

KITSAP COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER PROJECT NO. 97003141

SUQUAMISH REGIONAL STORMWATER TREATMENT FACILITY



FUNDED IN PART BY THE WASHINGTON STATE DEPARTMENT OF ECOLOGY



CONTRACT PROVISIONS

KITSAP COUNTY DEPARTMENT OF PUBLIC WORKS
614 DIVISION STREET, MS-26
PORT ORCHARD, WASHINGTON 98366-4699
360.337.5777

APPROVED FOR CONSTRUCTION:

2/11/25
DATE


CHRISTOPHER PIERCY
ASSISTANT DIRECTOR
FOR UTILITIES

BACK OF COVER

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ATTACHMENTS

- A. WASHINGTON STATE PREVAILING WAGE RATES, STATE BENEFIT CODE KEY AND SUPPLEMENTAL (L&I STATEMENT)
- B. USACE NATIONWIDE PERMIT 7
- C. WASHINGTON DEPARTMENT OF FISH AND WILDLIFE HYDRAULIC PROJECT APPROVAL
- D. KITSAP COUNTY SHORELINE DEVELOPMENT PERMIT AND CONDITIONAL USE PERMIT
- E. WASHINGTON DEPARTMENT OF ECOLOGY STORMWATER FACILITY SPECIFICATIONS INSERT
- F. KITSAP PUBLIC UTILITIES DISTRICT STANDARD DRAWINGS - WATER
- G. GEOTECHNICAL ENGINEERING INVESTIGATION REPORT, NOVEMBER 2021
- H. INADVERTENT DISCOVERY PLAN
- I. TRAFFIC CONTROL PLANS

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CALL FOR BIDS

KITSAP COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER PROJECT NO. 97003141

SUQUAMISH REGIONAL STORMWATER TREATMENT FACILITY

BID OPENING: DATE: MARCH 11, 2025 TIME: 11:00 AM

PRE-BID MEETING: DATE: MARCH 4, 2025 TIME: 10:00 AM

LOCATION: 18408 Angeline Ave NE, Suquamish, WA 98392

A mandatory pre-bid meeting will be held at the time and location above. **This meeting must be attended by the Prime Contractor/Prospective Bidder.** After the meeting, a tour of the project will be conducted. This will be the only tour of the project.

Sealed bids for the project designated above will be received by Kitsap County Department of Public Works before the time and date indicated above, at which time they will be opened and publicly read aloud. The Public Works building is closed to the public.

Bids delivered in person or by private carrier (UPS, Federal Express, etc.) will be received by staff from Kitsap County Department of Public Works between the hours of 10:30 AM and 11:00 AM at:

Kitsap County Department of Public Works
Front Entrance of the Public Works Building,
507 Austin Avenue
Port Orchard, Washington

Bids will be opened and publicly read aloud at the front entrance of the Public Works Building.

Bids delivered by US Postal Service shall be addressed to:

Kitsap County Department of Public Works
614 Division Street, MS-26
Port Orchard, Washington 98366-4699

Prospective bidders are hereby notified that they are solely responsible for ensuring timely delivery of their bid to the place of bid opening.

All bid proposals shall be accompanied by a bid proposal surety bond made payable to Kitsap County Department of Public Works in an amount equal to five percent (5%) of the amount of such bid proposal. Should the successful Bidder fail to enter into such contract and furnish satisfactory performance and payment bonds within the time stated in the Special Provisions, the bid proposal bond shall be forfeited to Kitsap County Department of Public Works.

Each proposal or bid shall be completely sealed in a separate envelope, properly addressed as stated above, with the name and address of the bidder and the name of the project plainly written on the outside of the envelope. A complete bid proposal shall include the following:

- 1) Proposal Form**
- 2) Bid Bond**
- 3) Bidder Responsibility Statement**
- 4) Certification of Compliance with Wage Payment Statutes**
- 5) Non-Collusion Affidavit**
- 6) Subcontractor List**
- 7) Proposal for Incorporating Recycled Materials into the Project**

All of the above items must be complete in all respects, including signatures (notarized where required). Bidder shall acknowledge receipt of all addendums in the spaces provided. The successful Bidder will be required to submit a photocopy of their current Washington State Contractors Registration. Failure to include all items may be cause for the bid to be considered irregular and thereby rejected.

Bids or proposals received after the time set for the opening of bids will not be considered.

Bidders are notified that all bids are likely to be rejected if the lowest responsible bid received exceeds the Engineer's estimate by an unreasonable amount.

Kitsap County reserves the right to award the bid in a manner and on a basis, which will best serve the County, taking into consideration the Bidder Responsibility Statement included with the bids and the requirements of the WSDOT/APWA Standard Specifications and the Contract Provisions.

The award of the contract, if made, shall be made to the responsible Bidder submitting the lowest responsive bid, based upon the total sum of the extension of unit prices for the bid items.

It is anticipated that this project will be funded in part by the Washington State Department of Ecology. Neither the State of Washington nor any of its departments or employees are, or shall be, a party to any contract or any subcontract resulting from this solicitation for bids.

It is anticipated that this project will be funded in part by the Washington State Department of Ecology. Neither the State of Washington nor any of its departments or employees are, or shall be, a party to this contract or any subcontract.

DESCRIPTION OF WORK

This contract is a stormwater improvement project which provides for the construction of a regional stormwater quality treatment facility, including drainage conveyance, catch basins, flow splitters, waterline relocation, sidewalk and pedestrian ramps, and repaving and landscaping for the improvement areas in accordance with the Contract Documents. The engineer's estimate ranges from \$3,500,000 to \$4,500,000.

OBTAINING PLANS AND CONTRACT PROVISIONS:

Electronic copies of the Plans and Contract Provisions in PDF format are available on the internet through Kitsap County's website, Department of Public Works, Road Projects Open for Bid, located at <http://kcowa.us/roadbid>.

Paper copies of the Contract Plans and Provisions for the proposed work may be obtained from the Kitsap County Department of Public Works at 507 Austin Avenue, 3rd floor Reception Desk, Port Orchard, Washington for a non-refundable fee of \$35.00 for each set plus \$5.00 to cover postage and handling if mailing is requested. To order these Contract Documents or to obtain a Bid Proposal Package at no cost, please call 360-337-5777 or email at help@kitsap1.com. Plans and Contract Provisions will not be shipped until the fee is received.

To be added to the Plan Holder List, please complete the form available online at <https://www.kitsapgov.com/pw/Pages/planholders.aspx>. Any questions or issues, please call 360-337-5777 or email at help@kitsap1.com.

CONTACT PERSON

Any prospective Bidder having questions or desire an explanation or interpretation of the Bid Documents are requested to contact Matthew Oxford, Capital Projects Manager, at moxford@kitsap.gov by close of business 5 business days preceding the bid opening.

General questions about the project may be addressed by contacting Matthew Oxford, Capital Projects Manager, at (360) 307-4383, or at moxford@kitsap.gov.

KITSAP COUNTY BOARD OF COMMISSIONERS

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PROPOSAL

KITSAP COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER PROJECT NO. 97003141

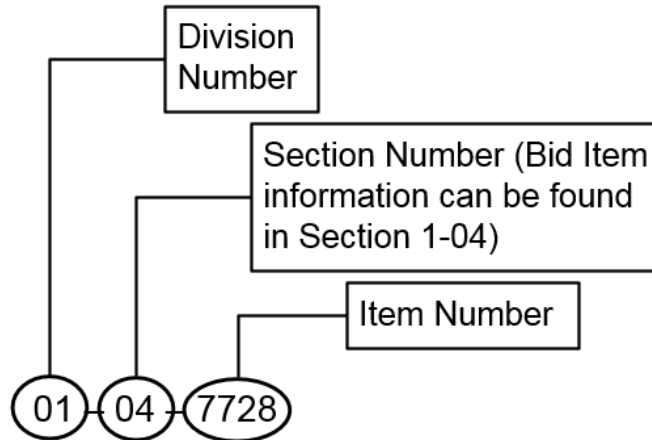
SUQUAMISH REGIONAL STORMWATER TREATMENT FACILITY

To the Honorable Board of Commissioners
Kitsap County
614 Division Street
Port Orchard, Washington 98366

1. Pursuant to and in compliance with your Advertisement for Bids and the other documents relating thereto, the undersigned Bidder, having familiarized themselves with the terms of the project related to those items herein bid, being aware of the local conditions affecting the performance of a Contract covering the items bid, having knowledge of the cost of the work at the place where the work is to be done, having familiarized themselves with the Contract Documents, hereby proposes and agrees to perform the work and/or to furnish the equipment, and to furnish any and all of the labor, materials, tools, expendable equipment and all utility and transportation services necessary to perform a Contract covering any or all of those items herein bid and to complete in a workmanlike manner all work covered by said Contract in connection with the Owner's Improvement Project, for an amount computed upon the basis of the quantity of work actually performed at the following bid prices:

NOTE: UNIT PRICES FOR ALL ITEMS, ALL EXTENSIONS, AND THE TOTAL AMOUNT OF BID MUST BE SHOWN. All prices shall be in legible figures (not words) written in ink or typed. The proposal shall include: A unit price for each item (omitting digits more than four places to the right of the decimal point); an extension for each unit price (omitting digits more than two places to the right of the decimal point); the total Contract price (the sum of all extensions).

COST CODE (a guide to locate Bid Item information – the Contracting Agency does not warrant its accuracy): The Cost Code for each Bid Item consists of the WSDOT/APWA Standard Specifications division number, the section number and the item number, in that order. An example is shown below:



Kitsap County-specific Bid Items are noted with “KC” at the end. Project-specific Bid Items are noted with “SP”. Bid Items that have options (e.g. Plant Selection or Beam Guardrail Anchor Type X) are designated as such. Examples are shown below:

01-04-7728	WSDOT Standard Bid Item
01-07-0010KC	Kitsap County Standard Bid Item
05-05-SP01	Project-specific Bid Item
08-02-6550-AC	WSDOT Standard Bid Item with Option
08-11-6760-16	WSDOT Standard Bid Item with Option (e.g. specific pipe size)

SCHEDULE A – ROAD AND STORM

NO.	COST CODE W/ SCH	ITEM	QTY	UNIT	UNIT COST	AMOUNT
A1	A-01-04-7728	MINOR CHANGE	50000	CALC	\$ 1.00	\$ 50,000.00
A2	A-01-07-7736	SPCC PLAN	1	L.S.		
A3	A-01-07-SP01	APPRENTICESHIP INCENTIVE	2000	CALC	\$ 1.00	\$ 2,000.00
A4	A-01-07-SP02	APPRENTICESHIP PENALTY	2	CALC	\$ 1.00	\$ 2.00
A5	A-01-08-7003	TYPE B PROGRESS SCHEDULE	1	L.S.		
A6	A-01-09-0001	MOBILIZATION	1	L.S.		
A7	A-01-10-6971KC	PROJECT TEMPORARY TRAFFIC CONTROL	1	L.S.		
A8	A-01-10-6982	CONSTRUCTION SIGNS CLASS A	100	S.F.		
A9	A-01-10-6993	PORTABLE CHANGEABLE MESSAGE SIGN	5100	HR		
A10	A-02-01-0035	CLEARING AND GRUBBING	1	L.S.		
A11	A-02-02-0050KC	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	L.S.		
A12	A-02-02-0079KC	SAW CUT ASPHALT CONCRETE PAVEMENT	640	L.F.		
A13	A-02-02-0100KC	REMOVING CEMENT CONC. SIDEWALK	130	S.Y.		

A14	A-02-02-0108KC	REMOVING CEMENT CONC. CURB AND GUTTER	170	L.F.		
A15	A-02-02-SP03	DEBRIS REMOVAL	180	S.F.		
A16	A-02-03-0310	ROADWAY EXCAVATION INCL. HAUL	70	C.Y.		
A17	A-02-03-0411KC	SPECIAL BORROW INCL. HAUL	160	TON		
A18	A-02-09-4006	STRUCTURE EXCAVATION CLASS A INCL. HAUL	5200	C.Y.		
A19	A-02-09-7006	STRUCTURE EXCAVATION CLASS B INCL. HAUL	970	C.Y.		
A20	A-02-09-7008	SHORING OR EXTRA EXCAVATION CLASS B	4830	S.F.		
A21	A-04-04-5120	CRUSHED SURFACING TOP COURSE	20	TON		
A22	A-05-04-5711KC	PLANING BITUMINOUS PAVEMENT	1170	S.Y.		
A23	A-05-04-5767KC	HMA CL. 1/2 IN. PG 58H-22	680	TON		
A24	A-06-10-6781	TEMPORARY BARRIER	250	L.F.		
A25	A-06-11-SP04	OUTFALL PIPE ANCHOR	1	EACH		
A26	A-06-20-SP05	PRETREATMENT UNIT VX-9000	1	EACH		

A27	A-06-20-SP06	PRETREATMENT UNIT VX-16000	1	EACH		
A28	A-06-20-SP07	WQ TREATMENT VAULT	1	EACH		
A29	A-06-20-SP08	CONSTRUCTION DEWATERING	1	L.S.		
A30	A-07-01-SP09	STORM SEWER CLEANOUT 8 IN. DIAM.	1	EACH		
A31	A-07-02-3017	HIGH-DENSITY POLYETHYLENE (HDPE) PIPE 18 IN. DIAM.	21	L.F.		
A32	A-07-02-3018	HIGH-DENSITY POLYETHYLENE (HDPE) PIPE 24 IN. DIAM.	65	L.F.		
A33	A-07-04-3576	SOLID WALL PVC STORM SEWER PIPE 8 IN. DIAM.	220	L.F.		
A34	A-07-04-3601	CORRUGATED POLYETHYLENE STORM SEWER PIPE 8 IN. DIAM.	32	L.F.		
A35	A-07-04-3602	CORRUGATED POLYETHYLENE STORM SEWER PIPE 12 IN. DIAM.	50	L.F.		
A36	A-07-04-3607	CORRUGATED POLYETHYLENE STORM SEWER PIPE 18 IN. DIAM.	108	L.F.		
A37	A-07-04-3608	CORRUGATED POLYETHYLENE STORM SEWER PIPE 24 IN. DIAM.	140	L.F.		
A38	A-07-04-3819KC	BUTTERFLY VALVE 8 IN.	1	EACH		
A39	A-07-05-3091KC	CATCH BASIN TYPE 1	2	EACH		

A40	A-07-05-3105KC	CATCH BASIN TYPE 2 48 IN. DIAM.	5	EACH		
A41	A-07-05-7360KC-1	MANHOLE 48 IN. DIAM. TYPE 1	2	EACH		
A42	A-07-05-7363KC-1	MANHOLE 54 IN. DIAM. TYPE 1	2	EACH		
A43	A-07-05-7369	MANHOLE ADDITIONAL HEIGHT 48 IN. DIAM. TYPE 1	7	L.F.		
A44	A-07-05-7371	MANHOLE ADDITIONAL HEIGHT 54 IN. DIAM. TYPE 1	6	L.F.		
A45	A-07-05-SP10	CATCH BASIN TYPE 2 72 IN DIAM WITH FLOW SPLITTER	2	EACH		
A46	A-07-05-SP11	OUTFALL STRUCTURE	1	EACH		
A47	A-07-08-7715KC	FORCE ACCOUNT POT-HOLE UTILITY CROSSING	10000	EST.	\$ 1.00	\$ 10,000.00
A48	A-08-01-6490KC	EROSION/WATER POLLUTION CONTROL	1	L.S.		
A49	A-08-02-6406KC	TOPSOIL TYPE A	80	C.Y.		
A50	A-08-02-6480KC	FINE COMPOST	40	C.Y.		
A51	A-08-02-6552-AR	PLANT SELECTION DECID TREE 2' CAL ACER RUBRUM_RED MAPLE	1	EACH		
A52	A-08-02-6552-PC	PLANT SELECTION EVERGREEN TREE 6'-8' PINUS CONTORTA	7	EACH		

A53	A-08-02-SP12	LANDSCAPE PLANTING	970	S.F.		
A54	A-08-02-SP13	HYDROSEED	2840	S.F.		
A55	A-08-02-SP14	ROOT BARRIER	176	L.F.		
A56	A-08-02-SP15	RELOCATE BOULDER MEMORIAL	1	L.S.		
A57	A-08-04-6700	CEMENT CONC. TRAFFIC CURB AND GUTTER	700	L.F.		
A58	A-08-06-SP16	DRIVEWAY ENTRANCE	110	S.Y.		
A59	A-08-12-7084	CHAIN LINK FENCE TYPE 4	24	L.F.		
A60	A-08-12-SP17	WOOD FENCE	65	L.F.		
A61	A-08-14-7055	CEMENT CONC. SIDEWALK	290	S.Y.		
A62	A-08-14-7058-PEA	CEMENT CONC. CURB RAMP TYPE PERPENDICULAR A	2	EACH		
A63	A-08-14-7058-SA	CEMENT CONC. CURB RAMP TYPE SINGLE DIRECTION A	3	EACH		
A64	A-08-15-0907KC	STREAMBED BOULDER TWO MAN	4	EACH		
A65	A-08-15-0908KC	STREAMBED BOULDER THREE MAN	18	EACH		
A66	A-08-21-6890	PERMANENT SIGNING	1	L.S.		

