 Olympia, WA 98504-3234

(360) 902-2200

Issued Date: February 16, 2024 Permit Number: 2024-6-55+01
Project End Date: February 15, 2026 FPA/Public Notice Number: N/A

Application ID: 33762

- 20. This approval is for the replacement of the existing outfall structure. The inlet elevation of the replacement structure must not be located waterward of +10.00 feet, as shown in the approved plans.
- 21. The new outfall must be modified to prevent fish entry by installing a tideflex check valve or equivalent.
- 22. The pipeline outfall must be configured to minimize both erosion of bed materials and adverse impacts to habitat.
- 23. Angular rock protecting the beach pipeline entrance must be a maximum of 7 feet 3 inches wide and must not encroach more than 3 feet waterward of the outfall pipe.
- 24. Rock for the splash pad must be composed of clean, angular material of a sufficient durability and size to prevent its being broken up or washed away by high water or wave action.
- 25. Prior to tidal inundation, backfill all trenches, depressions, or holes created during construction waterward of the ordinary high water line.

DEMOBILIZATION/CLEANUP

- 26. Remove all trash and unauthorized fill in the project area, including concrete blocks or pieces, bricks, asphalt, metal, treated wood, glass, floating debris, and paper, that is waterward of the ordinary high water line and deposit upland.
- 27. Remove any riprap (including quarry spalls) scattered, or abandoned outside the original design footprint from the bed and deposit it an upland area above the limits of extreme high tidal water.
- 28. Do not burn wood, trash, waste, or other deleterious materials waterward of the ordinary high water line.

LOCATION #1:	Site Name: Port of Tacoma Parcel 86 Stormwater Conveyance Improvements 3701 Taylor Way, Tacoma, WA 98421					
WORK START:	February 16, 2	2024		WORK END:	February 15, 2026	
WRIA		Waterbody:		Tributary to:		
10 - Puyallup - White		Hylebos Creek		Hylebos Waterway		
<u>1/4 SEC:</u>	Section:	Township:	Range:	<u>Latitude:</u>	Longitude:	County:
SE 1/4	36	21 N	03 E	47.260675	-122.361452	Pierce
Location #1 Driving Directions						

From I-5, take Exit 137 for WA-99 toward Fife/Milton, and turn right onto WA-99 N/54th Ave E in 0.4 mi. Continue straight onto 54th Ave. E for 0.8 mi, then continue onto Taylor Way E. In 0.5 miles, the project location is on the right.

APPLY TO ALL HYDRAULIC PROJECT APPROVALS

This Hydraulic Project Approval pertains only to those requirements of the Washington State Hydraulic Code, specifically Chapter 77.55 RCW. Additional authorization from other public agencies may be necessary for this project. The person(s) to whom this Hydraulic Project Approval is issued is responsible for applying for and obtaining any additional authorization from other public agencies (local, state and/or federal) that may be necessary for this project.



Washington Department of Fish & Wildlife PO Box 43234 Olympia, WA 98504-3234

(360) 902-2200

Issued Date: February 16, 2024 Permit Number: 2024-6-55+01
Project End Date: February 15, 2026 FPA/Public Notice Number: N/A

Application ID: 33762

This Hydraulic Project Approval shall be available on the job site at all times and all its provisions followed by the person (s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work.

This Hydraulic Project Approval does not authorize trespass.

The person(s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work may be held liable for any loss or damage to fish life or fish habitat that results from failure to comply with the provisions of this Hydraulic Project Approval.

Failure to comply with the provisions of this Hydraulic Project Approval could result in civil action against you, including, but not limited to, a stop work order or notice to comply, and/or a gross misdemeanor criminal charge, possibly punishable by fine and/or imprisonment.

All Hydraulic Project Approvals issued under RCW 77.55.021 are subject to additional restrictions, conditions, or revocation if the Department of Fish and Wildlife determines that changed conditions require such action. The person(s) to whom this Hydraulic Project Approval is issued has the right to appeal those decisions. Procedures for filing appeals are listed below.

MINOR MODIFICATIONS TO THIS HPA: You may request approval of minor modifications to the required work timing or to the plans and specifications approved in this HPA unless this is a General HPA. If this is a General HPA you must use the Major Modification process described below. Any approved minor modification will require issuance of a letter documenting the approval. A minor modification to the required work timing means any change to the work start or end dates of the current work season to enable project or work phase completion. Minor modifications will be approved only if spawning or incubating fish are not present within the vicinity of the project. You may request subsequent minor modifications to the required work timing. A minor modification of the plans and specifications means any changes in the materials, characteristics or construction of your project that does not alter the project's impact to fish life or habitat and does not require a change in the provisions of the HPA to mitigate the impacts of the modification. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a minor modification through APPS. A link to APPS is at http://wdfw.wa.gov/licensing/hpa/. If you did not use APPS you must submit a written request that clearly indicates you are seeking a minor modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the APP ID number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234, or by email to HPAapplications@dfw.wa.gov. You should allow up to 45 days for the department to process your request.