A67	A-08-22-6806	PAINT LINE	50	L.F.		
A68	A-08-22-6833	PLASTIC TRAFFIC ARROW	3	EACH		
A69	A-08-22-6857	PLASTIC CROSSWALK LINE	55	S.F.		
A70	A-08-26-SP18	COBBLES IN CONCRETE	320	S.F.		
A71	A-08-26-SP19	CRUSHED STONE PATH	55	S.F.		
A72	A-08-27-7500KC	FIELD OFFICE BUILDING	1	L.S.		
SCHEDULE A TOTAL						\$

SCHEDULE B - WATER

NO.	COST CODE W/ SCH	ITEM	QTY	UNIT	UNIT COST	AMOUNT
B1	B-01-07-7736	SPCC PLAN	1	L.S.	\$	\$
B2	B-01-09-0001	MOBILIZATION	1	L.S.	\$	\$
B3	B-01-10-6971KC	PROJECT TEMPORARY TRAFFIC CONTROL	1	L.S.	\$	\$
B4	B-07-09-3867	DUCTILE IRON PIPE FOR WATER MAIN 8 IN. DIAM.	225	L.F.	\$	\$
B5	B-07-09-SP01	BENDS	7	EACH	\$	\$
SCHEDULE B SUBTOTAL						\$
SALES TAX 9.2%						\$
SCHEDULE B TOTAL						\$

SCHEDULE A TOTAL \$ _____

SCHEDULE B TOTAL \$ _____

GRAND TOTAL \$ _____

2. BIDDER SHALL INCLUDE SALES TAX IN THE LUMP SUM AND UNIT PRICE BID ITEMS in accordance with Section 1-07.2(1) of Special Provisions.
3. The undersigned Bidder hereby proposes and agrees to commence work under this Contract, if awarded to them, in accordance with Sections 1-08.4 and 1-08.5 of the Special Provisions. They further agree to complete the contract within **145 working days**.
4. The agreed liquidated damage to the Owner shall be in accordance with Liquidated Damages as described in the Standard Specifications, Amendments thereto, and Special Provisions.
5. The Owner reserves the right to delete all or any portions of the work as outlined in the Contract Documents.
6. The required bid security in the amount of five percent (5%) of the total bid is hereto attached.
7. It is understood that the Contractor is responsible for obtaining and completing all required government forms.
8. Receipt of the following Addenda to the Contract Document is hereby acknowledged.

ADDENDUM #	DATE OF RECEIPT OF ADDENDUM	SIGNED ACKNOWLEDGMENT
1		
2		
3		
4		
5		
6		

(Note: Failure to acknowledge receipt of the Addenda may be considered an irregularity in the proposal).

9. Notice of Acceptance of this bid or requests for additional information should be addressed to the undersigned at the address stated below and unless otherwise notified in writing, this address shall be used by the successful bidder during the life of the Contract for all official notices.
10. By signing this Proposal, the Bidder certifies that they have read and understand all of the terms and Conditions of the Contract Plans, Standard Specifications, the Amendments there to, and these Special Provisions, and agrees to comply with them.

Date: _____

Proper Name of Bidder (Type or Print): _____

By (Signature): _____

Name and Title (Type or Print Name and Title of Signatory): _____

Street Address: _____

City, State and Zip Code: _____

Telephone Number with Area Code: _____

Fax Number with Area Code: _____

Mailing Address,
if different from above: _____

E-mail Address
(to be used by the County
to send award documents) _____

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BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, as Principal, and _____ as Surety, are hereby held and firmly bound unto Kitsap County Department of Public Works as Owner in the penal sum of _____ for payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns. Signed this _____ day of _____, 2025.

The Condition of the above obligation is such that whereas the Principal has submitted to Kitsap County Department of Public Works, a certain BID, attached hereto and made a part hereof to enter a contract in writing, for the _____

NOW, THEREFORE,

- (a) If said BID be rejected, or
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attachment hereto (properly completed in accordance with said BID) and shall furnish a BOND for faithful performance of said contract, and for the payment of all persons performing labor and furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are Corporations have set their Corporation seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Principal

Surety

By: _____

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BIDDER RESPONSIBILITY STATEMENT

Each Bidder shall prepare and submit the following information with their bid.

By signing the signature page of the Proposal, the Bidder affirms that the following information is true and correct.

Name of Bidder: _____

Business Address: _____

A) MANDATORY BIDDER RESPONSIBILITY CRITERIA (RCW 39.04.350)

1. Washington State Contractors License Number: _____
Effective Date: _____

2. State of Washington Unified Business Identifier (UBI) No.: _____

3. Do you have industrial insurance (workers' compensation) coverage for your employees working in Washington as required by Title 51 RCW?
Yes: No: Not Applicable:

4. Washington State Employment Security Department number as required by Title 51 RCW.
Number: Not Applicable:

5. Washington State Department of Revenue state excise tax registration number as required by Title 82 RCW.
Number: Not Applicable:

6. Have you ever been disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3)?
Yes: No:

7. Have you received training on the requirements related to public works and prevailing wage?
Yes: No: Exempt:

**B) SUPPLEMENTAL BIDDER RESPONSIBILITY CRITERIA
(SPECIAL PROVISIONS SECTION 1-02.14)**

1. Do you own delinquent taxes to the State of Washington Department of Revenue?
Yes: No:
2. Are you currently debarred or suspended from bidding by the Federal government?
Yes: No:
3. Does your standard subcontract form include the subcontract responsibility language required by RCW 39.06.020?
Yes: No:
4. Do you have any established procedure which your company utilizes to validate the responsibility of each of your subcontractors and any sub-tier contractors?
Yes: No:
5. Do you have any record of prevailing wage violations in the last 5 years as determined by the Washington State Department of Labor and Industries?
Yes: No:
6. Have you had any claims against retainage or payment bonds for public works projects in the last 3 years?
Yes: No:
7. Has your company or its owners been convicted of a crime involving bidding on a public works contract in the last 5 years?
Yes: No:
8. Has your company had any public works contract terminated for cause or terminated for default by a government agency in the last 5 years?
Yes: No:
9. Has your company had any lawsuits with judgments entered against the company in the last 5 years?
Yes: No:

C) CONTRACTING AGENCY SPECIFIC BIDDER RESPONSIBILITY CRITERIA (SPECIAL PROVISIONS SECTION 1-02.14)

1. Gross amount of contracts currently in hand: _____

2. Provide a list of more important construction projects completed by your company in the last 5 years. Include project name, year, approximate cost, name and current phone number of project engineer or owner:

3. Bank references: _____

4. Bonding company: _____

Supporting documentation verifying that the bidder meets the supplemental and Contracting Agency specific responsibility criteria stated in Sections B and C above may be requested by the Contracting Agency in accordance with Section 1-02.14 of the Special Provisions.

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Kitsap County Public Works
An APWA Accredited Agency



This form must be submitted with the Bid Proposal or as a Supplement to the Bid no later than 24 hours after the time for delivery of the Bid Proposal, as provided for in Section 1-02.9 of the Contract Provisions.

CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date **February 18, 2025**, the bidder is not a “willful” violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as 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.

I certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Bidder’s Business Name

Signature of Authorized Official*

Printed Name

Title

Date

City

State

Check One:

Sole Proprietorship Partnership Joint Venture Corporation

State of Incorporation, or if not a corporation, State where business entity was formed:

If a co-partnership, give firm name under which business is transacted:

** If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.*

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Failure to return this Declaration as part of the bid proposal package will make the bid nonresponsive and ineligible for award.

NON-COLLUSION DECLARATION FORM

I, by signing the proposal, hereby declare, under penalty of perjury under the laws of the United States that the following statements are true and correct:

1. That the undersigned person(s), firm, association or corporation has (have) not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the project for which this proposal is submitted.
2. **That by signing the signature page of this proposal, I am deemed to have signed and to have agreed to the provisions of this declaration.**

NOTICE TO ALL BIDDERS

To report rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (USDOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of USDOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the USDOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

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SUBCONTRACTOR LIST

Local Agency Name
Local Agency Address

Local Agency Subcontractor List

Prepared in compliance with RCW 39.30.060 as amended

To Be Submitted with the Bid Proposal

Project Name

Failure to list subcontractors with whom the bidder, if awarded the contract, will directly subcontract for performance of the work of structural steel installation, rebar installation, heating, ventilation and air conditioning, plumbing, as described in Chapter 18.106 RCW, and electrical, as described in Chapter 19.28 RCW or naming more than one subcontractor to perform the same work will result in your bid being non-responsive and therefore void.

Subcontractor(s) with whom the bidder will directly subcontract that are proposed to perform the work of structural steel installation, rebar installation, heating, ventilation and air conditioning, plumbing, as described in Chapter 18.106 RCW, and electrical as described in Chapter 19.28 RCW must be listed below. The work to be performed is to be listed below the subcontractor(s) name.

To the extent the Project includes one or more categories of work referenced in RCW 39.30.060, and no subcontractor is listed below to perform such work, the bidder certifies that the work will either (i) be performed by the bidder itself, or (ii) be performed by a lower tier subcontractor who will not contract directly with the bidder.

Subcontractor Name	
Work to be performed	
Subcontractor Name	
Work to be performed	
Subcontractor Name	
Work to be performed	
Subcontractor Name	
Work to be performed	
Subcontractor Name	
Work to be performed	

* Bidder's are notified that it is the opinion of the enforcement agency that PVC or metal conduit, junction boxes, etc. are considered electrical equipment and therefore considered part of electrical work, even if the installation is for future use and no wiring or electrical current is connected during the project.

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PROPOSAL FOR INCORPORATING RECYCLED MATERIALS INTO THE PROJECT



APWA-WA Division 1 Committee

rev. 5/13/2022

Proposal for Incorporating Recycled Materials into the Project

In compliance with RCW 70A.205.700, the Bidder shall propose below, the total percent of construction aggregate and concrete materials to be incorporated into the Project that are recycled materials. Calculated percentages must be within the amounts allowed in Section 9-03.21(1)E, Table on Maximum Allowable Percent (By Weight) of Recycled Material, of the Standard Specifications.

Proposed total percentage: _____ percent.

Note: Use of recycled materials is highly encouraged within the limits shown above, but does not constitute a Bidder Preference, and will not affect the determination of award, unless two or more lowest responsive Bid totals are exactly equal, in which case proposed recycling percentages will be used as a tie-breaker, per the APWA GSP in Section 1-03.1 of the Special Provisions. Regardless, the Bidder's stated proposed percentages will become a goal the Contractor should do its best to accomplish. Bidders will be required to report on recycled materials actually incorporated into the Project, in accordance with the APWA GSP in Section 1-06.6 of the Special Provisions.

Bidder: _____

Signature of Authorized Official: _____

Date: _____

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AGREEMENT

This Agreement, made and entered into this _____ day of _____, 2025 by and between Kitsap County, through the BOARD OF COUNTY COMMISSIONERS of Kitsap County, State of Washington, hereinafter referred to as the "COUNTY", and _____, a general Contractor licensed by the State of Washington, for themselves, their heirs, executors, administrators, successors, and assigns, hereinafter referred to as the "CONTRACTOR."

RECITALS:

WHEREAS, the COUNTY desires to improve stormwater conveyance and treatment within the Suquamish area, in Commissioner District #1.

WHEREAS, the CONTRACTOR has been selected by competitive bid as the "responsible bidder with the lowest responsive bid," as defined under RCW 39.04.010;

NOW THEREFORE, in consideration of the mutual benefits and covenants contained herein, the COUNTY and the CONTRACTOR mutually agree as follows:

CONTRACT DOCUMENTS:

This Agreement hereby incorporates the recitals and the Contract Documents, which documents are incorporated herein by reference. The Contract Documents shall include, but shall not be limited to, the Contract Provisions for "**SUQUAMISH REGIONAL STORMWATER TREATMENT FACILITY**", Call for Bids, Contractors accepted Bid Proposal, the General and Special Provisions, Contract Plans and Drawings, Addenda, applicable Bonds, and the 2025 WSDOT/APWA Standard Specifications for Road, Bridge, and Municipal Construction, hereinafter referred to as the "Standard Specifications", any amendments to the Standard Specifications, and this Agreement.

"The Work" as referred to in this Agreement means the definition described in WSDOT/APWA Standard Specifications Section 1-01.3

1) DESCRIPTION OF WORK:

This contract is a stormwater improvement project which provides for the construction of a regional stormwater quality treatment facility, including drainage conveyance, catch basins, flow splitters, waterline relocation, sidewalk and pedestrian ramps, and repaving and landscaping for the improvement areas in accordance with the Contract Documents

The CONTRACTOR shall furnish all of the labor, materials, tools, equipment, and everything needed for the construction and completion of the Work described herein, in accordance with, and more fully described in, the Contract Documents.

2) BINDING EFFECT:

The covenants and conditions contained in this Agreement shall apply to and bind the parties, heirs, legal representatives and assigns of the parties.

3) TIME IS OF THE ESSENCE:

The CONTRACTOR agrees to work promptly and to fully complete the Work within the time limits as described in the Contract Documents. Failure to complete within the allowed time limit will subject the CONTRACTOR to Liquidated Damages, as described in Section 1-08.9, Liquidated Damages, of the Contract Documents.

4) TIME FOR COMPLETION:

The work to be performed under this Agreement shall commence and complete in accordance with Sections 1-08.4, Notice to Proceed and Prosecution of Work, and 1-08.5, Time for Completion, of the Contract Documents and Physically Completion of the work shall be achieved within **145 WORKING DAYS**, unless Contract Time is extended otherwise in accordance with the Contract Documents.

5) COMPENSATION:

The COUNTY agrees to pay the CONTRACTOR for the work described and completed according to the Contract Documents the sum of [spell out the amount in words and in numbers] , \$ _____ . This sum shall include state sales tax.

6) INDEPENDENT CONTRACTOR:

The CONTRACTOR shall perform the services under this Agreement as an independent CONTRACTOR and not as an agent, employee or servant of the COUNTY. The parties agree that the CONTRACTOR is not entitled to any benefits or rights enjoyed by employees of the COUNTY. CONTRACTOR shall comply with all laws regarding workers' compensation.

7) DISCRIMINATION AND AMERICANS WITH DISABILITIES ACT (ADA):

The CONTRACTOR agrees to comply with all provisions of the Americans with Disabilities Act and all regulations interpreting or enforcing said Act. The CONTRACTOR agrees to comply with all Federal, State and County laws and regulations in effect pertaining to non-discrimination. Violation of this section may be treated as a breach of this Agreement.

8) LIABILITY FOR NEGLIGENCE:

The CONTRACTOR shall be liable for any additional expenses incurred by the COUNTY as a result of carelessness or negligence on the part of the CONTRACTOR, the CONTRACTOR's agents, or the CONTRACTOR's employees. The CONTRACTOR agrees that the COUNTY may deduct such additional costs on its own behalf from monies due, or to become due, to the CONTRACTOR.

9) TERMINATION:

This Agreement may be terminated by the officials or agents of the COUNTY authorized to contract for or supervise the execution of such work in accordance with Section 1-08.10 of the Contract Documents.

10) MODIFICATION

There shall be no modification of this Agreement, except in writing, executed with the same formalities as this Agreement. Change Orders totaling less than \$25,000 of the original contract amount may be executed by the Director of Public Works or their authorized agent. Change Orders totaling more than \$25,000 but less than \$75,000 of the original contract amount may be executed by the County Administrator, or their authorized agent. Change Orders that exceed \$75,000 of the total contract amount shall be valid provided they are executed by the Chair of the Board of County Commissioners or their authorized agent.

11) HOLD HARMLESS:

The CONTRACTOR shall indemnify and hold harmless the COUNTY and its officers and employees from, and shall process and defend at its own expense, all claims, demands or suits at law or equity arising in whole or in part from the CONTRACTOR's performance of any of its obligations under this Agreement; provided that nothing herein shall require the CONTRACTOR to indemnify the COUNTY against and hold harmless the COUNTY from claims, demands, or suits based upon the sole negligence of the COUNTY, its agents, officers, and employees; and provided further that if claims or suits are caused by or result from the concurrent negligence of (a) the CONTRACTOR or CONTRACTOR's agents or employees, and (b) the COUNTY or COUNTY's agents, officers, or employees, this indemnity provision shall be valid and enforceable only to the extent of the CONTRACTOR's negligence or the negligence of the CONTRACTOR's agents or employees.

The CONTRACTOR expressly assumes potential liability for actions brought by the CONTRACTOR's own employees against the COUNTY; and, solely for the purpose of this indemnification and defense, the CONTRACTOR specifically waives any immunity under the state industrial insurance law, Title 51 RCW. The CONTRACTOR recognizes that this waiver was specifically entered into pursuant to the provisions of RCW 4.24.115 and was subject of mutual negotiation.

12) INSURANCE REQUIREMENTS:

Section 1-07.18 of the Contract Documents shall govern this Agreement.

13) VENUE AND CHOICE OF LAW:

Any action at law, suit in equity, or other judicial proceeding for the enforcement of this contract or any provisions thereof shall be instituted as provided for in RCW 36.01.050. It is mutually understood and agreed that this Agreement shall be governed by the laws of the State of Washington, both as to interpretation and performance.

14) INTEGRATION CLAUSE:

This instrument embodies the entire agreement of the parties. There are no promises, terms, conditions or obligations other than those contained herein; and this Agreement shall supersede all previous communications, representations or agreements, either verbal or written, between parties.

15) AUTHORIZATION:

Each party signing below warrants to the other party, that they have the full power and authority to execute this Agreement on behalf of the party for whom they sign.

16) COMPLIANCE WITH LAWS:

The CONTRACTOR shall comply with all applicable federal, state and local laws, rules and regulations in performing this Agreement.

17) SEVERABILITY:

a. If a court of competent jurisdiction holds any part, term or provision of this Agreement to be illegal, or invalid in whole or in part, the validity of the remaining provisions shall not be affected, and the parties rights and obligations shall be construed and enforced as if the Contract did not contain the particular provision held to be invalid.

b. If it should appear that any provision of this Agreement is in conflict with any statutory provision of the United States or State of Washington, said provision which may conflict therewith shall be deemed inoperative and null and void insofar as it may be in conflict therewith, and shall be deemed modified to conform to such statutory provision.

18) CONFLICTS PROVISION:

In the event language in this Agreement conflicts with the requirements in the Standard Specifications, the language in this Agreement controls.

19) RIGHTS and REMEDIES:

No action or failure to act by the COUNTY shall constitute a waiver of a right or duty afforded the COUNTY under the Contract Documents, nor shall such action or failure to act constitute approval of an acquiescence in a breach therein, except as may be specifically agreed in writing.

20) THIRD-PARTY AGREEMENTS:

Neither this Agreement nor the Contract Documents shall be construed to create a contractual relationship of any kind between the COUNTY and any Subcontractor or any persons other than the COUNTY and the CONTRACTOR.

21) RECORDS RETENTION:

The wage, payroll, bid and cost records of the CONTRACTOR and its Subcontractors, and all records subject to audit in accordance with the Standard Specifications shall be retained for a period of not less than six (6) years after the date of Final Acceptance of the Contract Documents.

22) PUBLIC RECORDS

The CONTRACTOR acknowledges the Agreement and all records associated with the Agreement shall be available to the COUNTY for inspection and copying by the public where required by the Public Records Act, Chapter 42.56 RCW ("Act"). To the extent that records in the custody of the CONTRACTOR are needed for the County to respond to a request under the Act, as determined by the County, the CONTRACTOR shall make them promptly available to the COUNTY at no cost to the COUNTY. If the CONTRACTOR considers any portion of any record, whether electronic or hard copy, to be protected from disclosure under the law, the CONTRACTOR shall clearly identify all specific information it claims to be confidential or proprietary. If the COUNTY receives a request under the Act to inspect or copy the information that has been identified by the CONTRACTOR as protected from disclosure and the COUNTY determines that release of the information is required by the ACT or otherwise appropriate, the County's sole obligation will be to make a reasonable effort to notify the CONTRACTOR of the request and the date that such protected information will be released to the requester unless the CONTRACTOR obtains a court order to enjoin disclosure pursuant to RCW 42.56.540. If the CONTRACTOR fails to timely obtain a court order enjoining disclosure, the COUNTY will release the requested information on the date specified. The COUNTY has no obligation on behalf of the CONTRACTOR to claim any exemption from disclosure under the ACT. The COUNTY will not be liable to the CONTRACTOR for releasing records in compliance with the Act, this subsection or court order.

23) CONTRACT BOND:

Payment and performance bonds for this project have been issued by

_____, Surety Company of _____

Street address: _____ City: _____

Telephone: _____ Contact Person: _____

in the amount of _____.

IN WITNESS WHEREOF, the said CONTRACTOR has executed this instrument, and the said Board of County Commissioners of aforesaid COUNTY pursuant to resolution duly adopted has caused this instrument to be executed by and in the name of said Board by its Chair, duly attested by its Clerk, the day and year first above written, and the seal of said Board to be hereunto affixed on the date this instrument first above written.

CONTRACTOR

**BOARD OF COUNTY COMMISSIONERS
KITSAP COUNTY, WASHINGTON**

CHRISTINE ROLFES, Chair

BY _____

TITLE _____

ORAN ROOT, Commissioner

KATHERINE T. WALTERS, Commissioner

Foregoing contract approved and ratified:

ATTEST

DANA DANIELS, Clerk of the Board

PUBLIC WORKS PAYMENT BOND

to _____, WA

Bond No. _____

_____, Washington, (_____) has awarded to _____ (Principal), a Contract for the construction of the project designated as _____, Project No. _____, in _____, Washington (Contract), and said Principal is required under the terms of that Contract to furnish a payment bond in accord with Title 39.08 Revised Code of Washington (RCW) and (where applicable) 60.28 RCW.

The Principal and _____ (Surety), a corporation organized under the laws of the State of _____ and licensed to do business in the State of Washington as surety and named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Dept., are jointly and severally held and firmly bound to _____, in the sum of _____ US Dollars (\$ _____) Total Contract Amount, subject to the provisions herein.

This statutory payment bond shall become null and void, if and when the Principal, its heirs, executors, administrators, successors, or assigns shall pay all persons in accordance with RCW Titles 60.28, 39.08, and 39.12 including all workers, laborers, mechanics, subcontractors, lower tier subcontractors, and material suppliers, and all persons who shall supply such contractor or subcontractor with provisions and supplies for the carrying on of such work, and all taxes incurred on said Contract under Title 50 and 51 RCW and all taxes imposed on the Principal under Title 82 RCW; and if such payment obligations have not been fulfilled, this bond shall remain in full force and effect.

The Surety agrees to indemnify, defend, and protect the _____ against any claim of direct or indirect loss resulting from the failure of the Principal, its heirs, executors, administrators, successors, or assigns, (or the subcontractors or lower tier subcontractors of the Principal) to pay all laborers, mechanics, subcontractors, lower tier subcontractors material persons, and all persons who shall supply such contractor or subcontractors with provisions and supplies for the carrying on of such work.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract, the specifications accompanying the Contract, or to the work to be performed under the Contract shall in any way affect its obligation on this bond, except as provided herein, and waives notice of any change, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

This bond may be executed in two (2) original counterparts, and shall be signed by the parties' duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed and original power of attorney for the officer executing on behalf of the surety.

The Surety agrees to be bound by the laws of the state of Washington and subjected to the jurisdiction of the state of Washington.

PRINCIPAL

SURETY

Principal Signature _____ Date _____

Surety Signature _____ Date _____

Printed Name _____

Printed Name _____

Title _____

Title _____

Local office/agent of Surety Company:

Name _____ Telephone _____

Address _____

DOT Form 272-003A EF
12/2019



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PUBLIC WORKS PERFORMANCE BOND

to _____, WA

Bond No. _____

_____, Washington, (_____) has awarded to _____ (Principal), a Contract for the construction of the project designated as _____, Project No. _____, in _____, Washington (Contract), and said Principal is required under the terms of that Contract to furnish a bond for performance of all obligations under the Contract.

The Principal, and _____ (Surety), a corporation organized under the laws of the State of _____ and licensed to do business in the State of Washington as surety and named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Dept., are jointly and severally held and firmly bound to the _____, in the sum of _____ US Dollars (\$ _____) Total Contract Amount, subject to the provisions herein.

This statutory performance bond shall become null and void, if and when the Principal, its heirs, executors, administrators, successors, or assigns shall well and faithfully perform all of the Principal's obligations under the Contract and fulfill all the terms and conditions of all duly authorized modifications, additions, and changes to said Contract that may hereafter be made, at the time and in the manner therein specified; and if such performance obligations have not been fulfilled, this bond shall remain in full force and effect.

The Surety agrees to indemnify, defend, and protect the _____ against any claim of direct or indirect loss resulting from the failure of the Principal, its heirs, executors, administrators, successors, or assigns (or any of the employees, subcontractors, or lower tier subcontractors of the Principal) to faithfully perform the Contract.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract, the specifications accompanying the Contract, or to the work to be performed under the Contract shall in any way affect its obligation on this bond, and waives notice of any change, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

This bond may be executed in two (2) original counterparts, and shall be signed by the parties' duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed and original power of attorney for the officer executing on behalf of the surety.

The Surety agrees to be bound by the laws of the state of Washington and subjected to the jurisdiction of the state of Washington.

PRINCIPAL

SURETY

Principal Signature _____ Date _____

Surety Signature _____ Date _____

Printed Name _____

Printed Name _____

Title _____

Title _____

Local office/agent of Surety Company:

Name _____

Telephone _____

Address _____



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SPECIAL PROVISIONS

KITSAP COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER PROJECT NO. 97003141

SUQUAMISH REGIONAL STORMWATER TREATMENT FACILITY

The Professional Engineer's seal and signature affixed hereon indicates this Engineer's review and participation in the preparation of the Special Provisions.



Kristina B. Nelson
Senior Program Manager - Engineering
Division 1

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INTRODUCTION TO THE SPECIAL PROVISIONS

(January 4, 2024 APWA GSP, Option A)

The work on this project shall be accomplished in accordance with the *Standard Specifications for Road, Bridge and Municipal Construction*, 2025 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter “Standard Specifications”). The Standard Specifications, as modified or supplemented by these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

These Special Provisions are made up of both General Special Provisions (GSPs) from various sources, which may have project-specific fill-ins; and project-specific Special Provisions. Each Provision either supplements, modifies, or replaces the comparable Standard Specification, or is a new Provision. The deletion, amendment, alteration, or addition to any subsection or portion of the Standard Specifications is meant to pertain only to that particular portion of the section, and in no way should it be interpreted that the balance of the section does not apply.

The GSPs are labeled under the headers of each GSP, with the effective date of the GSP and its source. For example:

(March 8, 2013 APWA GSP)
(April 1, 2013 WSDOT GSP)
(May 1, 2013 KC GSP) Agency Special Provision

Project specific special provisions are labeled without a date as such:
*(*****)*

Also incorporated into the Contract Documents by reference are:

- *Manual on Uniform Traffic Control Devices for Streets and Highways*, currently adopted edition, with Washington State modifications, if any
- *Standard Plans for Road, Bridge and Municipal Construction*, WSDOT Manual M21-01, current edition
- Kitsap County Road Standards, current edition

Contractor shall obtain copies of these publications, at Contractor's own expense.

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DIVISION 1 GENERAL REQUIREMENTS

Description of Work

(March 13, 1995 WSDOT GSP)

This Contract provides for the improvement of ***the stormwater with the construction of a regional stormwater quality treatment facility, including drainage conveyance, catch basins, flow splitters, waterline relocation, sidewalk and pedestrian ramps, and repaving and landscaping for the improvement areas *** and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

1-01 DEFINITIONS AND TERMS

1-01.3 Definitions

(January 19, 2022 APWA GSP)

Delete the heading Completion Dates and the three paragraphs that follow it, and replace them with the following:

Dates

Bid Opening Date

The date on which the Contracting Agency publicly opens and reads the Bids.

Award Date

The date of the formal decision of the Contracting Agency to accept the lowest responsible and responsive Bidder for the Work.

Contract Execution Date

The date the Contracting Agency officially binds the Agency to the Contract.

Notice to Proceed Date

The date stated in the Notice to Proceed on which the Contract time begins.

Substantial Completion Date

The day the Engineer determines the Contracting Agency has full and unrestricted use and benefit of the facilities, both from the operational and safety standpoint, any remaining traffic disruptions will be rare and brief, and only minor incidental work, replacement of temporary substitute facilities, plant establishment periods, or correction or repair remains for the Physical Completion of the total Contract.

Physical Completion Date

The day all of the Work is physically completed on the project. All documentation required by the Contract and required by law does not necessarily need to be furnished by the Contractor by this date.

Completion Date

The day all the Work specified in the Contract is completed and all the obligations of the Contractor under the contract are fulfilled by the Contractor. All documentation required by the Contract and required by law must be furnished by the Contractor before establishment of this date.

Final Acceptance Date

The date on which the Contracting Agency accepts the Work as complete.

Supplement this Section with the following:

All references in the Standard Specifications or WSDOT General Special Provisions, to the terms "Department of Transportation", "Washington State Transportation Commission", "Commission", "Secretary of Transportation", "Secretary", "Headquarters", and "State Treasurer" shall be revised to read "Contracting Agency".

All references to the terms "State" or "state" shall be revised to read "Contracting Agency" unless the reference is to an administrative agency of the State of Washington, a State statute or regulation, or the context reasonably indicates otherwise.

All references to "State Materials Laboratory" shall be revised to read "Contracting Agency designated location".

All references to "final contract voucher certification" shall be interpreted to mean the Contracting Agency form(s) by which final payment is authorized, and final completion and acceptance granted.

Additive

A supplemental unit of work or group of bid items, identified separately in the Bid Proposal, which may, at the discretion of the Contracting Agency, be awarded in addition to the base bid.

Alternate

One of two or more units of work or groups of bid items, identified separately in the Bid Proposal, from which the Contracting Agency may make a choice between different methods or material of construction for performing the same work.

Business Day

A business day is any day from Monday through Friday except holidays as listed in Section 1-08.5.

Contract Bond

The definition in the Standard Specifications for “Contract Bond” applies to whatever bond form(s) are required by the Contract Documents, which may be a combination of a Payment Bond and a Performance Bond.

Contract Documents

See definition for “Contract”.

Contract Time

The period of time established by the terms and conditions of the Contract within which the Work must be physically completed.

Notice of Award

The written notice from the Contracting Agency to the successful Bidder signifying the Contracting Agency’s acceptance of the Bid Proposal.

Notice to Proceed

The written notice from the Contracting Agency or Engineer to the Contractor authorizing and directing the Contractor to proceed with the Work and establishing the date on which the Contract time begins.

Traffic

Both vehicular and non-vehicular traffic, such as pedestrians, bicyclists, wheelchairs, and equestrian traffic.

1-02 BID PROCEDURES AND CONDITIONS

1-02.1 Prequalification of Bidders

Delete this section and replace it with the following:

1-02.1 Qualifications of Bidder

(January 24, 2011 APWA GSP)

Before award of a public works contract, a bidder must meet at least the minimum qualifications of RCW 39.04.350(1) to be considered a responsible bidder and qualified to be awarded a public works project.

Add the following new section:

1-02.1(1) Supplemental Qualifications Criteria

(July 31, 2017 APWA GSP)

In addition, the Contracting Agency has established Contracting Agency-specific and/or project-specific supplemental criteria, in accordance with RCW 39.04.350(3), for determining Bidder responsibility, including the basis for evaluation and the deadline for appealing a determination that a Bidder is

not responsible. These criteria are contained in Section 1-02.14 Option C of these Special Provisions.

1-02.2 Plans and Specifications
(June 27, 2011 APWA GSP)

Delete this section and replace it with the following:

Information as to where Bid Documents can be obtained or reviewed can be found in the Call for Bids (Advertisement for Bids) for the work.

After award of the contract, plans and specifications will be issued to the Contractor at no cost as detailed below:

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced plans (11" x 17")	5	Furnished automatically upon award.
Contract Provisions	5	Furnished automatically upon award.
Large plans (e.g., 22" x 34")	5	Furnished automatically upon award.

Additional plans and Contract Provisions may be obtained by the Contractor from the source stated in the Call for Bids, at the Contractor's own expense.

1-02.4 Examination of Plans, Specifications and Site of Work

1-02.4(1) General
(December 30, 2022 APWA GSP, Option B)

The first sentence of the ninth paragraph, beginning with "Prospective Bidder desiring...", is revised to read:

Prospective Bidders desiring an explanation or interpretation of the Bid Documents, shall request the explanation or interpretation in writing by close of business 5 business days preceding the bid opening to allow a written reply to reach all prospective Bidders before the submission of their Bids.

1-02.5 Proposal Forms
(July 31, 2017 APWA GSP)

Delete this section and replace it with the following:

The Proposal Form will identify the project and its location and describe the work. It will also list estimated quantities, units of measurement, the items of work, and

the materials to be furnished at the unit bid prices. The bidder shall complete spaces on the proposal form that call for, but are not limited to, unit prices; extensions; summations; the total bid amount; signatures; date; and, where applicable, retail sales taxes and acknowledgment of addenda; the bidder's name, address, telephone number, and signature; the bidder's UDBE/DBE/M/WBE commitment, if applicable; a State of Washington Contractor's Registration Number; and a Business License Number, if applicable. Bids shall be completed by typing or shall be printed in ink by hand, preferably in black ink. The required certifications are included as part of the Proposal Form.

The Contracting Agency reserves the right to arrange the proposal forms with alternates and additives, if such be to the advantage of the Contracting Agency. The bidder shall bid on all alternates and additives set forth in the Proposal Form unless otherwise specified.

1-02.6 Preparation of Proposal
(November 25, 2024 APWA GSP, Option B)

Supplement the second paragraph with the following:

4. If a minimum bid amount has been established for any item, the unit or lump sum price must equal or exceed the minimum amount stated.

Delete the last two paragraphs, and replace them with the following:

The Bidder shall submit with their Bid a completed Contractor Certification Wage Law Compliance form, provided by the Contracting Agency. Failure to return this certification as part of the Bid Proposal package will make this Bid Nonresponsive and ineligible for Award. A Contractor Certification of Wage Law Compliance form is included in the Proposal Forms.

The Bidder shall make no stipulation on the Bid Form, nor qualify the bid in any manner.

A bid by a corporation shall be executed in the corporate name, by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign).

A bid by a partnership shall be executed in the partnership name and signed by a partner.

A bid by a joint venture shall be executed in the joint venture name and signed by a member of the joint venture.

Add the following new section:

1-02.6(1) Recycled Materials Proposal
(January 4, 2016 APWA GSP)

The Bidder shall submit with the Bid, its proposal for incorporating recycled materials into the project, using the form provided in the Contract Provisions.

1-02.7 Bid Deposit
(March 8, 2013 APWA GSP)

Supplement this section with the following:

Bid bonds shall contain the following:

1. Contracting Agency-assigned number for the project;
2. Name of the project;
3. The Contracting Agency named as obligee;
4. The amount of the bid bond stated either as a dollar figure or as a percentage which represents five percent of the maximum bid amount that could be awarded;
5. Signature of the bidder's officer empowered to sign official statements. The signature of the person authorized to submit the bid should agree with the signature on the bond, and the title of the person must accompany the said signature;
6. The signature of the surety's officer empowered to sign the bond and the power of attorney.

If so stated in the Contract Provisions, bidder must use the bond form included in the Contract Provisions.

If so stated in the Contract Provisions, cash will not be accepted for a bid deposit.

1-02.9 Delivery of Proposal

Delete this section and replace it with the following:

General

Each Proposal shall be submitted in a sealed envelope, with the Project Name and Project Number as stated in the Call for Bids clearly marked on the outside of the envelope, or as otherwise required in the Bid Documents, to ensure proper handling and delivery.

Supplemental bid information submitted after the proposal submittal but within 48 hours of the time and date the proposal is due, the document(s) shall be submitted as follows:

1. By facsimile to the following FAX number: (360) 337-4867 or
2. By e-mail to the following e-mail address: tsmith@kitsap.gov

All other information required to be submitted with the Bid Proposal must be submitted with the Bid Proposal itself, at the time stated in the Call for Bids.