MAJOR MODIFICATIONS TO THIS HPA: You may request approval of major modifications to any aspect of your HPA. Any approved change other than a minor modification to your HPA will require issuance of a new HPA. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a major modification through APPS. A link to APPS is at http://wdfw.wa.gov/licensing/hpa/. If you did not use APPS you must submit a written request that clearly indicates you are requesting a major modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the APP ID number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send your written request by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234. You may email your request for a major modification to HPAapplications@dfw.wa.gov. You should allow up to 45 days for the department to process your request.



Washington Department of Fish & Wildlife PO Box 43234 Olympia, WA 98504-3234

(360) 902-2200

Issued Date: February 16, 2024 Permit Number: 2024-6-55+01
Project End Date: February 15, 2026 FPA/Public Notice Number: N/A

Application ID: 33762

APPEALS INFORMATION

If you wish to appeal the issuance, denial, conditioning, or modification of a Hydraulic Project Approval (HPA), Washington Department of Fish and Wildlife (WDFW) recommends that you first contact the department employee who issued or denied the HPA to discuss your concerns. Such a discussion may resolve your concerns without the need for further appeal action. If you proceed with an appeal, you may request an informal or formal appeal. WDFW encourages you to take advantage of the informal appeal process before initiating a formal appeal. The informal appeal process includes a review by department management of the HPA or denial and often resolves issues faster and with less legal complexity than the formal appeal process. If the informal appeal process does not resolve your concerns, you may advance your appeal to the formal process. You may contact the HPA Appeals Coordinator at (360) 902-2534 for more information.

A. INFORMAL APPEALS: WAC 220-660-460 is the rule describing how to request an informal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete informal appeal procedures. The following information summarizes that rule.

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request an informal appeal of that action. You must send your request to WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. WDFW must receive your request within 30 days from the date you receive notice of the decision. If you agree, and you applied for the HPA, resolution of the appeal may be facilitated through an informal conference with the WDFW employee responsible for the decision and a supervisor. If a resolution is not reached through the informal conference, or you are not the person who applied for the HPA, the HPA Appeals Coordinator or designee may conduct an informal hearing or review and recommend a decision to the Director or designee. If you are not satisfied with the results of the informal appeal, you may file a request for a formal appeal.

B. FORMAL APPEALS: WAC 220-660-470 is the rule describing how to request a formal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete formal appeal procedures. The following information summarizes that rule.

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request a formal appeal of that action. You must send your request for a formal appeal to the clerk of the Pollution Control Hearings Boards and serve a copy on WDFW within 30 days from the date you receive notice of the decision. You may serve WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. The time period for requesting a formal appeal is suspended during consideration of a timely informal appeal. If there has been an informal appeal, you may request a formal appeal within 30 days from the date you receive the Director's or designee's written decision in response to the informal appeal.

C. FAILURE TO APPEAL WITHIN THE REQUIRED TIME PERIODS: If there is no timely request for an appeal, the WDFW action shall be final and unappealable.



Washington Department of Fish & Wildlife PO Box 43234 Olympia, WA 98504-3234

(360) 902-2200

Issued Date: February 16, 2024 Project End Date: February 15, 2026 Permit Number: 2024-6-55+01 FPA/Public Notice Number: N/A

Application ID: 33762

Habitat Biologist Miles.Penk@dfw.wa.gov

Miles Penk 360-480-2908

for Director

WDFW

Appendix D – Site Development Permit SDEV24-0334



CITY OF TACOMA

Planning and Development Services (253) 591-5030

747 Market St. 3rd Floor Tacoma, WA 98402 Inspections (253) 573-2587

Site Development Permit #SDEV24-0334

Issued Date: 10/28/2024 **Expiration Date:** 04/26/2025

SITE INFORMATION

Address: 3701 TAYLOR WAY Parcel: 0321364024

PERMIT ISSUED TO

LICENSED CONTRACTOR

PROPERTY OWNER

PORT OF TACOMA REAL ESTATE DEPT TACOMA, WA 98401 PORT OF TACOMA
REAL ESTATE DEPT
TACOMA, WA 98401

PERMIT INFORMATION

Project Description: Modify existing conveyance system of an existing outfall 11193. Replacing an existing 12" concrete pipe outfall with a new 15" corrugated high density polyethene (HDPE) pipe outfall and lowering the outfall from 14.0 feet to 10.0 feet elevation based on the Port of Tacoma Datum. Replacing approximately 310 linear feet of storm drain piping with approximately 480 linear feet of new piping sized to convey flows generated by the contributing drainage areas. - Installing a vault which can be modified in the future to provide stormwater treatment for the portion of the drainage area that is covered under the Washington State Department of Ecology (Ecology) Industrial Stormwater General Permit (ISGP).

Permit Fee: \$538.20
Project Coordinator: N/A
Related Site Record: N/A
Related Land Use Record: N/A

CONDITIONS OF APPROVAL

Discovery of archaeological/cultural sites during construction

In the event of an unanticipated discovery of suspected archaeological materials or human remains during the course of construction, all work within 30 feet of the discovery site shall cease immediately and the project management personnel must follow procedures outlined in the City of Tacoma standard Unanticipated Discovery Plan (UDP). All project management personnel should access and familiarize themselves with the UDP steps and requirements prior to the start of construction, and shall inform workers and equipment operators of the UDP as well.

The UDP can be accessed here: https://cityoftacoma.org/culturalResources/

PRINTED PERMIT AND APPROVED PLANS MUST BE KEPT ON SITE DURING CONSTRUCTION

All plumbing, heating, and electrical work will be performed by either the home owner or by a contractor licensed to do the same. Separate permits are required for other work, including but not limited to, sanitary and storm sewer, sidewalk, curb and gutter, driveways, parking lot paving, street improvements, fire protection, and signs. Plumbing and mechanical permits can be incorporated into some permits.

Page 2 of 6

747 Market St. 3rd Floor Tacoma, WA 98402 Inspections (253) 573-2587



CITY OF TACOMA

Planning and Development Services (253) 591-5030

Site Development Permit #SDEV24-0334

Issued Date: 10/28/2024 **Expiration Date:** 04/26/2025

VALUATIONS
Estimated Valuation:
\$270,000

PROJECT DETAILS

Night or Weekend Work:

NO



CITY OF TACOMA

747 Market St. 3rd Floor Tacoma, WA 98402 Inspections (253) 573-2587

Planning and Development Services (253) 591-5030

Site Development Permit #SDEV24-0334

Issued Date: 10/28/2024 **Expiration Date:** 04/26/2025

Row

APPROVED REVIEWERS

Category	Approved By	Email	Phone Number
Critical Areas Review	C.C. Busek	cbusek@cityoftacoma.org	
Critical Areas Review	Karla Kluge	kkluge@cityoftacoma.org	253-365-4932
Document Review	Joy Rodriguez	jrodrigu@cityoftacoma.org	253-312-3513
Fire Protection Review	Chris Seaman	cseaman@cityoftacoma.org	253-591-5503
Flood Hazard Review	Quyen Thai	qthai@cityoftacoma.org	253-254-8796
Land Use Review	Shanta Frantz	sfrantz@cityoftacoma.org	253-260-0769
Site Development Review	Joy Rodriguez	jrodrigu@cityoftacoma.org	253-312-3513
Steep Slopes Review	Craig Kuntz	ckuntz@cityoftacoma.org	253-405-2068
Traffic Review	Jennifer Kammerzell	jkammerzell@cityoftacoma.org	253-591-5511

GENERAL:

PERMISSION IS HEREBY GIVEN TO DO THE DESCRIBED WORK, AS NOTED ON THE REVERSE SIDE, ACCORDING TO THE CONDITIONS HEREON AND ACCORDING TO THE APPROVED PLANS AND SPECIFICATIONS PERTAINING THERETO, SUBJECT TO COMPLIANCE WITH THE ORDINANCES OF THE CITY OF TACOMA.,

YOUR ATTENTION IS CALLED TO THE FACT THAT IT SHALL BE THE DUTY OF THE PERMITEE (General Contractor) to assure that all necessary inspections are called for and approved by the City Inspectors.

YOUR ATTENTION IS CALLED to the fact that in addition to the called for inspections specified by the applicable codes, the Building Official may make or require any other inspections of any construction work necessary to ascertain compliance with the provisions of City Codes and other laws which are enforced by the City of Tacoma.