Proposals that are received as required will be publicly opened and read as specified in Section 1-02.12. The Contracting Agency will not open or consider any Bid Proposal that is received after the time specified in the Call for Bids for receipt of Bid Proposals, or received in a location other than that specified in the Call for Bids. The Contracting Agency will not open or consider any "Supplemental Information" (Written Confirmation Documents or GFE Documentation) that is received after the time specified or received in a location other than that specified in the Call for Bids.

If an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be received at the office designated for receipt of bids as specified in Section 1-02.12 the time specified for receipt of the Proposal will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which the normal work processes of the Contracting Agency resume.

1-02.10 Withdrawing, Revising, or Supplementing Proposal
(July 23, 2015 APWA GSP)

Delete this section, and replace it with the following:

After submitting a physical Bid Proposal to the Contracting Agency, the Bidder may withdraw, revise, or supplement it if:

1. The Bidder submits a written request signed by an authorized person and physically delivers it to the place designated for receipt of Bid Proposals, and
2. The Contracting Agency receives the request before the time set for receipt of Bid Proposals, and
3. The revised or supplemented Bid Proposal (if any) is received by the Contracting Agency before the time set for receipt of Bid Proposals.

If the Bidder's request to withdraw, revise, or supplement its Bid Proposal is received before the time set for receipt of Bid Proposals, the Contracting Agency will return the unopened Proposal package to the Bidder. The Bidder must then submit the revised or supplemented package in its entirety. If the Bidder does

not submit a revised or supplemented package, then its bid shall be considered withdrawn.

Late revised or supplemented Bid Proposals or late withdrawal requests will be date recorded by the Contracting Agency and returned unopened. Mailed, emailed, or faxed requests to withdraw, revise, or supplement a Bid Proposal are not acceptable.

1-02.13 Irregular Proposals
(September 3, 2024 APWA GSP)

Delete this section and replace it with the following:

1. A Proposal will be considered irregular and will be rejected if:
 - a. The Bidder is not prequalified when so required;
 - b. The Bidder adds provisions reserving the right to reject or accept the Award, or enter into the Contract;
 - c. A price per unit cannot be determined from the Bid Proposal;
 - d. The Proposal form is not properly executed;
 - e. The Bidder fails to submit or properly complete a subcontractor list (WSDOT Form 271-015), if applicable, as required in Section 1-02.6;
 - f. The Bidder fails to submit or properly complete a Disadvantaged Business Enterprise Certification (WSDOT Form 272-056), if applicable, as required in Section 1-02.6;
 - g. The Bidder fails to submit Written Confirmations (WSDOT Form 422-031) from each DBE firm listed on the Bidder's completed DBE Utilization Certification that they are in agreement with the bidder's DBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;
 - h. The Bidder fails to submit DBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award in accordance with Section 1-07.11;
 - i. The Bidder fails to submit a DBE Bid Item Breakdown (WSDOT Form 272-054), if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions;
 - j. The Bidder fails to submit the Bidder Questionnaire (DOT Form 272-022), if applicable as required by Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions; or
 - k. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation.

2. A Proposal may be considered irregular and may be rejected if:

- a. The Proposal does not include a unit price for every Bid item;
- b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
- c. The authorized Proposal Form furnished by the Contracting Agency is not used or is altered;
- d. The completed Proposal form contains unauthorized additions, deletions, alternate Bids, or conditions;
- e. Receipt of Addenda is not acknowledged;
- f. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or
- g. If Proposal form entries are not made in ink.

1-02.14 Disqualification of Bidders

Delete this section and replace it with the following:

A Bidder will be deemed not responsible if the Bidder fails to attend and sign in at the mandatory pre-bid meeting as indicated in the Call for Bids.

A Bidder will be deemed not responsible if the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended; or does not meet Supplemental Criteria 1-8 in this Section:

The Contracting Agency will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1), and Supplemental Criteria 1-2. Evidence that the Bidder meets Supplemental Criteria 3-8 shall be provided by the Bidder as stated later in this Section.

1. Delinquent State Taxes

- A. Criterion: The Bidder shall not owe delinquent taxes to the Washington State Department of Revenue without a payment plan approved by the Department of Revenue.
- B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder does not owe delinquent taxes to the Washington State Department of Revenue, or if delinquent taxes are owed to the Washington State Department of Revenue, the Bidder must submit a written payment plan approved by the Department of Revenue, to the Contracting Agency by the deadline listed below.

2. Federal Debarment

- A. Criterion: The Bidder shall not currently be debarred or suspended by the Federal government.
- B. Documentation: The Bidder shall not be listed as having an “active exclusion” on the U.S. government’s “System for Award Management” database (www.sam.gov).

3. Subcontractor Responsibility

- A. Criterion: The Bidder’s standard subcontract form shall include the subcontractor responsibility language required by RCW 39.06.020, and the Bidder shall have an established procedure which it utilizes to validate the responsibility of each of its subcontractors. The Bidder’s subcontract form shall also include a requirement that each of its subcontractors shall have and document a similar procedure to determine whether the sub-tier subcontractors with whom it contracts are also “responsible” subcontractors as defined by RCW 39.06.020.
- B. Documentation: The Bidder, if and when required as detailed below, shall submit a copy of its standard subcontract form for review by the Contracting Agency, and a written description of its procedure for validating the responsibility of subcontractors with which it contracts.

4. Claims Against Retainage and Bonds

- A. Criterion: The Bidder shall not have a record of excessive claims filed against the retainage or payment bonds for public works projects in the three years prior to the bid submittal date, that demonstrate a lack of effective management by the Bidder of making timely and appropriate payments to its subcontractors, suppliers, and workers, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.
- B. Documentation: The Bidder, if and when required as detailed below, shall submit a list of the public works projects completed in the three years prior to the bid submittal date that have had claims against retainage and bonds and include for each project the following information:
 - Name of project
 - The owner and contact information for the owner;
 - A list of claims filed against the retainage and/or payment bond for any of the projects listed;
 - A written explanation of the circumstances surrounding each claim and the ultimate resolution of the claim.

5. Public Bidding Crime

- A. Criterion: The Bidder and/or its owners shall not have been convicted of a crime involving bidding on a public works contract in the five years prior to the bid submittal date.
- B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder and/or its owners have not been convicted of a crime involving bidding on a public works contract.

6. Termination for Cause / Termination for Default

- A. Criterion: The Bidder shall not have had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.
- B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder has not had any public works contract terminated for cause or terminated for default by a government agency in the five years prior to the bid submittal date; or if Bidder was terminated, describe the circumstances.

7. Lawsuits

- A. Criterion: The Bidder shall not have lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Contracting Agency.
- B. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Contracting Agency) that the Bidder has not had any lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, or shall submit a list of all lawsuits with judgments entered against the Bidder in the five years prior to the bid submittal date, along with a written explanation of the circumstances surrounding each such lawsuit. The Contracting Agency shall evaluate these explanations to determine whether the lawsuits demonstrate a pattern of failing to meet of terms of construction related contracts.

8. Contracting Agency Specific Criteria

A. Criterion: Bidders shall supply the following information:

1. Dollar amount of contracts currently held by the bidder,
2. List of more important construction projects completed by your company in the last 5 years,
3. Bank references, and
4. Bonding company.

B. Documentation: The required information shall be included in Section C of the Bidder Responsibility Statement.

As evidence that the Bidder meets the Supplemental Responsibility Criteria stated above, the apparent low Bidder must submit to the Contracting Agency by 12:00 P.M. (noon) of the second business day following the bid submittal deadline, a written statement verifying that the Bidder meets the Supplemental Criteria together with supporting documentation (sufficient in the sole judgment of the Contracting Agency) demonstrating compliance with the Supplemental Responsibility Criteria. The Contracting Agency reserves the right to request further documentation as needed from the low bidder and documentation from other Bidders as well to assess Bidder responsibility and compliance with all bidder responsibility criteria. The Contracting Agency also reserves the right to obtain information from third parties and independent sources of information concerning a Bidder's compliance with the mandatory and supplemental criteria, and to use that information in their evaluation. The Contracting Agency may consider mitigating factors in determining whether the Bidder complies with the requirements of the Supplemental Criteria.

The basis for evaluation of Bidder compliance with these mandatory and Supplemental Criteria shall include any documents or facts obtained by Contracting Agency (whether from the Bidder or third parties) including but not limited to: (i) financial, historical, or operational data from the Bidder; (ii) information obtained directly by the Contracting Agency from others for whom the Bidder has worked, or other public agencies or private enterprises; and (iii) any additional information obtained by the Contracting Agency which is believed to be relevant to the matter.

If the Contracting Agency determines the Bidder does not meet the bidder responsibility criteria above and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder in writing, with the reasons for its determination. If the Bidder disagrees with this determination, it may appeal the determination within two (2) business days of the Contracting Agency's determination by presenting its appeal and any additional information to the Contracting Agency. The Contracting Agency will consider the appeal and any

additional information before issuing its final determination. If the final determination affirms that the Bidder is not responsible, the Contracting Agency will not execute a contract with any other Bidder until at least two business days after the Bidder determined to be not responsible has received the Contracting Agency's final determination.

Request to Change Supplemental Bidder Responsibility Criteria Prior To Bid: Bidders with concerns about the relevancy or restrictiveness of the Supplemental Bidder Responsibility Criteria may make or submit requests to the Contracting Agency to modify the criteria. Such requests shall be in writing, describe the nature of the concerns, and propose specific modifications to the criteria. Bidders shall submit such requests to the Contracting Agency no later than five (5) business days prior to the bid submittal deadline and address the request to the Project Engineer or such other person designated by the Contracting Agency in the Bid Documents.

1-02.15 Pre Award Information
(December 30, 2022 APWA GSP)

Revise this section to read:

Before awarding any contract, the Contracting Agency may require one or more of these items or actions of the apparent lowest responsible bidder:

1. A complete statement of the origin, composition, and manufacture of any or all materials to be used,
2. Samples of these materials for quality and fitness tests,
3. A progress schedule (in a form the Contracting Agency requires) showing the order of and time required for the various phases of the work,
4. A breakdown of costs assigned to any bid item,
5. Attendance at a conference with the Engineer or representatives of the Engineer,
6. Obtain, and furnish a copy of, a business license to do business in the city or county where the work is located.
7. Any other information or action taken that is deemed necessary to ensure that the bidder is the lowest responsible bidder.

1-03 AWARD AND EXECUTION OF CONTRACT

1-03.1 Consideration of Bids

(December 30, 2022 APWA GSP)

Revise the first paragraph to read:

After opening and reading proposals, the Contracting Agency will check them for correctness of extensions of the prices per unit and the total price. If a discrepancy exists between the price per unit and the extended amount of any bid item, the price per unit will control. If a minimum bid amount has been established for any item and the bidder's unit or lump sum price is less than the minimum specified amount, the Contracting Agency will unilaterally revise the unit or lump sum price, to the minimum specified amount and recalculate the extension. The total of extensions, corrected where necessary, including sales taxes where applicable and such additives and/or alternates as selected by the Contracting Agency, will be used by the Contracting Agency for award purposes and to fix the Awarded Contract Price amount and the amount of the contract bond.

1-03.1(1) Identical Bid Totals

(December 30, 2022 APWA GSP)

Revise this section to read:

After opening Bids, if two or more lowest responsive Bid totals are exactly equal, then the tie-breaker will be the Bidder with an equal lowest bid, that proposed to use the highest percentage of recycled materials in the Project, per the form submitted with the Bid Proposal. If those percentages are also exactly equal, then the tie-breaker will be determined by drawing as follows: Two or more slips of paper will be marked as follows: one marked "Winner" and the other(s) marked "unsuccessful". The slips will be folded to make the marking unseen. The slips will be placed inside a box. One authorized representative of each Bidder shall draw a slip from the box. Bidders shall draw in alphabetic order by the name of the firm as registered with the Washington State Department of Licensing. The slips shall be unfolded and the firm with the slip marked "Winner" will be determined to be the successful Bidder and eligible for Award of the Contract. Only those Bidders who submitted a Bid total that is exactly equal to the lowest responsive Bid, and with a proposed recycled materials percentage that is exactly equal to the highest proposed recycled materials amount, are eligible to draw.

1-03.3 Execution of Contract
(July 8, 2024 APWA GSP Option A)

Revise this section to read:

Within 3 calendar days of Award date (not including Saturdays, Sundays and Holidays), the successful Bidder shall provide the information necessary to execute the Contract to the Contracting Agency. The Bidder shall send the contact information, including the full name, email address, and phone number, for the authorized signer and bonding agent to the Contracting Agency.

Copies of the Contract Provisions, including the unsigned Form of Contract, will be available for signature by the successful bidder on the first business day following award. The number of copies to be executed by the Contractor will be determined by the Contracting Agency.

Within **10** calendar days after the award date, the successful bidder shall return the signed Contracting Agency-prepared contract, an insurance certification as required by Section 1-07.18, a satisfactory bond as required by law and Section 1-03.4, the Transfer of Coverage form for the Construction Stormwater General Permit with sections I, III, and VIII completed when provided. Before execution of the contract by the Contracting Agency, the successful bidder shall provide any pre-award information the Contracting Agency may require under Section 1-02.15.

Until the Contracting Agency executes a contract, no proposal shall bind the Contracting Agency nor shall any work begin within the project limits or within Contracting Agency-furnished sites. The Contractor shall bear all risks for any work begun outside such areas and for any materials ordered before the contract is executed by the Contracting Agency.

If the bidder experiences circumstances beyond their control that prevents return of the contract documents within the calendar days after the award date stated above, the Contracting Agency may grant up to a maximum of **10** additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

1-03.4 Contract Bond
(July 23, 2015 APWA GSP)

Delete the first paragraph and replace it with the following:

The successful bidder shall provide executed payment and performance bond(s) for the full contract amount. The bond may be a combined payment and performance bond; or be separate payment and performance bonds. In the case

of separate payment and performance bonds, each shall be for the full contract amount. The bond(s) shall:

1. Be on Contracting Agency-furnished form(s);
2. Be signed by an approved surety (or sureties) that:
 - a. Is registered with the Washington State Insurance Commissioner, and
 - b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,
3. Guarantee that the Contractor will perform and comply with all obligations, duties, and conditions under the Contract, including but not limited to the duty and obligation to indemnify, defend, and protect the Contracting Agency against all losses and claims related directly or indirectly from any failure:
 - a. Of the Contractor (or any of the employees, subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform and comply with all contract obligations, conditions, and duties, or
 - b. Of the Contractor (or the subcontractors or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, subcontractors, lower tier subcontractors, material person, or any other person who provides supplies or provisions for carrying out the work;
4. Be conditioned upon the payment of taxes, increases, and penalties incurred on the project under titles 50, 51, and 82 RCW; and
5. Be accompanied by a power of attorney for the Surety's officer empowered to sign the bond; and
6. Be signed by an officer of the Contractor empowered to sign official statements (sole proprietor or partner). If the Contractor is a corporation, the bond(s) must be signed by the president or vice president, unless accompanied by written proof of the authority of the individual signing the bond(s) to bind the corporation (i.e., corporate resolution, power of attorney, or a letter to such effect signed by the president or vice president).

1-03.7 Judicial Review

(December 30, 2022 APWA GSP)

Revise this section to read:

All decisions made by the Contracting Agency regarding the Award and execution of the Contract or Bid rejection shall be conclusive subject to the scope of judicial review permitted under Washington Law. Such review, if any, shall be timely filed in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction.

1-04 SCOPE OF WORK

1-04.2 Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda

(December 30, 2022 APWA GSP)

Revise the second paragraph to read:

Any inconsistency in the parts of the contract shall be resolved by following this order of precedence (e.g., 1 presiding over 2, 2 over 3, 3 over 4, and so forth):

1. Addenda,
2. Proposal Form,
3. Special Provisions,
4. Contract Plans,
5. Standard Specifications,
6. Contracting Agency's Standard Plans or Details (if any), and
7. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

1-04.4 Minor Changes

(January 19, 2022 APWA GSP)

The first two sentences of the last paragraph of Section 1-04.4 are deleted.

1-04.6 Variation in Estimated Quantities

(May 25, 2006 APWA GSP)

Supplement this section with the following:

The quantities for Special Borrow including Haul have been entered into the Proposal only to provide a common proposal for bidders. Actual quantities will be determined in the field as the work progresses, and will be paid at the original bid price, regardless of final quantity. These bid items shall not be subject to the provisions of 1-04.6 of the Standard Specifications.

1-05 CONTROL OF WORK

1-05.3 Working Drawings

Section 1-05.3 is supplemented with the following:

(November 29, 2022 KC GSP)

1-05.3(1) Submittals

The Contractor shall not install materials or equipment, which requires submittals, until reviewed by the Contracting Agency. Late submissions by the Contractor shall not be cause for time extension.

Submittals shall be made per Submittal Number and Revision assigned by the Contracting Agency's project management software, rather than per material. The Contractor shall be responsible for ensuring that each submittal includes cut sheets and/or other information for all pertinent materials necessary to complete the work for each Submittal Number. It is understood that producing submittals for each Submittal Number may require multiple submittals of common materials that are associated with more than one Submittal Number. The Contractor shall also be responsible for producing submittals that may only be associated with a Specification Section, not a particular Submittal Number.

The Contractor shall submit electronic copies of each submittal required by the Contract Documents through the Contracting Agency's project management software, (see Special Provisions Section 1-05.17), unless otherwise required elsewhere in the Contract Provisions. This includes, but is not limited to:

- Working Drawings
- Product Data
- Samples
- Reports
- Material Submittals (Ref. 1-06)
- Progress Schedules (Ref. 1-08.3)

Physical samples shall be delivered with a hardcopy of the transmittal submitted through the Contracting Agency's project management software.

The Engineer will return reviewed submittals through the Contracting Agency's project management software for the Contractor's use.