YOUR ATTENTION IS CALLED to the fact that in addition to regularly scheduled inspections during construction there shall be a final inspection and approval on all buildings or structures when completed and ready for occupancy. AU required off-site improvements (curbs, sidewalks, storm sewers, etc.) must be completed at time a final inspection and prior to occupancy of building. Construction of off-site improvements requires scheduled inspections during construction in addition to the final inspection.

SPECIAL PERMITS

The holder of Special Permits agrees to the following stipulations:

- 1. To complete the work encompassed by the Special Permit in accordance with the current edition of the WSDOTIAFWA Standard Specifications as amended by the City of Tacoma General Special Provisions and in accordance with any special provisions or conditions set forth before final acceptance as required by the provisions of the Street Obstruction Bond.
- 2. To indemnify and hold the City of Tacoma harmless from any and all damages done to any person or property which may arise from the construction encompassed by the Special Permit.
- 3. To submit for review and approval to the Traffic Engineer a traffic control plan developed in accordance with the "Manual on Uniform Traffic Control Devices" (MUTCD). The traffic control plan shall show pedestrian access through the work zone.
- 4. To protect the public by placing adequate barricades, signs, cones, lights or other traffic control devices in accordance with the approved traffic control plan. It is understood that traffic lane closures and or sidewalk closures are limited to that which is specifically permitted herein. No other closures will be allowed without prior written approval of the City Engineer.
- 5. To provide and maintain protected pedestrian and ADA compliant disability access on walkways at all times.
- 6. The City of Tacoma does not guarantee sewer location or depth information. It shall be the permittee's responsibility to verify sewer and sewer stub locations and depths.
- 7. To restore Rights-of-Way in accordance with the City's Rights-of-Way Restoration Policy and City of Tacoma Standard Plans
- 8. Trench backfill within all improved streets or streets proposed for improvement shall be full depth bank run gravel or approved equal by the Construction Division.
- 9. All cuts in arterial streets shall be patched and maintained with Hot Mix Asphalt until permanent repairs are completed. All cuts in residential streets or alleys shall be patched and maintained with cold mix asphalt until permanent repairs are made. Permanent repairs shall be per current City of Tacoma Standard Plans. Streets and alleys shall be permanently repaired within 30 days.
- 10. To be responsible for the preservation of any utilities within the construction area.

CALL TOLL FREE BEFORE YOU DIG -1-800-424-5555 (Utilities Underground Location Center)

- 11. 24 Hour notice is required prior to any inspection. Construction Division 253-591-5760, Traffic SignaVStreetlight 253-591-5287.
- 12. The Special Permit Expiration date is 30 days from the issue date unless otherwise noted.

9.08.070 Revocation of permits and removal of development.

All permits and/or development granted under the provisions of this chapter may, in any case, be revoked by the Director of

Planning and Development Services, or designee, upon 30 days' notice, or without notice in case any such use or occupation

shall become dangerous or any structure or obstruction permitted shall become insecure or unsafe, or shall not be constructed,

maintained, or used in accordance with the provisions of this chapter. The development shall be removed at the expense of the

permittee and/or adjacent property owner.

If any such structure, obstruction, use, or occupancy is not discontinued on notice to do so by the Director of Planning and

Development Services, the City may forthwith remove such structure or obstruction from such place, or make such repairs

upon such structure or obstruction as may be necessary to render the same secure and safe, at the expense of the permittee or

successor, and such expense, together with the cost of its collection, may be collected in the manner provided by law. As

alternative, the City may enforce under Title 8.

(Ord. 28501 Ex. A; passed Apr. 10, 2018: Ord. 22865 § 1; passed Jan. 18, 1983: Ord. 21035 § 1; passed Apr. 5, 1977)

Appendix E – Port of Tacoma Construction SWPPP Short Form

CONSTRUCTION SWPPP SHORT FORM

The threshold for using the Port of Tacoma's (Port) short form is a project that proposes to clear or disturb less than one acre of land. Projects falling within this threshold may use this short form instead of preparing a professionally designed Construction Stormwater Pollution Prevention Plan (SWPPP). If project disturbance quantities exceed this threshold, you must prepare of formal Construction SWPPP as part of your submittal package. If your project is within the threshold and includes—or may affect—a critical area, please contact the Port to determine if the SWPPP short form may be used.

CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN SHORT FORM

Project Name:		
Address:		
Contact/Owner:		Phone:
Erosion Control Supervisor:		
Phone:	Cell:	Pager:
Emergency (After hours) Contact:		Phone:
Permit No.:		
Parcel No.:		

Required Submittals

A Construction SWPPP consists of both a project narrative and a site plan. The project narrative describes existing conditions on the site, the proposed conditions, and how construction site runoff will be managed until final site stabilization is achieved. Any additional relevant information should be included in the project narrative. All Best Management Practices (BMPs) that will be utilized onsite must be included as part of the project narrative and provided (electronically or hard copy) as part of the submittal package. If additional BMPs beyond those included in the Washington Department of Ecology's (Ecology) Western Washington Stormwater Management Manual (Ecology SWMM) or the City of Tacoma's (City) Stormwater Management Manual (City SWMM) are proposed to be used, a narrative and appropriate details describing the BMP (its function, installation method, and maintenance activities) will be required.

The site plan is a drawing which shows the location of the proposed BMPs to control erosion and sedimentation during and after construction activities.

The City's govMe site (http://www.govme.org.) may be used to find much of the information needed to complete this form, such as adjacent areas, topography, critical areas, the downstream drainage path, and information concerning onsite features.

PROJECT NARRATIVE

The Construction SWPPP Short Form narrative must be completed at part of the submittal package. Any information described, as part of the narrative, should also be shown on the site plan.

Note: From October 1 through April 30, clearing, grading, and other soil disturbing activities shall only be permitted by special authorization from the Port.

A.	Project Description (Check all that apply)
	New Structure Building Addition Grading/Excavation
	Paving Utilities Other:
1.	Total project area (square feet)
2.	Total proposed impervious area (square feet)
3.	Total existing impervious area (square feet)
4.	Total proposed area to be disturbed (square feet)
5.	Total volume of cut/fill (cubic yards)
Ad	ditional Project Information:
В.	Existing Site Conditions (Check all that apply)
Ο.	
1.	Describe the existing vegetation on the site. (Check all that apply)
	Forest Pasture/field grass Pavement Landscaping Brush
_	Trees Other:
2.	Describe how surface water (stormwater) drainage flows across/from the site. (Check all that apply)
	☐ Sheet Flow ☐ Gutter ☐ Catch Basin ☐ Ditch/Swale ☐ Storm Sewer
	Stream Other:
3.	Describe any unusual site condition(s) or other features of note.
	☐ Steep Grades ☐ Large depression ☐ Underground tanks ☐ Springs
	☐ Easements ☐ Existing structures ☐ Existing utilities ☐ Other:
C.	Adjacent Areas (Check all that apply)
1.	Check any/all adjacent areas that may be affected by site disturbance and fully describe below in item 2:
	☐ Streams* ☐ Lakes* ☐ Wetlands* ☐ Steep slopes*
	☐ Residential Areas ☐ Roads ☐ Ditches, pipes, culverts ☐ Other:
	* If the site is on or adjacent to a critical area (e.g., waterbody), the Port may require additional information, engineering, and other permits to be submitted with this short form.

2.	Describe how and where surface water enters the site from properties located upstream:
3.	Describe the downstream drainage path from the site to the receiving body of water (minimum distance of 0.25 mile [1320 feet]). (E.g., water flows from the site into a curbline, then to a catch basin at the intersection of X and Y streets. A 10-inch pipe system conveys water another 1000 feet to a wetland.) Include information on the condition of the drainage structures.
D . Th	Soils (Check all that apply) e intent of this section is to identify when additional soils information may be required for
ap _l inv	policants using this short form. There are other site-specific issues that may necessitate a soils restigation or more extensive erosion control practices. The Port will determine these nations on a case-by-case basis as part of their review.
1.	Does the project propose infiltration? Infiltration systems require prior Port approval.
	☐ Yes ☐ No
2.	Does the project propose construction on or near steep slopes (15% or greater)?
	☐ Yes ☐ No
	If infiltration is proposed for the site or steep slopes (15% or greater) have been identified, the Port will require soils information as part of project design. The applicant must contact a soil professional or civil engineer that specializes in soil analysis and perform an in-depth soils investigation. If the Yes box is checked for either question, the Port may not permit the use of this short form.

E. Construction Sequencing/Phasing

- 1. Construction sequence: the standard construction sequence is as follows:
 - Mark clearing/grading limits.
 - Install initial erosion control Best Management Practices (BMPs) (e.g., construction entrance, silt fence, catch basin inserts, etc.).
 - Clear, grade, and fill project site as outlined in the site plan while implementing and maintaining proper temporary erosion and sediment control BMPs simultaneously.
 - Install permanent erosion protection as described in the specifications (e.g., impervious surfaces, landscaping, etc.).
 - Remove temporary erosion control methods as permitted. Do not remove temporary erosion control until permanent erosion protection is fully established.