1-05.3(2) Submittal Schedule

In conformance with section 1-08.3, the progress schedule shall be submitted and reviewed prior to commencing any work. No delay claim shall be entertained for Contractor's failure to comply.

No claim will be allowed for damages or extension of time resulting from rejection of a submittal or the requirement of resubmittals as outlined by this section.

The Engineer's review will be completed as quickly as possible but may require up to ten (10) working days from the date the submittals or resubmittals are received until they are sent to the Contractor. If more than ten (10) working days are required for the Engineer's review of any individual submittal or resubmittal, an extension of time will be considered in accordance with Section 1-08.8.

1-05.3(3) Submittal Procedures

Contractor submittals shall be in accordance with the following:

The Contractor shall thoroughly review each submittal for dimensions, quantities, and details of the material or item shown. The Contractor shall review each submittal and note any errors, omissions, or deviations with the Contract Documents. The Contractor shall accept full responsibility for the completeness of each submittal.

Each submittal shall have a unique number assigned to it (via the Contracting Agency's project management software). On each page, indicate the page number, and total number of pages in each submittal.

Each submittal shall indicate the following:

1. The intended use of the item in the work;
2. Clearly indicate only applicable items on any catalog cut sheets;
3. The current revision, issue number, and data shall be indicated on all drawings and other descriptive data.
4. Description of Submittal.
5. Related Specification Section and/or plan sheet.
6. Each material submittal shall clearly indicate the name and address of all suppliers, processors, distributors, and/or producers from which the Contractor directly purchased each material.

When submitting product data, the Contractor shall modify drawings to delete any information not applicable to the project and add information that is applicable to the project. The Contractor shall mark copies of printed material to clearly identify the pertinent materials, products or models.

Samples submitted shall be of sufficient size and quantity to clearly illustrate functional characteristics of product or material and full range of colors available. Field samples and mock-ups, where required, shall be erected at the project site where directed by the Engineer.

The Contractor shall notify the Engineer, in writing at time of submission, of deviations in submittals from requirements of the contract documents.

The Contracting Agency shall not be responsible for delays in reviewing submittals not submitted in accordance with these specifications.

Review or approval of Working Drawings shall neither confer upon the Contracting Agency nor relieve the Contractor of any responsibility for the accuracy of the drawings or their conformity with the Contract. The Contractor

shall bear all risk and all costs of any Work delays caused by rejection or non-approval of Working Drawings.

1-05.3(4) Engineer's Review of Submittals

The Engineer's review of drawings and data submitted by the Contractor will cover only general conformity with the Contract drawings and specifications. The Engineer's review of submittals shall not relieve the Contractor from responsibility for errors, omissions, deviations, or responsibility for compliance with the Contract documents.

Review of a separate item does not constitute review of an assembly in which the item functions.

When the submittal or resubmittal is marked "APPROVED", "APPROVED AS NOTED", "REVIEWED & FILED" AND "CONDITIONALLY APPROVED" no resubmittal is required. When the submittal is marked "REVIEWED WITH COMMENTS" the Contractor shall comply with any comments on the return submittal.

1-05.3(5) Resubmittals

When a submittal is marked "REVISE AND RESUBMIT" or "REJECTED," the Contractor shall make the corrections as noted and instructed by the Engineer and resubmit via the Contracting Agency's project management software. The Contractor shall not install material or equipment that has received a review status of "REVISE AND RESUBMIT" or "REJECTED".

When corrected copies are resubmitted, the Contractor shall in writing direct specific attention to all revisions and shall list separately any revision made other than those called for by the Engineer on previous submittals. The Contracting Agency's project management software will assign the resubmittal number of the original submittal followed by a revision number (1, 2, etc.) to indicate the sequence of the resubmittal.

Each submittal shall have a unique number assigned to it (via the Contracting Agency's project management software).

The Contractor shall revise returned submittals as required and resubmit until final review is obtained. Any associated progress delay due to the Contractor's need to revise and resubmit is the Contractor's sole responsibility.

The Contractor shall verify that all exceptions previously noted by the Engineer have been accounted for.

1-05.3(6) Clarifications

Clarifications of the Contract intent shall be submitted via a Request for Information (RFI) using the Contracting Agency's project management software as described in Section 1-05.17 of the Special Provisions. The Contractor shall provide a clear and concise clarification question, specific project document reference such as plan detail number or specification number, proposed solution to the clarification question, and provide any supporting documentation necessary to understand the clarification question.

Request for Information responses provided by the Contracting Agency shall be incorporated into the Record Drawings, if resulting in a change to the Contract Plans.

Request for Information responses provided by the Contracting Agency shall not be construed to be a change to the Contract Documents.

1-05.4 Conformity With and Deviations from Plans and Stakes

Delete the fourth through seventh paragraph of this section and add the following new subsection:

(November 25, 2024 APWA GSP, Option C)

1-05.4(1) Contracting Agency Provided Construction Staking

1-05.4(1)A General

As used in this Section 1-05.4, the words, "stake," "mark," "marker," or "monument" will be deemed to include any kind of survey marking, whether or not set by the Contracting Agency.

1-05.4(1)B Control Stakes

The Engineer will supply construction stakes and marks establishing lines, slopes and grades in accordance with this Section of these Special Provisions. The Contractor shall assume full responsibility for detailed dimensions, elevations, and excavation slopes measured from these Engineer furnished stakes and marks.

A claim by the Contractor for extra compensation by reason of alterations or reconstruction work allegedly due to error in the Engineer's line and grade will not be allowed unless the original control points set by the Engineer still exist, or unless the Contractor can provide other satisfactory substantiating evidence to prove the error was caused by incorrect Engineer furnished survey data. Three consecutive points set on line or grade shall be the minimum points used to determine any variation from a straight line or grade. Any such variation shall, upon discovery, be reported to the Engineer.

The Contractor shall provide a work site clear of equipment, stockpiles and obstructions which has been prepared and maintained to permit construction staking to proceed in a safe and orderly manner. The Engineer will stake a finite amount of work in a single day in accordance with Section 1-05.4(1)C of these Special Provisions.

Stakes that constitute reference points for all construction work will be conspicuously marked with an appropriate color of flagging tape. It will be the responsibility of the Contractor to inform its employees and subcontractors of the importance and necessity to preserve the stakes.

1-05.4(1)C Survey Requests

It shall be the Contractor's responsibility to properly schedule survey work and coordinate staking requests with construction activities. The Engineer may be reasonably expected to stake any one of the following items, in the quantity shown, in a single day:

Roadway grading	+/-1500 lineal feet of centerline
Storm or sanitary sewer	Approximately 8-10 structures
Water main	+/-1500 lineal feet of pipe
Curb and gutter	+/-1300 lineal feet (one side only)
Base and top course	+/-1000 lineal feet of centerline
Slope staking	+/-800-1200 lineal feet (top and toe)
Illumination/signalization	Approximately 15-20 structures

Actual quantities may vary based on the complexity of the project, line of sight considerations, traffic interference, properly prepared work site, and other items that could affect production.

The Contractor shall be aware that length does not always translate directly into stationing. For example, a survey request for storm sewer pipe from Station 3+00 to 8+00 is 500 lineal feet in length. There may be 1000 lineal feet, or more, of storm sewer pipe, if the pipe is placed on both sides of the roadway and interconnected.

The Contractor shall provide staking requests at least three (3) working days before the Engineer needs to begin the staking operation. If the work site is obstructed so that survey work cannot be done, a new survey request shall be submitted by the Contractor so that the survey work can be rescheduled once the site is properly prepared. An additional 3 working days may be required to complete the rescheduled work.

The Contractor shall work to preserve stakes and marks set by the Engineer. The Contracting Agency will deduct from payments due the Contractor all

costs to replace such stakes, marks damaged or destroyed by the Contractor's operation. A new survey request shall be submitted by the Contractor to replace the damaged or destroyed stakes. An additional 3 working days may be required to complete the request.

If the removal of a control stake or monument is required by the construction operations of the Contractor or its subcontractors, and advance notice of at least three (3) working days is given to the Engineer, the Engineer will reference, remove, and later replace the stakes at no cost to the Contractor.

The Contractor is not entitled to an extension of time, as provided for in Section 1-08.8 as a result of any replacement of control stakes.

1-05.4(1)D Staking Services

The Contractor shall determine appropriate construction stake offset distances and direction to prevent damage to stakes by its construction equipment.

The Engineer shall furnish to the Contractor, one time only, all principal lines, grades and measurements the Engineer deems necessary for completion of the work. These shall generally consist of one initial set of:

1. Cut or fill stakes for establishing grade and embankments,
2. Curb or gutter grade stakes,
3. Centerline finish grade stakes for pavement sections wider than 25 feet as set forth in Section 1-05.5(5), subsection 2, and
4. Offset points to establish line and grade for underground utilities such as water, sewers, storm drains, illumination and signalization.

No intermediate stakes shall be provided between curb grade and centerline stakes.

The Contractor shall provide enough safe areas to permit the Engineer to set those points and elevations that are the responsibility of the Contracting Agency and to perform random checks of the surveying performed by the Contractor.

Roadway and Utility Surveys

The Engineer will furnish the following stakes and reference marks:

- Clearing Limits - One set of clearing limit stakes will be set at approximately 50-foot stations or as needed.
- Rough Grading - One set of rough grade stakes will be set along the construction centerline of streets at 50-foot stations as required. (If superelevations require intermediate stakes along vertical curves, the Engineer will provide staking at closer intervals.) One set of primary cut

and fill stakes will be set for site work. One set of secondary final grade cut and fill stakes will be set where deemed applicable as determined by the Engineer.

- Storm Sewers - Two cut or fill stakes for each inlet, catch basin or manhole will be set at offsets to the center of the structure.
- Sanitary Sewers - Two cut or fill stakes for each manhole or cleanout location will be set at appropriate offsets to the center of the structure.
- Water Main - One set of line stakes will be furnished for water mains at 50-foot stations. Additionally, two reference stakes for each valve, hydrant, tee and angle point location will be set concurrently with these line stakes.
- Staking for Embankments - Catch points and one-line stake will be set in those cases where the vertical difference in elevation from the construction centerline to the toe or top of a cut or fill slope exceeds 3 feet. In all other areas, stakes shall be set at an appropriate offset to the street centerline to allow for the preservation of said offsets through the rough grading phase. In both cases the stakes shall be clearly marked with appropriate information necessary to complete the rough grading phase.
- Curb and Gutters - One set of curb and gutter stakes shall be set at an offset on 25-foot intervals, beginning and end points of curves and curb returns, wheelchair ramps, driveways, and sufficient mid-curve points to establish proper alignment.
- Base and Top Course - One set of final construction centerline grade hubs will be set for each course, at not less than 50-foot stations. No intermediate stakes shall be provided unless superelevations require them. In those circumstances, one grade hub left and right of construction centerline at the transition stations will be set at an offset to centerline at not less than 25-foot stations.
- Adjacent or Adjoining Wetlands - One set of stakes delineating adjacent wetland perimeters will be set at 25 to 50-foot stations as required.
- Illumination and Traffic Signals System - One set of stakes for luminaires and traffic signal pole foundations will be set as required. One set of stakes for vaults, junction boxes, and conduits will be set, only if curb and gutter is not in place at the time of the survey request. If curb and gutter is in place, staking for vaults, junction boxes, and conduits will be provided at an additional expense to the Contractor.

When deemed appropriate by the Engineer, cut sheets will be supplied for curb, storm, sanitary sewer and water lines. Cuts or fills may be marked on the surveyed points but should not be relied on as accurate until a completed cut sheet is supplied.

The Contractor is responsible for staking all other items not specifically listed and deemed necessary to construct the project per the Plans and Specifications. All costs associated with Contractor staking shall be incidental to the Work and be included in the Contract unit prices.

Structure Survey

The Engineer is responsible for setting all alignment stakes, slope stakes, and grades necessary for the construction of bridges, noise walls, and retaining walls. The Contractor shall maintain stakes set for construction and maintain the necessary lines and grades.

The survey work by the Engineer will include the following:

- Establish, by placing hubs and/or marked stakes, the location with offsets of foundation shafts and piles.
- Establish offsets to footing centerline of bearing for structure excavation.
- Establish offsets to footing centerline of bearing for footing forms.
- Establish wing wall, retaining wall, and noise wall horizontal alignment.
- Establish retaining wall top of wall profile grade.
- Establish elevation benchmarks for all substructure formwork.
- Check elevations at top of footing concrete line inside footing formwork immediately prior to concrete placement.
- Check column location and pier centerline of bearing at top of footing immediately prior to concrete placement.
- Establish location and plumbness of column forms and monitor column plumbness during concrete placement.
- Establish pier cap and crossbeam top and bottom elevations and centerline of bearing.
- Check pier cap and crossbeam top and bottom elevations and centerline of bearing prior to and during concrete placement.
- Establish grout pad locations and elevations.
- Establish structure bearing locations and elevations, including locations of anchor bolt assemblies.
- Establish box girder bottom slab grades and locations.
- Establish girder and/or web wall profiles and locations.
- Establish diaphragm locations and centerline of bearing.
- Establish roadway slab alignment, grades and provide dimensions from top of girder to top of roadway slab. Set elevations for deck paving machine rails.
- Establish traffic barrier and curb profile.
- Profile all girders prior to the placement of any deadload or construction live load that may affect the girder's profile.

1-05.4(1)E Monuments

The Contractor shall work to preserve the existing monumentation as provided in RCW 58.09.130 and WAC 332-120. The Contractor shall notify the Engineer immediately if it becomes apparent that a survey marker will be disturbed due to construction. The Contractor shall allow 5 working days for the Engineer to acquire information so that a reference monument may be set. The Engineer will notify the Contractor if or when the monument will be reset to its original

position after construction. All costs associated with the replacement of monuments damaged or destroyed prior to being referenced shall be deducted from monies due to the Contractor.

Payment

Depending on the Contractor's means and methods of construction additional Construction staking beyond that described above may be required by the Contractor. Should additional staking be required by the Contractor and all cost for providing additional construction staking shall be included in bid items provided within the proposal.

1-05.7 Removal of Defective and Unauthorized Work *(October 1, 2005 APWA GSP)*

Supplement this section with the following:

If the Contractor fails to remedy defective or unauthorized work within the time specified in a written notice from the Engineer or fails to perform any part of the work required by the Contract Documents, the Engineer may correct and remedy such work as may be identified in the written notice, with Contracting Agency forces or by such other means as the Contracting Agency may deem necessary.

If the Contractor fails to comply with a written order to remedy what the Engineer determines to be an emergency situation, the Engineer may have the defective and unauthorized work corrected immediately, have the rejected work removed and replaced, or have work the Contractor refuses to perform completed by using Contracting Agency or other forces. An emergency situation is any situation when, in the opinion of the Engineer, a delay in its remedy could be potentially unsafe, or might cause serious risk of loss or damage to the public.

Direct or indirect costs incurred by the Contracting Agency attributable to correcting and remedying defective or unauthorized work, or work the Contractor failed or refused to perform, shall be paid by the Contractor. Payment will be deducted by the Engineer from monies due, or to become due, the Contractor. Such direct and indirect costs shall include in particular, but without limitation, compensation for additional professional services required, and costs for repair and replacement of work of others destroyed or damaged by correction, removal, or replacement of the Contractor's unauthorized work.

No adjustment in contract time or compensation will be allowed because of the delay in the performance of the work attributable to the exercise of the Contracting Agency's rights provided by this Section.

The rights exercised under the provisions of this section shall not diminish the Contracting Agency's right to pursue any other avenue for additional remedy or damages with respect to the Contractor's failure to perform the work as required.

1-05.11 Final Inspection

Delete this section and replace it with the following:

1-05.11 Final Inspections and Operational Testing *(October 1, 2005 APWA GSP)*

1-05.11(1) Substantial Completion Date

When the Contractor considers the work to be substantially complete, the Contractor shall so notify the Engineer and request the Engineer establish the Substantial Completion Date. The Contractor's request shall list the specific items of work that remain to be completed in order to reach physical completion. The Engineer will schedule an inspection of the work with the Contractor to determine the status of completion. The Engineer may also establish the Substantial Completion Date unilaterally.

If, after this inspection, the Engineer concurs with the Contractor that the work is substantially complete and ready for its intended use, the Engineer, by written notice to the Contractor, will set the Substantial Completion Date. If, after this inspection the Engineer does not consider the work substantially complete and ready for its intended use, the Engineer will, by written notice, so notify the Contractor giving the reasons therefor.

Upon receipt of written notice concurring in or denying substantial completion, whichever is applicable, the Contractor shall pursue vigorously, diligently and without unauthorized interruption, the work necessary to reach Substantial and Physical Completion. The Contractor shall provide the Engineer with a revised schedule indicating when the Contractor expects to reach substantial and physical completion of the work.

The above process shall be repeated until the Engineer establishes the Substantial Completion Date and the Contractor considers the work physically complete and ready for final inspection.

1-05.11(2) Final Inspection and Physical Completion Date

When the Contractor considers the work physically complete and ready for final inspection, the Contractor by written notice, shall request the Engineer to schedule a final inspection. The Engineer will set a date for final inspection. The Engineer and the Contractor will then make a final inspection and the Engineer will notify the Contractor in writing of all particulars in which the final inspection reveals the work incomplete or unacceptable. The Contractor shall immediately take such corrective measures as are necessary to remedy the listed deficiencies. Corrective work shall be pursued vigorously, diligently, and without interruption until physical completion of the listed deficiencies. This process will

continue until the Engineer is satisfied the listed deficiencies have been corrected.

If action to correct the listed deficiencies is not initiated within 7 days after receipt of the written notice listing the deficiencies, the Engineer may, upon written notice to the Contractor, take whatever steps are necessary to correct those deficiencies pursuant to Section 1-05.7.

The Contractor will not be allowed an extension of contract time because of a delay in the performance of the work attributable to the exercise of the Engineer's right hereunder.

Upon correction of all deficiencies, the Engineer will notify the Contractor and the Contracting Agency, in writing, of the date upon which the work was considered physically complete. That date shall constitute the Physical Completion Date of the contract but shall not imply acceptance of the work or that all the obligations of the Contractor under the contract have been fulfilled.

1-05.11(3) Operational Testing

It is the intent of the Contracting Agency to have at the Physical Completion Date a complete and operable system. Therefore, when the work involves the installation of machinery or other mechanical equipment; street lighting, electrical distribution or signal systems; irrigation systems; buildings; or other similar work it may be desirable for the Engineer to have the Contractor operate and test the work for a period of time after final inspection but prior to the physical completion date. Whenever items of work are listed in the Contract Provisions for operational testing they shall be fully tested under operating conditions for the time period specified to ensure their acceptability prior to the Physical Completion Date. During and following the test period, the Contractor shall correct any items of workmanship, materials, or equipment which prove faulty, or that are not in first class operating condition. Equipment, electrical controls, meters, or other devices and equipment to be tested during this period shall be tested under the observation of the Engineer, so that the Engineer may determine their suitability for the purpose for which they were installed. The Physical Completion Date cannot be established until testing and corrections have been completed to the satisfaction of the Engineer.

The costs for power, gas, labor, material, supplies, and everything else needed to successfully complete operational testing, shall be included in the unit contract prices related to the system being tested, unless specifically set forth otherwise in the proposal.

Operational and test periods, when required by the Engineer, shall not affect a manufacturer's guaranties or warranties furnished under the terms of the contract.

1-05.13 Superintendents, Labor and Equipment of Contractor
(August 14, 2013 APWA GSP)

Delete the sixth and seventh paragraphs of this section.

1-05.15 Method of Serving Notices
(January 4, 2024 APWA GSP)

Revise the second paragraph to read:

All correspondence from the Contractor shall be served and directed to the Engineer. All correspondence from the Contractor constituting any notification, notice of protest, notice of dispute, or other correspondence constituting notification required to be furnished under the Contract, must be written in paper format, hand delivered or sent via certified mail delivery service with return receipt requested to the Engineer's office. Electronic copies such as e-mails or electronically delivered copies of correspondence will not constitute such notice and will not comply with the requirements of the Contract.

Add the following new section:

1-05.16 Water and Power
(October 1, 2005 APWA GSP)

The Contractor shall make necessary arrangements and shall bear the costs for power and water necessary for the performance of the work unless the contract includes power and water as a pay item.

Add the following new section:

(November 29, 2022 KC GSP)

1-05.17 Project Management Communications – Provided at no cost to Contractor

1-05.17(1) Summary

The Contractor shall use the communications tool and protocols included in the Contracting Agency's project management software during this project. The use of project management communications as herein described does not replace or change any contractual responsibilities of the participants.

A valid email address, electronic and computer equipment, and internet connections are the responsibility of each project participant. The Contracting Agency will set up the user account.

Nothing in this specification or the subsequent communications supersedes the parties' obligations and rights for copyright or document ownership as

established by the Contract Documents. The use of CAD files, processes or design information distributed in this system is intended only for the project specified herein.

1-05.17(2) Training & Support

The Contracting Agency will host an information and training session for Contractor staff in use of the Contracting Agency's project management software at a time to be schedule after contract award. Companies may also use online videos, support articles, online chat and phone support provided by the Contracting Agency's project management software at no cost.

1-05.17(3) Project Archive

The archive will be available to the Contractor at no cost. The archive set will contain only documents that the Contractor has access to during construction. All legal rights in any discovery process are retained. Archive material shall be ordered through the Contracting Agency.

1-05.17(4) Authorized Users

Access to the Contracting Agency's project management software will be by individuals who have been authorized to use it by the Engineer.

1. The Contracting Agency will provide the Contractor with at least five (5) access accounts for the duration of the project. The sharing of user accounts is prohibited.
2. Contractor shall provide Engineer with list of Authorized users including valid email addresses following award of the Contract and scheduling of Contracting Agency provided training.
3. Authorized users will be contacted via e-mail with log-in information.
4. Individuals shall be responsible for the proper use of their passwords and access to data as agents of the Contractor.
5. Only entities with a direct Contract with the Contracting Agency will be allowed to have read/write access (Authorized user) to the software. Read access may be provided to others, if beneficial to the project, including subcontractors and utility providers.

1-05.17(5) Communications

The use of fax, email and courier communication for this project is discouraged in favor of using the Contracting Agency's project management software to send messages. Communication functions are as follows:

1. Document Integrity and Revisions:

- a. Documents, comments, drawings, and other data posted to the system remain a permanent component of the project. The originator, time and date are recorded for each document submitted to the system. Submitting a new document or record with a unique ID, originator, and time stamp is the method used to make modifications or corrections.
 - b. The system identifies revised or superseded documents and their predecessors.
 - c. Server or Client-side software enhancements during the life of the project will not alter or restrict the content of data published by the system. System upgrades will not affect access to older documents or software.
2. Document Security: The system provides a method for communication of documents. Documents allow security group assignment to respect the contractual parties' communication with the exception that the Contracting Agency Administrative Users have access to everything. **DO NOT POST PRIVATE OR CONFIDENTIAL ITEMS IN THE DATABASE.**
 3. Document Integration: Documents of various types are able to be logically related to one another. For example, requests for information (RFIs), inspector's daily field reports (IDRs), supplemental sketches and photographs can be referenced as related records.
 4. Reporting: The system is capable of generating reports for work in progress, and logs for each document type. Summary reports generated by the system are available for project members and are subject to each user's security settings.
 5. Notifications and Distribution: Document distribution to project members may be accomplished both within the Contracting Agency's project management software and via email depending on user settings. Project document distribution to parties outside of the project communication system may be accomplished by secure email of outgoing documents and attachments, readable by a standard email client.
 6. Except for paper documents which require original signatures and large format documents (greater than 11 x 17 inches), all other documents shall be submitted by transmission in electronic form into the Contracting Agency's project management software by Authorized users.
 1. Large format documents may be transmitted by hardcopy and electronically via the Contracting Agency's project management software as otherwise agreed, or as otherwise noted in the specifications.
 2. Document Types that shall be transmitted via the Contracting Agency's project management software include, but are not limited to:
 - i. Request for Information (RFI)
 - ii. Change Order (CO)
 - iii. Submittals

- iv. Transmittals, including record of documents and materials delivered in hard copy
- v. Meeting Minutes/Notes
- vi. Application for Payments
- vii. Review Comments
- viii. Inspector's Daily Field Reports (IDR)
- ix. Construction Photographs
- x. Drawings
- xi. Supplemental Sketches
- xii. Schedules
- xiii. Specifications

1-05.17(6) Record Keeping

1. The Contracting Agency and their representatives and the Contractor shall respond to electronic documents received from the Contracting Agency's project management software and consider them as if received in paper document form.
2. The Contracting Agency and their representatives and the Contractor reserve the right to reply or respond through the Contracting Agency's project management software to documents actually received in paper document form.
3. The following are examples of paper documents which will require an original signature:
 - a. Contract
 - b. Change Orders
 - c. Application & Certificates for Payment
 - d. Force Account and Protested Force Account forms
 - e. Correspondence by the Contractor constituting notification per Section 1-05.15 of the Special Provisions.

1-05.17(7) Minimum Equipment Requirements

In addition to other requirements specified in this Section, the Contractor shall be responsible for providing suitable tools and internet access to utilize the Contracting Agency's project management software. Contact the Contracting Agency for equipment requirements and support.

No separate payment will be made for the use of the Contracting Agency's project management software, as this will be considered incidental to the Contract. All costs incurred to carry out the requirements of utilizing and maintaining the Contracting Agency's project management software, including

but not limited to, labor, training, equipment, and required tools are the sole responsibility of the Contractor.

1-06 CONTROL OF MATERIAL

1-06.1 Approval of Materials Prior to Use

1-06.1(4) Fabrication Inspection Expense *(June 27, 2011 APWA GSP)*

Delete this section in its entirety.

1-06.6 Recycled Materials *(January 4, 2016 APWA GSP)*

Delete this section, including its subsections, and replace it with the following:

The Contractor shall make their best effort to utilize recycled materials in the construction of the project. Approval of such material use shall be as detailed elsewhere in the Standard Specifications.

Prior to Physical Completion the Contractor shall report the quantity of recycled materials that were utilized in the construction of the project for each of the items listed in Section 9-03.21. The report shall include hot mix asphalt, recycled concrete aggregate, recycled glass, steel furnace slag and other recycled materials (e.g. utilization of on-site material and aggregates from concrete returned to the supplier). The Contractor's report shall be provided on DOT form 350-075 Recycled Materials Reporting.

1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

1-07.1 Laws to be Observed *(October 1, 2005 APWA GSP)*

Supplement this section with the following:

In cases of conflict between different safety regulations, the more stringent regulation shall apply.

The Washington State Department of Labor and Industries shall be the sole and paramount administrative agency responsible for the administration of the provisions of the Washington Industrial Safety and Health Act of 1973 (WISHA).

The Contractor shall maintain at the project site office, or other well-known place at the project site, all articles necessary for providing first aid to the injured. The Contractor shall establish, publish, and make known to all employees, procedures for ensuring immediate removal to a hospital, or doctor's care,

persons, including employees, who may have been injured on the project site. Employees should not be permitted to work on the project site before the Contractor has established and made known procedures for removal of injured persons to a hospital or a doctor's care.

The Contractor shall have sole responsibility for the safety, efficiency, and adequacy of the Contractor's plant, appliances, and methods, and for any damage or injury resulting from their failure, or improper maintenance, use, or operation. The Contractor shall be solely and completely responsible for the conditions of the project site, including safety for all persons and property in the performance of the work. This requirement shall apply continuously, and not be limited to normal working hours. The required or implied duty of the Engineer to conduct construction review of the Contractor's performance does not, and shall not, be intended to include review and adequacy of the Contractor's safety measures in, on, or near the project site.

1-07.2 State Taxes

Delete this section, including its sub-sections, in its entirety and replace it with the following:

1-07.2 State Sales Tax *(June 27, 2011 APWA GSP)*

The Washington State Department of Revenue has issued special rules on the State sales tax. Sections 1-07.2(1) through 1-07.2(3) are meant to clarify those rules. The Contractor should contact the Washington State Department of Revenue for answers to questions in this area. The Contracting Agency will not adjust its payment if the Contractor bases a bid on a misunderstood tax liability.

The Contractor shall include all Contractor-paid taxes in the unit bid prices or other contract amounts. In some cases, however, state retail sales tax will not be included. Section 1-07.2(2) describes this exception.

The Contracting Agency will pay the retained percentage (or release the Contract Bond if a FHWA-funded Project) only if the Contractor has obtained from the Washington State Department of Revenue a certificate showing that all contract-related taxes have been paid (RCW 60.28.051). The Contracting Agency may deduct from its payments to the Contractor any amount the Contractor may owe the Washington State Department of Revenue, whether the amount owed relates to this contract or not. Any amount so deducted will be paid into the proper State fund.

1-07.2(1) State Sales Tax — Rule 171

WAC 458-20-171, and its related rules, apply 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. This includes storm or combined sewer systems within and included as a part of the street or road drainage system and power lines when such are part of the roadway lighting system. For work performed in such cases, the Contractor shall include Washington State Retail Sales Taxes in the various unit bid item prices, or other contract amounts, including those that the Contractor pays on the purchase of the materials, equipment, or supplies used or consumed in doing the work.

1-07.2(2) State Sales Tax — Rule 170

WAC 458-20-170, and its related rules, apply to the constructing and repairing of new or existing buildings, or other structures, upon real property. This includes, but is not limited to, the construction of streets, roads, highways, etc., owned by the state of Washington; water mains and their appurtenances; sanitary sewers and sewage disposal systems unless such sewers and disposal systems are within, and a part of, a street or road drainage system; telephone, telegraph, electrical power distribution lines, or other conduits or lines in or above streets or roads, unless such power lines become a part of a street or road lighting system; and installing or attaching of any article of tangible personal property in or to real property, whether or not such personal property becomes a part of the realty by virtue of installation.

For work performed in such cases, the Contractor shall collect from the Contracting Agency, retail sales tax on the full contract price. The Contracting Agency will automatically add this sales tax to each payment to the Contractor. For this reason, the Contractor shall not include the retail sales tax in the unit bid item prices, or in any other contract amount subject to Rule 170, with the following exception.

Exception: The Contracting Agency will not add in sales tax for a payment the Contractor or a subcontractor makes on the purchase or rental of tools, machinery, equipment, or consumable supplies not integrated into the project. Such sales taxes shall be included in the unit bid item prices or in any other contract amount.

1-07.2(3) Services

The Contractor shall not collect retail sales tax from the Contracting Agency on any contract wholly for professional or other services (as defined in Washington State Department of Revenue Rules 138 and 244).

1-07.6 Permits and Licenses

Section 1-07.6 is supplemented with the following:

(January 2, 2018 WSDOT GSP, Option 1)

The Contracting Agency has obtained the below-listed permit(s) for this project. A copy of the permit(s) is attached as an appendix for informational purposes. Copies of these permits, including a copy of the Transfer of Coverage form, when applicable, are required to be onsite at all times.

Contact with the permitting agencies, concerning the below-listed permit(s), shall be made through the Engineer with the exception of when the Construction Stormwater General Permit coverage is transferred to the Contractor, direct communication with the Department of Ecology is allowed. The Contractor shall be responsible for obtaining Ecology's approval for any Work requiring additional approvals (e.g. Request for Chemical Treatment Form). The Contractor shall obtain additional permits as necessary. All costs to obtain and comply with additional permits shall be included in the applicable Bid items for the Work involved.

***** USACE NATIONWIDE PERMIT 27**

**WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
HYDRAULIC PROJECT APPROVAL**

**KITSAP COUNTY SHORELINE DEVELOPMENT PERMIT AND
CONDITIONAL USE PERMIT *****

1-07.7 Load Limits

Section 1-07.7 is supplemented with the following:

If the sources of materials provided by the Contractor necessitates hauling over roads other than County roads, the Contractor shall, at the Contractor's expense, make all arrangements for the use of the haul routes.

1-07.8 High-Visibility Apparel

The third and fourth paragraphs of Section 1-07.8 are revised to read:

(November 4, 2024 WSDOT GSP)

High-visibility garments shall always be the outermost garments worn in a manner to ensure 360 degrees of uninterrupted background and retroreflective material encircling the torso. High-visibility garments shall be labeled as, and in a condition compliant with the ANSI/ISEA 107-2015 publication entitled "American National Standard for High-Visibility Safety Apparel and Accessories," or equivalent revisions

1-07.8(1) Traffic Control Personnel

Section 1-07.8(1) is revised to read:

(November 4, 2024 WSDOT GSP)

All personnel performing the Work described in Section 1-10 (including traffic control supervisors, flaggers, and others performing traffic control labor of any kind) shall comply with the following:

1. During daylight hours with clear visibility, workers shall wear a high-visibility ANSI/ISEA 107 Type R Class 2 or 3 garment with background material that are fluorescent yellow-green, fluorescent orange-red, or fluorescent red in color; and a high visibility hardhat that is white, yellow, yellow-green, orange, or red in color; and
2. During hours of darkness ($\frac{1}{2}$ hour before sunset to $\frac{1}{2}$ hour after sunrise) or other low-visibility conditions (snow, fog, etc.), workers shall wear a high visibility ANSI/ISEA 107 Type R Class 2 or 3 garment with background material that are fluorescent yellow-green, fluorescent orange-red, or fluorescent red in color; a high-visibility lower garment meeting ANSI/ISEA 107 Class E, and a high visibility hardhat marked with at least 12 square inches of retroreflective material applied to provide 360 degrees of visibility

1-07.9 Wages

1-07.9(3) Apprentices

(July 8, 2024 APWA GSP)

Supplement this section with the following:

Apprentice Utilization

This Contract includes an Apprentice Utilization Requirement. Fifteen percent or more of project Labor Hours shall be performed by Apprentices unless Good Faith Efforts are accepted. Apprentice Utilization will be determined using the Department of Labor and Industries (L&I) online Prevailing Wage Intent & Affidavit (PWIA) system.

Definitions

For the purposes of this specification the following definitions apply:

1. Apprentice is a person enrolled in a State-approved Apprenticeship Training Program.
2. Apprentice Utilization is the apprentice labor hours, on the project, expressed as a percentage of project Labor Hours based on certified

payrolls or the affidavits of wages paid, whichever is least. The percentage is not rounded up.

3. Apprentice Utilization Requirement is the minimum percentage of apprentice labor hours required by the Contract.
4. Good Faith Effort(s) (GFE) describes the Contractor's efforts to meet the Apprentice Utilization Requirement including but not limited to the specific steps as described elsewhere in this specification.
5. Labor Hours are the total hours performed by all workers receiving an hourly wage who are subject to prevailing wage requirements for work performed on the Contract as defined by RCW 39.04.310. Labor Hours are determined based on the scope of work performed by the individuals, rather than the title of their occupations in accordance with WAC 296-127.
6. State-approved Apprenticeship Training Program is an apprenticeship training program approved by the Washington State Apprenticeship Council.
7. Apprentice Wage Rates are the applicable wage rates that are to be paid for an apprentice registered in a training program, separate from Journey Level rates, as set by the Washington State Apprenticeship Training Council and Washington State Department of Labor and Industries (L&I).

Electronic Reporting

The Contractor shall use the PWIA System to submit the "Apprentice Utilization Plan". Reporting instructions are available in the application.