	List any changes from the standard construction sequence outlined above:
2.	Construction phasing: if construction is going to occur in separate phases, please describe:
F.	Construction Schedule
F. 1.	Construction Schedule Provide a proposed construction schedule (dates construction starts and ends, and dates for any construction phasing.)
	Provide a proposed construction schedule (dates construction starts and ends, and dates for
	Provide a proposed construction schedule (dates construction starts and ends, and dates for any construction phasing.)
	Provide a proposed construction schedule (dates construction starts and ends, and dates for any construction phasing.) Start Date: End Date:
	Provide a proposed construction schedule (dates construction starts and ends, and dates for any construction phasing.) Start Date: End Date: Interim Phasing Dates: Wet Season Construction Activities: Wet season occurs from October 1 to April 30. Please

Note: Additional erosion control methods may be required during periods of increased surface water runoff.

2. Site plan

	~100	P	-			
As	A site plan, to scale, must be included with this checklist that shows the following items:					
		a.	Address, Parcel Number, Permit Number, and Street Names			
		b.	North Arrow			
		c.	Indicate boundaries of existing vegetation (e.g., tree lines, grassy areas, pasture areas, fields, etc.)			
		d.	Identify any onsite or adjacent critical areas and associated buffers (e.g., wetlands, steep slopes, streams, etc.).			
		e.	Identify any FEMA base flood boundaries and Shoreline Management boundaries.			
		f.	Show existing and proposed contours.			
		g.	Delineate areas that are to be cleared and/or graded.			
		h.	Show all cut and fill slopes, indicating top and bottom of slope catch lines.			
		i.	Show locations where upstream run-on enters the site and locations where runoff leaves the site.			
		j.	Indicate existing surface water flow direction(s).			
		k.	Label final grade contour and indicate proposed surface water flow direction and surface water conveyance systems (e.g., pipes, catch basins, ditches, etc.).			
		1.	Show grades, dimensions, and direction of flow in all (existing and proposed) ditches, swales, culverts, and pipes.			
		m.	Indicate locations and outlets of any dewatering systems (usually to sediment trap).			
		n.	Identify and locate all erosion control methods to be used during and after construction			

ONSITE FIELD VERIFICATION OF ACTUAL CONDITIONS IS REQUIRED.

Figure 1. (see page 5 for Site Plan requirements)

GUIDELINES FOR EROSION CONTROL ELEMENTS

This SWPPP must contain the 12 required elements, as required by Ecology. Check off each element as it is addressed in the SWPPP short form and/or on your site plan.

1.	Mark Clearing Limits
2.	Establish Construction Access
3.	Control Flow Rates
4.	Install Sediment Controls
5.	Stabilize Soils
6.	Protect Slopes
7.	Protect Drain Inlets
8.	Stabilize Channels and Outlets
9.	Control Pollutants
10.	Control Dewatering
11.	Maintain BMPs
12.	Manage the Project

The following is a brief description of each of the 12 required elements of a SWPPP. If an element does not apply to the proposed project site, please describe why the element does not apply. Applicable BMPs are listed with each element and in Table 1. Please note that this list is not a comprehensive list of BMPs available for small construction projects, but erosion and sediment control techniques most pertinent to small construction sites are included here. More detailed information on construction BMPs can be found in Ecology's SWMM Volume II and the City's SWMM Volume II (Ecology 2005; City of Tacoma 2012). Please provide hard copies of the BMPs that will be used for the project and include as part of this Construction SWPPP. BMPs that may be used if needed can be noted as being contingent in the event additional erosion control is needed. Describe any additional BMPs that will be utilized onsite and add them to the SWPPP short form.

For phased construction projects, clearly indicate erosion control methods to be used for each phase of construction.

Element #1 – Mark Clearing Limits

All construction projects must clearly mark any clearing limits, sensitive areas and their buffers prior to beginning any land disturbing activities, including clearing and grading. Clearly mark the limits both in the field and on the site plans. Limits shall be marked in such a way that any trees or vegetation that is to remain will not be harmed.

Applicable BMPs include:

- BMP C101: Preserving Natural Vegetation
- BMP C102: Buffer Zones
- BMP C103: High Visibility Plastic or Metal Fence
- BMP C104: Stake and Wire Fence

OR This element is not required for this project because:		The BMP(s) being proposed to meet this element are:
This element is not required for this project because:	(OR
		This element is not required for this project because:
	_	

Element #2 – Establish Construction Access

All construction projects subject to vehicular traffic shall provide a means of preventing vehicle "tracking" soil from the site onto streets or neighboring properties. Limit vehicle traffic on- and off-site to one route if possible. All access points shall be stabilized with a rock pad construction entrance or other Port-approved BMP. The applicant should consider placing the entrance in the area for future driveway(s), as it may be possible to use the rock as a driveway base material. The entrance(s) must be inspected weekly, at a minimum, to ensure no excess sediment buildup or missing rock.

Applicable BMPs include:

- BMP C105: Stabilized Construction Entrance
- BMP C106: Wheel Wash
- BMP C107: Construction Road/Parking Area Stabilization

	Port	of Tacoma
	The BMP(s) being proposed to meet this element are:	
	OR	
	This element is not required for this project because:	
Ele	ement #3 – Control Flow Rates	
	otect properties and waterways downstream of the project site from erosion due to blume, velocity, and peak flow of stormwater runoff from the project site.	ncreases in
spe	ermanent infiltration facilities shall not be used for flow control during construct ecifically approved by the Environmental Department. Sediment traps can prentrol for small sites by allowing water to pool and allowing sediment to settle out of	ovide flow
Ap	oplicable BMPs include:	
	BMP C207: Check DamsBMP C240: Sediment Trap	
	The BMP(s) being proposed to meet this element are:	
	OR	
	This element is not required for this project because:	

Element 4 – Install Sediment Controls

Surface water runoff from disturbed areas must pass through an appropriate sediment removal device prior to leaving a construction site or discharging into a waterbody. Sediment barriers are typically used to slow stormwater sheet flow and allow the sediment to settle out behind the barrier.

Sediment controls must be installed/constructed prior to site grading.

Applicable BMPs include:

- BMP C208: Triangular Silt DikeBMP C232: Gravel Filter Berm
- BMP C233: Silt FenceBMP C235: Straw Wattles

	The BMP(s) being proposed to meet this element are:
-	OR
	This element is not required for this project because:
<u>-</u>	

Element #5 – Stabilize Soils

Stabilize exposed and unworked soils by applying BMPs that protect the soils from raindrop impact, flowing water, and wind.

From October 1 through April 30, no soils shall remain exposed or unworked for more than 2 days. From May 1 to September 30, no soils shall remain exposed or unworked for more than 7 days. This applies to all soils whether at final grade or not.

Applicable BMPs include:

- BMP C120: Temporary and Permanent Seeding
- BMP C121: Mulching
- BMP C122: Nets and Blankets
- BMP C123: Plastic Covering
- BMP C140: Dust Control

	Port of Tacoma
	The BMP(s) being proposed to meet this element are:
	OR
	This element is not required for this project because:
Ele	ement #6 – Protect Slopes
	otect slopes by diverting water at the top of the slope. Reduce slope velocities by minimizing continuous length of the slope.
Ap	plicable BMPs include:
	 BMP C200: Interceptor Dike and Swale BMP C204: Pipe Slope Drains BMP C207: Check Dams
	The BMP(s) being proposed to meet this element are:
	OR
	This element is not required for this project because:

Element #7 – Protect Drain Inlets

All operable storm drain inlets must be protected during construction so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment. Install catch basin protection on all catch basins within 500 feet downstream of the project.

App	plicable BMPs include:
	BMP C220: Storm Drain Inlet Protection
	The BMP(s) being proposed to meet this element are:
	OR
	This element is not required for this project because:
Ele	ment #8 – Stabilize Channels and Outlets
out	bilize all temporary onsite conveyance channels. Provide stabilization to prevent erosion of lets, adjacent stream banks, slopes, and downstream reaches at the conveyance system outlets.
Apı	plicable BMPs include:
	 BMP C202: Channel Lining BMP C209: Outlet Protection
	The BMP(s) being proposed to meet this element are:
	OR
	This element is not required for this project because:

Element #9 – Control Pollutants

Handle and dispose of all pollutants, including demolition debris and other solid wastes in a manner that does not cause stormwater contamination. Provide cover and containment for all chemicals, liquid products (including paint), petroleum products, and other materials. Handle all concrete and concrete waste appropriately.

	1.	1 1	DIA		1 1
Αn	nlica	able	BMPs	1nc	liide
1 1 P	PIIC	auto		1110	iuuc.