Apprentice Utilization Plan

The Contractor shall submit an "Apprentice Utilization Plan" by filling out the Apprentice Utilization Plan Form (WSDOT Form 424-004) within 30 calendar days of execution, however no later than the preconstruction meeting, demonstrating how and when they intend to achieve the Apprentice Utilization Requirement. The Plan shall be in sufficient detail for the Engineer to track the Contractor's progress in meeting the utilization requirements. An Apprentice Utilization Plan shall be updated and resubmitted as the Work progresses or when requested by the Engineer.

If the Contractor is unable to demonstrate the ability to meet the Apprentice Utilization Requirement with their initial Apprentice Utilization Plan submission, an effort must be made to find additional registered apprentices to perform on the contract. If after attempts have been made at every tier and every scope, the Contractor must submit GFE documentation to the

Contracting Agency. The Contractor shall actively seek out opportunities to meet the Apprentice Utilization Requirement during the construction Work.

Contacts

The Contractor may obtain information on State-approved Apprenticeship Training Programs by using the Apprentice Registration and Tracking System (ARTS) <https://secure.lni.wa.gov/arts-public/#/program-search> or contacting the Department of Labor and Industries directly at:

Specialty Compliance and Services Division, Apprenticeship Section, P.O. Box 44530, Olympia, WA 98504-4530 or by phone at (360) 902-5320.

Compliance

The Contractor is expected to make attempts to employ Apprentices and shall include the requirement in any subcontracts at any tier. In the event that the Contractor is unable to achieve the Apprentice Utilization Requirement, the Contractor shall submit GFE documentation demonstrating the efforts and attempts they made. Final GFE documentation shall be submitted to the Contracting Agency after Substantial Completion but no later than 30 days after Physical Completion.

If the Contractor fails to actively attempt to employ Apprentices, submit GFE documentation, or if the Engineer does not approve the GFE, the Contractor will be assessed a penalty. The Engineer will provide the Contractor with a written notice at Final Acceptance of the project informing the Contractor of the failure to comply with this specification which will include a calculation of the penalty to be assessed as provided for in the Payment section in this special provision.

If the Contractor achieves the required Apprentice Utilization an incentive will be assessed with Final Payment.

Good Faith Efforts

The GFE shall document the attempts (efforts) the Contractor (and any subcontractor at any tier) made to meet the Apprentice Utilization Requirement. Emails, letters, or other written communications with letterhead, titles, and contact information are required.

Documentation must include one or more of the following accepted GFEs:

1. Demonstrated Lack of Availability of Apprentices. Correspondence from State-approved Apprenticeship Training Program(s), with project specific responses confirming there is a lack of availability of Apprentices for this project.
2. Demonstrated Disproportionate Ratio of Material/Equipment/Products to Labor Hours. Documentation explaining the bid includes a disproportionate high cost of material/equipment/products to Labor

Hours. (E.g., a \$2 M estimated contract includes \$1 M or more in procurement costs of equipment to be installed.)

3. Demonstrated Lack of Necessary Labor Hours. Correspondence from a State-approved Apprenticeship Training Programs confirming there is not enough time in the project to meet required journey level to apprenticeship training ratios.
4. Demonstrated Lack of Available Approved Programs. Correspondence from State-approved Apprenticeship Training Programs, confirming there are no programs that train for the scopes included/anticipated on the project. Contractor and state programs to submit training program detail needs and details that could be used for future program creation.
5. Funding Precedent. Documentation that shows conflicting, more restrictive, or precedent requirements for other training on the Project. Examples include, but are not limited to, Tribal Employment Rights (TERO), Federal Training Hours, or Special Training that affect the ability to use state-registered apprentices.
6. Warranty Work. Documentation from Original Equipment Manufacturers, or similar, confirming that work performed must only be completed by certified journey-level installers or risk voiding warranty, or similar.
7. Other Effort. The Contractor may submit other evidence, documentation, or rationale for not being able to achieve the required Apprenticeship Utilization that are not covered in the other efforts named. Other efforts will still need to be corroborated by an independent, knowledgeable third-party.

Contractors may receive a GFE credit for graduated Apprenticeship hours through the end of the calendar year for all projects worked on as long as the Apprentice remains continuously employed with the same Contractor/subcontractor they were working for when they graduated. If an Apprentice graduates during employment on a project of significant duration, they may be counted towards a GFE credit for up to one year after their graduation or until the end of the project (whichever comes first). Determination of whether Contract requirements were met in good faith will be made by subtracting the hours from the journeyman total reported hours for the project and adding them to the apprentice hour total. If the new utilization percentage meets the Contract requirement, the Contractor will be reported as meeting the requirement in good faith.

Approving Good Faith Efforts

The Contracting Agency will review submitted Good Faith Efforts and issue a determination. The Engineer may request additional information, documentation, evidence or similar in order to approve such efforts. A

determination by the Engineer is final. The approved Good Faith Efforts will be loaded into the PWIA system by the Contracting Agency.

Payment

Payment will be made for the following Bid Items:

“Apprenticeship Incentive”, by calculation

An incentive of \$2,000 will be assessed with the Final Payment for Contractors who meet the Apprentice Utilization Requirement without a reduction by Good Faith Effort. For the purpose of providing a common proposal for all bidders, the Contracting Agency has entered an amount in the proposal to become a part of the total bid by the Contractor.

“Apprenticeship Penalty”, by calculation.

Apprenticeship Hours will be measured for each hour of work performed by an apprentice as shown on the Monthly Apprentice Utilization Report, based on certified payrolls or the affidavits of wages paid, whichever is least. The percentage is not rounded up. For the purpose of providing a common proposal for all bidders, the Contracting Agency has entered an amount in the proposal to become a part of the total bid by the Contractor.

When the Contractor fails to meet the Apprenticeship goal of 15%, a penalty will be assessed for each hour that is not achieved, unless a Good Faith Effort is approved by the Contracting Agency.

Apprenticeship Utilization Penalty will be calculated as described below:

Percent of goal met	Penalty per hour of unmet goal
100%	\$0.00
90% to 99%	\$2.00
75% to 89%	\$3.50
50% to 74%	\$5.00
1% to 49%	\$7.50
0%	\$10.00

The Contractor shall include all related costs in the unit Bid prices of the Contract, included but not limited to implementing, developing, documenting, and administering an apprenticeship utilization program, recording and reporting hours and all other costs to comply with this provision.

1-07.9(5) Required Documents

1-07.9(5)A General

(July 8, 2024 APWA GSP)

This section is revised to read as follows:

All Statements of Intent to Pay Prevailing Wages, Affidavits of Wages Paid and Certified Payrolls, including a signed Statement of Compliance for Federal-aid projects, shall be submitted to the Engineer and to the State L&I online Prevailing Wage Intent & Affidavit (PWIA) system. When apprenticeship is a requirement of the contract, include in PWIA all apprentices.

1-07.11 Requirements for Nondiscrimination

1-07.11(2) Contractual Requirements

(November 25, 2024 APWA GSP)

Delete item 11 of the first paragraph of Section 1-07.11(2).

1-07.15 Temporary Water Pollution Prevention

Supplement this section with the following subsection:

*(*****)*

(Department of Ecology)

1-07.15(2) Protection of the Environment

No construction related activity shall contribute to the degradation of the environment, allow material to enter surface or ground waters, or allow particulate emissions to the atmosphere, which exceed state or federal standards. Any actions that potentially allow a discharge to state waters must have prior approval of the Washington State Department of Ecology.

1-07.17 Utilities and Similar Facilities

Section 1-07.17 is supplemented with the following:

(October 3, 2022 WSDOT GSP, Option 2)

Locations and dimensions shown in the Plans for existing facilities are in accordance with available information obtained without uncovering, measuring, or other verification.

Public and private utilities, or their Contractors, will furnish all work necessary to adjust, relocate, replace, or construct their facilities unless otherwise provided for in the Plans or these Special Provisions. Such adjustment, relocation, replacement, or construction will be done during the prosecution of the work for

this project. It is anticipated that utility adjustment, relocation, replacement, or construction within the project limits will be completed as follows:

***** Relocation or adjustment of existing power, telephone, cable television, and fiber optic communications cable facilities. *****

The Contractor shall attend a mandatory utility preconstruction meeting with the Engineer, all affected subcontractors, and all utility owners and their Contractors prior to beginning onsite work.

The following addresses and telephone numbers of utility companies or their Contractors that will be adjusting, relocating, replacing or constructing utilities within the project limits are supplied for the Contractor's use:

**Astound
4519 SE Mile Hill Drive
Port Orchard, WA 98366
Contact: Shawn Murphy
Telephone: (360) 204-2530**

**Cascade Natural Gas
PO Box 539
Bremerton, WA
Contact: Shawn O'Neill
Telephone: (360) 328-6845**

**Comcast
1225 Sylvan Way
Bremerton, WA 98310
Contact: Matthew Orosz
Telephone: (360) 340-4989**

**KPUD - FIBER
PO Box 1989
Poulsbo, WA 98370
Contact: Jim LeCompte
Telephone: (360) 710-5771**

**KPUD - WATER
PO Box 1989
Poulsbo, WA 98370
Contact: Todd Smith
Telephone: (360) 779-7653, ext. 751**

Lumen
4600 Neel Ct
Gig Harbor, WA 98335
Contact: Christopher Jensen
Telephone: (360) 535-0095

Puget Sound Energy
6522 Kitsap Way
Bremerton, WA 98312
Contact: Errol Burgos
Telephone: (425) 324-5341

Section 1-07.17 is supplemented with the following new subsection:

(November 29, 2022 KC GSP)

1-07.17(3) Protection and Support of Existing Utilities:

Description

The Contractor shall provide support and protection of all existing utility facilities crossing the work area during construction. All utilities shall remain fully operational throughout the life of this Contract. The Contractor shall be responsible for coordinating with the Engineer and the utility owners for the relocation of the utilities, or the erection of temporary support for them. The Contractor shall be responsible for the erection of all temporary support and temporary relocation necessary to complete the work.

The Contractor shall “pothole” and expose the existing underground utilities crossing the route of the new improvements. Excavation immediately adjacent to the existing conduits shall be made by hand methods in compliance with Washington State requirements.

Payment

Payment will be made for the following bid item included on the proposal:

“Protection & Support of Existing Utilities”, per lump sum.

The lump sum Contract price for “Protection and Support of Existing Utilities” shall be full pay for all labor, tools, materials and equipment necessary to complete the work and for any costs incurred by the Contractor due to the loss of work efficiency as a result of the requirement to work adjacent to the relocated or temporarily supported utilities.

1-07.18 Public Liability and Property Damage Insurance

Delete this section in its entirety, and replace it with the following:

1-07.18 Insurance

(January 4, 2024 APWA GSP)

1-07.18(1) General Requirements

- A. The Contractor shall procure and maintain the insurance described in all subsections of section 1-07.18 of these Special Provisions, from insurers with a current A. M. Best rating of not less than A-: VII and licensed to do business in the State of Washington. The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer's financial condition.
- B. The Contractor shall keep this insurance in force without interruption from the commencement of the Contractor's Work through the term of the Contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated below.
- C. If any insurance policy is written on a claims-made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months following the Completion Date or earlier termination of this Contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period ("tail") or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.
- D. The Contractor's Automobile Liability, Commercial General Liability and Excess or Umbrella Liability insurance policies shall be primary and non-contributory insurance as respects the Contracting Agency's insurance, self-insurance, or self-insured pool coverage. Any insurance, self-insurance, or self-insured pool coverage maintained by the Contracting Agency shall be excess of the Contractor's insurance and shall not contribute with it.
- E. The Contractor shall provide the Contracting Agency and all additional insureds with written notice of any policy cancellation, within two business days of their receipt of such notice.

- F. The Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the Contracting Agency
- G. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the Contracting Agency may, after giving five business days' notice to the Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.
- H. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made.
- I. Under no circumstances shall a wrap up policy be obtained, for either initiating or maintaining coverage, to satisfy insurance requirements for any policy required under this Section. A "wrap up policy" is defined as an insurance agreement or arrangement under which all the parties working on a specified or designated project are insured under one policy for liability arising out of that specified or designated project.

1-07.18(2) Additional Insured

All insurance policies, with the exception of Workers Compensation, and of Professional Liability and Builder's Risk (if required by this Contract) shall name the following listed entities as additional insured(s) using the forms or endorsements required herein:

- the Contracting Agency and its officers, elected officials, employees, agents, and volunteers

The above-listed entities shall be additional insured(s) for the full available limits of liability maintained by the Contractor, irrespective of whether such limits maintained by the Contractor are greater than those required by this Contract, and irrespective of whether the Certificate of Insurance provided by the Contractor pursuant to 1-07.18(4) describes limits lower than those maintained by the Contractor.

For Commercial General Liability insurance coverage, the required additional insured endorsements shall be at least as broad as ISO forms CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

1-07.18(3) Subcontractors

The Contractor shall cause each subcontractor of every tier to provide insurance coverage that complies with all applicable requirements of the Contractor-

provided insurance as set forth herein, except the Contractor shall have sole responsibility for determining the limits of coverage required to be obtained by subcontractors.

The Contractor shall ensure that all subcontractors of every tier add all entities listed in 1-07.18(2) as additional insureds, and provide proof of such on the policies as required by that section as detailed in 1-07.18(2) using an endorsement as least as broad as ISO CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency evidence of insurance and copies of the additional insured endorsements of each subcontractor of every tier as required in 1-07.18(4) Verification of Coverage.

1-07.18(4) Verification of Coverage

The Contractor shall deliver to the Contracting Agency a Certificate(s) of Insurance and endorsements for each policy of insurance meeting the requirements set forth herein when the Contractor delivers the signed Contract for the work. Failure of Contracting Agency to demand such verification of coverage with these insurance requirements or failure of Contracting Agency to identify a deficiency from the insurance documentation provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

Verification of coverage shall include:

1. An ACORD certificate or a form determined by the Contracting Agency to be equivalent.
2. Copies of all endorsements naming Contracting Agency and all other entities listed in 1-07.18(2) as additional insured(s), showing the policy number. The Contractor may submit a copy of any blanket additional insured clause from its policies instead of a separate endorsement.
3. Any other amendatory endorsements to show the coverage required herein.
4. A notation of coverage enhancements on the Certificate of Insurance shall not satisfy these requirements – actual endorsements must be submitted.

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency a full and certified copy of the insurance policy(s). If Builders Risk insurance is required on this Project, a full and certified copy of that policy is required when the Contractor delivers the signed Contract for the work.

1-07.18(5) Coverages and Limits

The insurance shall provide the minimum coverages and limits set forth below. Contractor's maintenance of insurance, its scope of coverage, and limits as required herein shall not be construed to limit the liability of the Contractor to the

coverage provided by such insurance, or otherwise limit the Contracting Agency's recourse to any remedy available at law or in equity.

All deductibles and self-insured retentions must be disclosed and are subject to approval by the Contracting Agency. The cost of any claim payments falling within the deductible or self-insured retention shall be the responsibility of the Contractor. In the event an additional insured incurs a liability subject to any policy's deductibles or self-insured retention, said deductibles or self-insured retention shall be the responsibility of the Contractor.

1-07.18(5)A Commercial General Liability

Commercial General Liability insurance shall be written on coverage forms at least as broad as ISO occurrence form CG 00 01, including but not limited to liability arising from premises, operations, stop gap liability, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract. There shall be no exclusion for liability arising from explosion, collapse or underground property damage.

The Commercial General Liability insurance shall be endorsed to provide a per project general aggregate limit, using ISO form CG 25 03 05 09 or an equivalent endorsement.

Contractor shall maintain Commercial General Liability Insurance arising out of the Contractor's completed operations for at least three years following Substantial Completion of the Work.

Such policy must provide the following minimum limits:

\$1,000,000	Each Occurrence
\$2,000,000	General Aggregate
\$2,000,000	Products & Completed Operations Aggregate
\$1,000,000	Personal & Advertising Injury each offence
\$1,000,000	Stop Gap / Employers' Liability each accident

1-07.18(5)B Automobile Liability

Automobile Liability shall cover owned, non-owned, hired, and leased vehicles; and shall be written on a coverage form at least as broad as ISO form CA 00 01. If the work involves the transport of pollutants, the automobile liability policy shall include MCS 90 and CA 99 48 endorsements.

Such policy must provide the following minimum limit:

\$1,000,000	Combined single limit each accident
-------------	-------------------------------------

1-07.18(5)C Workers' Compensation

The Contractor shall comply with Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.

Supplement this section with the following:

(*****)

(Department of Ecology)

Third Party Beneficiary

All parties agree that the State of Washington shall be, and is hereby, named as an express third-party beneficiary of this contract, with full rights as such.

1-07.23 Public Convenience and Safety

Section 1-07.23 is supplemented with the following:

The Contractor shall maintain safe pedestrian passage through the work area at all times.

1-07.23(1) Construction Under Traffic

(May 2, 2017 APWA GSP)

Revise the third sentence of the second paragraph to read:

Accessibility to existing or temporary pedestrian push buttons shall not be impaired; if approved by the Contracting Agency activating pedestrian recall timing or other accommodation may be allowed during construction.

Add the following new subsection:

1-07.23(4) Closures

1-07.23(4) A Road Closures

The road may be closed to vehicular traffic for the duration of the Work.

1-07.24 Rights of Way

(July 23, 2015 APWA GSP)

Delete this section and replace it with the following:

Street Right of Way lines, limits of easements, and limits of construction permits are indicated in the Plans. The Contractor's construction activities shall be confined within these limits unless arrangements for use of private property are made.

Generally, the Contracting Agency will have obtained, prior to bid opening, all rights of way and easements, both permanent and temporary, necessary for carrying out the work. Exceptions to this are noted in the Bid Documents or will be brought to the Contractor's attention by a duly issued Addendum.

Whenever any of the work is accomplished on or through property other than public Right of Way, the Contractor shall meet and fulfill all covenants and stipulations of any easement agreement obtained by the Contracting Agency from the owner of the private property. Copies of the easement agreements may be included in the Contract Provisions or made available to the Contractor as soon as practical after they have been obtained by the Engineer.