- BMP C150: Materials on Hand
- BMP C151: Concrete Handling
- BMP C152: Sawcutting and Surface Pollution Prevention

•	BMP C153: Material Delivery, Storage and Containment
	The BMP(s) being proposed to meet this element are:
_	
(OR
	This element is not required for this project because:
_	
_	
Elen	nent #10 – Control Dewatering
syste othe	n, non-turbid dewatering water, such as groundwater, can be discharged to the stormwater em provided the dewatering flow does not cause erosion or flooding of receiving waters. All redewatering water shall be pumped to a settling container and taken offsite or discharged to City sewer system. All discharges to the City sewer system require City approval, which

Applicable BMPs include:

•	BMP	C150:	Materials	on Hand
---	-----	-------	-----------	---------

may include a Special Approved Discharge (SAD) permit.

The BMP(s) being proposed to meet this element are:

OR

This element is not required for this project because:
-
Element #11 – Maintain BMPs
Maintain and repair temporary erosion and sediment control BMPs as needed. Inspect all BMPs at least weekly and after every storm event.
Remove all temporary erosion and sediment control BMPs within 30 days after final site stabilization or if the BMP is no longer needed. Any sediment trapped during construction activities should be removed or stabilized onsite. No sediment shall be discharged into the stormwater drainage system or any natural conveyance system (e.g., streams).
Applicable BMPs include:
BMP C160: Certified Erosion and Sediment Control Lead
The BMP(s) being proposed to meet this element are:
-
OR
This element is not required for this project because:

Element #12 – Manage the Project

Phase development projects to prevent soil erosion and the transport of sediment from the project site during construction. Coordinate all work prior initial construction with subcontractors and other utilities to ensure no areas are worked prematurely.\

A designated erosion and sediment control person is required for all construction projects. This person is responsible for ensuring that the project's erosion and sediment control BMPs are appropriate for the site and are functioning properly. They are also responsible for updating the

SWPPP as necessary as site conditions warrant. They must be available 24 hours a day to ensure compliance.

Applicable BMPs include:

•	BMP C160:	Certified Erosion and Sediment Control Lead	1
•	BMP C162:	Scheduling	

• BMP C180: Small Project Construction Stormwater Pollution Prevention

	The BMP(s) being proposed to meet this element are:
<u> </u>	OR .
	This element is not required for this project because:

Table 1. Applicable BMPs for the 12 Elements of a SWPPP

Table 1. Applicable BMPs for the 12 Elements of a SWPPP					
Element #1 – Mark Clearing Limits					
BMP C101	Preserving Natural Vegetation				
BMP C102	Buffer Zones				
BMP C103	High Visibility Plastic and Wire Fence				
BMP C104	Stake and Wire Fence				
Element #2 – Establish Construction Entrance					
BMP C105	Stabilized Construction Entrance				
BMP C106	Wheel Wash				
BMP C107	Construction Road/Parking Area Stabilization				
Element #3 – Control Flow Rates					
BMP C207	Check Dams				
BMP C240	Sediment Trap				
Element #4 – Install Sediment Controls					
BMP C208	Triangular Silt Trap				
BMP C232	Gravel Filter Berm				
BMP C233	Silt Fence				
BMP C235	Straw Wattles				
Element #5 – Stabilize Soils					
BMP C120	Temporary and Permanent Seeding				
BMP C121	Mulching				
BMP C122	Nets and Blankets				
BMP C123	Plastic Covering				
BMP C140	Dust Control				
Element #6 – Protect Slopes					
BMP C200	Interceptor Dike and Swale				
BMP C204	Pipe Slope Drains				
BMP C207	Check Dams				
Element #7 – Protect Drain Inlets					
BMP C220	Storm Drain Inlet Protection				
Element #8 – Stabilize Channels and Outlets					
BMP C202	Channel Lining				
BMP C209	Outlet Protection				
Element #9 – Control Pollutants					
BMP C150	Materials on Hand				
	•				

Element #9 – Control Pollutants, cont.				
BMP C151	Concrete Handling			
BMP C152	Sawcutting and Surfacing Pollution Prevention			
BMP C153	Materials, Delivery, Storage and Containment			
Element #10 – Control Dewatering				
BMP C150	Materials on Hand			
Element #11 – Maintain BMPs				
BMP C160	Certified Erosion and Sediment Control Lead			
Element #12 – Manage the Project				
BMP C160	Certified Erosion and Sediment Control Lead			
BMP C162	Scheduling			
BMP C180	Small Project Construction Stormwater Pollution Prevention			

REFERENCES

City of Tacoma. 2012. Stormwater Management Manual 2012 Edition. Public Works/ Environmental Services, Maintenance Division, Tacoma, Washington.

Washington State Department of Ecology (Ecology). 2005. Stormwater Management Manual for Western Washington. Water Quality Program, Lacey, Washington.