Whenever easements or rights of entry have not been acquired prior to advertising, these areas are so noted in the Plans. The Contractor shall not proceed with any portion of the work in areas where right of way, easements or rights of entry have not been acquired until the Engineer certifies to the Contractor that the right of way or easement is available or that the right of entry has been received. If the Contractor is delayed due to acts of omission on the part of the Contracting Agency in obtaining easements, rights of entry or right of way, the Contractor will be entitled to an extension of time. The Contractor agrees that such delay shall not be a breach of contract.

Each property owner shall be given 48 hours' notice prior to entry by the Contractor. This includes entry onto easements and private property where private improvements must be adjusted.

The Contractor shall be responsible for providing, without expense or liability to the Contracting Agency, any additional land and access thereto that the Contractor may desire for temporary construction facilities, storage of materials, or other Contractor needs. However, before using any private property, whether adjoining the work or not, the Contractor shall file with the Engineer a written permission of the private property owner, and, upon vacating the premises, a written release from the property owner of each property disturbed or otherwise interfered with by reasons of construction pursued under this contract. The statement shall be signed by the private property owner, or proper authority acting for the owner of the private property affected, stating that permission has been granted to use the property and all necessary permits have been obtained or, in the case of a release, that the restoration of the property has been satisfactorily accomplished. The statement shall include the parcel number, address, and date of signature. Written releases must be filed with the Engineer before the Completion Date will be established.

1-08 PROSECUTION AND PROGRESS

Add the following new section:

1-08.0 Preliminary Matters *(May 25, 2006 APWA GSP)*

Add the following new section:

1-08.0(1) Preconstruction Conference *(July 8, 2024 APWA GSP)*

Prior to the Contractor beginning the work, a preconstruction conference will be held between the Contractor, the Engineer and such other interested parties as may be invited. The purpose of the preconstruction conference will be:

1. To review the initial progress schedule;
2. To establish a working understanding among the various parties associated or affected by the work;
3. To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;
4. To review DBE Requirements, Training Plans, and Apprenticeship Plans, when applicable.
5. To establish normal working hours for the work;
6. To review safety standards and traffic control; and
7. To discuss such other related items as may be pertinent to the work.

The Contractor shall prepare and submit at the preconstruction conference the following:

1. A breakdown of all lump sum items;
2. A preliminary schedule of working drawing submittals; and
3. A list of material sources for approval if applicable.

Add the following new section:

1-08.0(2) Hours of Work *(December 8, 2014 APWA GSP)*

Except in the case of emergency or unless otherwise approved by the Engineer, the normal working hours for the Contract shall be any consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. Monday through Friday, exclusive of a lunch break. If the Contractor desires different than the normal working hours stated above, the request must be submitted in writing prior to the preconstruction

conference, subject to the provisions below. The working hours for the Contract shall be established at or prior to the preconstruction conference.

All working hours and days are also subject to local permit and ordinance conditions (such as noise ordinances).

If the Contractor wishes to deviate from the established working hours, the Contractor shall submit a written request to the Engineer for consideration. This request shall state what hours are being requested, and why. Requests shall be submitted for review no later than 2 working days prior to the day(s) the Contractor is requesting to change the hours.

If the Contracting Agency approves such a deviation, such approval may be subject to certain other conditions, which will be detailed in writing. For example:

1. On non-Federal aid projects, requiring the Contractor to reimburse the Contracting Agency for the costs in excess of straight-time costs for Contracting Agency representatives who worked during such times. (The Engineer may require designated representatives to be present during the work. Representatives who may be deemed necessary by the Engineer include, but are not limited to: survey crews; personnel from the Contracting Agency's material testing lab; inspectors; and other Contracting Agency employees or third party consultants when, in the opinion of the Engineer, such work necessitates their presence.)
2. Considering the work performed on Saturdays, Sundays, and holidays as working days with regard to the contract time.
3. Considering multiple work shifts as multiple working days with respect to contract time even though the multiple shifts occur in a single 24-hour period.
4. If a 4-10 work schedule is requested and approved the non-working day for the week will be charged as a working day.
5. If Davis Bacon wage rates apply to this Contract, all requirements must be met and recorded properly on certified payroll

1-08.1 Subcontracting

1-08.1(7) Payments to Subcontractors and Lower-Tier Subcontractors

1-08.1(7)A Payment Reporting *(November 25, 2024 APWA GSP)*

Delete this section and replace it with the following:

1-08.1(7) VACANT

1-08.1(9) Required Subcontract Clauses

1-08.1(9)B Clauses Required in Subcontracts of All Tiers

(November 25, 2024 APWA GSP)

Delete item 8 of the second paragraph of Section 1-08.1(8)B.

1-08.3 Progress Schedule

1-08.3(2)B Type B Progress Schedule

(January 4, 2024 APWA GSP)

Revise the first paragraph to read:

The Contractor shall submit a preliminary Type B Progress Schedule at or prior to the preconstruction conference. The preliminary Type B Progress Schedule shall comply with all of these requirements and the requirements of Section 1-08.3(2), except that it may be limited to only those activities occurring within the first 60-working days of the project.

Revise the first sentence of the second paragraph to read:

The Contractor shall submit one copy of a Type B Progress Schedule depicting the entire project no later than 21-calendar days after the preconstruction conference.

1-08.4 Prosecution of Work

Section 1-08.4 is deleted and replaced with the following:

1-08.4 Notice to Proceed and Prosecution of Work

(July 23, 2015 APWA GSP)

Notice to Proceed will be given after the contract has been executed and the contract bond and evidence of insurance have been approved and filed by the Contracting Agency. The Contractor shall not commence with the work until the Notice to Proceed has been given by the Engineer. The Contractor shall commence construction activities on the project site within ten days of the Notice to Proceed Date, unless otherwise approved in writing. The Contractor shall diligently pursue the work to the physical completion date within the time specified in the contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve the Contractor of the responsibility to complete the work within the time(s) specified in the contract.

When shown in the Plans, the first order of work shall be the installation of high visibility fencing to delineate all areas for protection or restoration, as described in the Contract. Installation of high visibility fencing adjacent to the roadway shall

occur after the placement of all necessary signs and traffic control devices in accordance with 1-10.1(2). Upon construction of the fencing, the Contractor shall request the Engineer to inspect the fence. No other work shall be performed on the site until the Contracting Agency has accepted the installation of high visibility fencing, as described in the Contract.

The first sentence of Section 1-08.4 is revised to read:

(August 7, 2006 WSDOT GSP, Option 3)

The Contractor shall begin work no earlier than ***** August 18, 2025 *****

1-08.5 Time for Completion

Section 1-08.5 is supplemented with the following:

(March 13, 1995 WSDOT GSP, Option 7)

This project shall be physically completed within ***** 145 ***** working days.

Revise the third and fourth paragraphs to read:

(November 25, 2024 APWA GSP, Option A)

Contract time shall begin on the first working day following the Notice to Proceed Date.

Each working day shall be charged to the contract as it occurs, until the contract work is physically complete. If substantial completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the contract the week before; (2) specified for the physical completion of the contract; and (3) remaining for the physical completion of the contract. The statement will also show the nonworking days and all partial or whole days the Engineer declares as unworkable. The statement will be identified as a Written Determination by the Engineer. If the Contractor does not agree with the Written Determination of working days, the Contractor shall pursue the protest procedures in accordance with Section 1-04.5. By failing to follow the procedures of Section 1-04.5, the Contractor shall be deemed as having accepted the statement as correct. If the Contractor is approved to work 10 hours a day and 4 days a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked would ordinarily be charged as a working day then the fifth day of that week will be charged as a working day whether or not the Contractor works on that day.

Revise the sixth paragraph to read:

(November 25, 2024 APWA GSP, Option A)

The Engineer will give the Contractor written notice of the completion date of the contract after all the Contractor's obligations under the contract have been

performed by the Contractor. The following events must occur before the Completion Date can be established:

1. The physical work on the project must be complete; and
2. The Contractor must furnish all documentation required by the contract and required by law, to allow the Contracting Agency to process final acceptance of the contract. The following documents must be received by the Project Engineer prior to establishing a completion date:
 - a. Certified Payrolls (per Section 1-07.9(5)).
 - b. Material Acceptance Certification Documents
 - c. Monthly Reports in DMCS of the amounts paid including the final payment confirmation to all firms required by Section 1-08.1(7)A if applicable
 - d. Final Contract Voucher Certification
 - e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all Subcontractors
 - f. A copy of the Notice of Termination sent to the Washington State Department of Ecology (Ecology); the elapse of 30 calendar days from the date of receipt of the Notice of Termination by Ecology; and no rejection of the Notice of Termination by Ecology. This requirement will not apply if the Construction Stormwater General Permit is transferred back to the Contracting Agency in accordance with Section 8-01.3(16).
 - g. Property owner releases per Section 1-07.24

1-08.9 Liquidated Damages

(March 3, 2021 APWA GSP, Option A)

Replace Section 1-08.9 with the following:

Time is of the essence of the Contract. Delays inconvenience the traveling public, obstruct traffic, interfere with and delay commerce, and increase risk to Highway users. Delays also cost tax payers undue sums of money, adding time needed for administration, engineering, inspection, and supervision.

Accordingly, the Contractor agrees:

1. To pay liquidated damages in the amount of ***** \$1,900 ***** for each working day beyond the number of working days established for Physical Completion, and
2. To authorize the Engineer to deduct these liquidated damages from any money due or coming due to the Contractor.

When the Contract Work has progressed to Substantial Completion as defined in the Contract, the Engineer may determine the Contract Work is Substantially

Complete. The Engineer will notify the Contractor in writing of the Substantial Completion Date. For overruns in Contract time occurring after the date so established, liquidated damages identified above will not apply. For overruns in Contract time occurring after the Substantial Completion Date, liquidated damages shall be assessed on the basis of direct engineering and related costs assignable to the project until the actual Physical Completion Date of all the Contract Work. The Contractor shall complete the remaining Work as promptly as possible. Upon request by the Project Engineer, the Contractor shall furnish a written schedule for completing the physical Work on the Contract.

Liquidated damages will not be assessed for any days for which an extension of time is granted. No deduction or payment of liquidated damages will, in any degree, release the Contractor from further obligations and liabilities to complete the entire Contract.

1-09 MEASUREMENT AND PAYMENT

1-09.2 Weighing Equipment

1-09.2(1) General Requirements for Weighing Equipment

(November 25, 2024 APWA GSP, Option B)

Revise item 4 of the fifth paragraph to read:

4. Test results and scale weight records for each day's hauling operations are provided to the Engineer daily. Reporting shall utilize WSDOT form 422-027LP, Scaleman's Daily Report, unless the printed ticket contains the same information that is on the Scaleman's Daily Report Form. The scale operator must provide AM and/or PM tare weights for each truck on the printed ticket.

1-09.2(5) Measurement

(December 30, 2022 APWA GSP)

Revise the first paragraph to read:

Scale Verification Checks – At the Engineer's discretion, the Engineer may perform verification checks on the accuracy of each batch, hopper, or platform scale used in weighing contract items of Work.

1-09.6 Force Account

(December 30, 2022 APWA GSP)

Supplement this section with the following:

The Contracting Agency has estimated and included in the Proposal, dollar amounts for all items to be paid per force account, only to provide a common

proposal for Bidders. All such dollar amounts are to become a part of Contractor's total bid. However, the Contracting Agency does not warrant expressly or by implication, that the actual amount of work will correspond with those estimates. Payment will be made on the basis of the amount of work actually authorized by the Engineer.

1-09.9 Payments

(July 8, 2024, APWA GSP, Option B)

Delete the fourth paragraph and replace it with the following:

Progress payments for completed work and material on hand will be based upon progress estimates prepared by the Engineer. A progress estimate cutoff date will be established at the preconstruction conference.

The initial progress estimate will be made not later than 30 days after the Contractor commences the work, and successive progress estimates will be made every month thereafter until the Completion Date. Progress estimates made during progress of the work are tentative, and made only for the purpose of determining progress payment. The progress estimates are subject to change at any time prior to the calculation of the Final Payment.

The value of the progress estimate will be the sum of the following:

1. Unit Price Items in the Bid Form — the approximate quantity of acceptable units of work completed multiplied by the unit price.
2. Lump Sum Items in the Bid Form — based on the approved Contractor's lump sum breakdown for that item, or absent such a breakdown, based on the Engineer's determination.
3. Materials on Hand — 100 percent of invoiced cost of material delivered to Job site or other storage area approved by the Engineer.
4. Change Orders — entitlement for approved extra cost or completed extra work as determined by the Engineer.

Progress payments will be made in accordance with the progress estimate less:

1. Retainage per Section 1-09.9(1), on non FHWA-funded projects;
2. The amount of Progress Payments previously made; and
3. Funds withheld by the Contracting Agency for disbursement in accordance with the Contract Documents.

Progress payments for work performed shall not be evidence of acceptable performance or an admission by the Contracting Agency that any work has been satisfactorily completed. The determination of payments under the contract will be final in accordance with Section 1-05.1.

1-09.11 Disputes and Claims

1-09.11(3) Time Limitation and Jurisdiction

(December 30, 2022 APWA GSP)

Revise this section to read:

For the convenience of the parties to the Contract it is mutually agreed by the parties that all claims or causes of action which the Contractor has against the Contracting Agency arising from the Contract shall be brought within 180 calendar days from the date of final acceptance (Section 1-05.12) of the Contract by the Contracting Agency; and it is further agreed that all such claims or causes of action shall be brought only in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to all such claims or causes of action. It is further mutually agreed by the parties that when claims or causes of action which the Contractor asserts against the Contracting Agency arising from the Contract are filed with the Contracting Agency or initiated in court, the Contractor shall permit the Contracting Agency to have timely access to all records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-09.13 Claims Resolution

1-09.13(3) Arbitration

1-09.13(3)A Arbitration General

(January 19, 2022 APWA GSP)

Revise the third paragraph to read:

The Contracting Agency and the Contractor mutually agree to be bound by the decision of the arbitrator, and judgment upon the award rendered by the arbitrator may be entered in the Superior Court of the county in which the Contracting Agency's headquarters is located, provided that where claims subject to arbitration are asserted against a county, RCW 36.01.050 shall control venue and jurisdiction of the Superior Court. The decision of the arbitrator and the specific basis for the decision shall be in writing. The arbitrator shall use the Contract as a basis for decisions.

1-10 TEMPORARY TRAFFIC CONTROL

1-10.2 Traffic Control Management

1-10.2(1) General

Section 1-10.2(1) is supplemented with the following:

(October 3, 2022 WSDOT GSP, Option 1)

The Traffic Control Supervisor shall be certified by one of the following:

The Northwest Laborers-Employers Training Trust
27055 Ohio Ave.
Kingston, WA 98346
(360) 297-3035
<https://www.nwlett.edu>

Evergreen Safety Council
12545 135th Ave. NE
Kirkland, WA 98034-8709
1-800-521-0778
<https://www.esc.org>

The American Traffic Safety Services Association
15 Riverside Parkway, Suite 100
Fredericksburg, Virginia 22406-1022
Training Dept. Toll Free (877) 642-4637
Phone: (540) 368-1701
<https://atssa.com/training>

Integrity Safety
13912 NE 20th Ave.
Vancouver, WA 98686
(360) 574-6071
<https://www.integritysafety.com>

US Safety Alliance
(904) 705-5660
<https://www.ussafetyalliance.com>

K&D Services Inc.
2719 Rockefeller Ave.
Everett, WA 98201
(800) 343-4049
<https://www.kndservices.net>

1-10.2(2) Traffic Control Plans (TCP)

Section 1-10.2(2) is supplemented with the following:

Development of Traffic Control Plans

Development of a Traffic Control Plan shall be the responsibility of the Contractor. The Contractor shall submit their Traffic Control Plan for the Engineer's review 5 working days prior to the Preconstruction Meeting. The Engineer shall review the Plan and at the Preconstruction Meeting give written approval or discuss the revisions required. Subsequent reviews or revisions, if required, shall be accomplished by the Engineer within 5 working days after submittal. No work shall be undertaken until the Contractor has written approval of the Traffic Control Plan.

The road may be closed to vehicular traffic in accordance with Section 1-07.23(1) of these Special Provisions and as shown in the Traffic Control Plans attached to the Contract Provisions. The Contractor shall provide Type 3 Barricade(s) in the immediate vicinity of the work zone. All costs for providing, installing, and maintaining the Type 3 Barricade(s) during the duration of the road closure shall be included in the Lump Sum Contract price for "Project Temporary Traffic Control".

Barricades shall be removed promptly upon completion of the work.

END OF DIVISION 1

KITSAP COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER PROJECT NO. 97003141

**SUQUAMISH REGIONAL STORMWATER
TREATMENT FACILITY**

The Professional Engineer's seal and signature affixed hereon indicates this Engineer's review and participation in the preparation of the following Divisions 2 through 9 of these Special Provisions.



2/7/2025

Cheyenne Covington, PE
Name

Osborn Consulting, Inc.
Firm

DIVISION 2 EARTHWORK

2-01 CLEARING, GRUBBING AND ROADSIDE CLEANUP

2-01.1 Description

Section 2-01.1 is supplemented with the following:

(March 13, 1995 WSDOT GSP, Option 1)

Clearing and grubbing on this project shall be performed within the following limits:

*** Clearing and grubbing on this project shall be performed as shown on the Plans.

All trees within the clearing limits shall be removed and disposed of, unless otherwise specifically noted in the Plans. Trees outside of the clearing limits noted on the Plans to be removed shall be close-cut to ground level (root systems left in place) and included in the payment for Clearing and Grubbing.***

All trees along the bluff shall be protected. Branches may be trimmed with Engineer approval.

2-01.2 Disposal of Usable Material and Debris

The third paragraph in Section 2-01.2 is revised to read:

The Contractor shall use Disposal Method No. 2 per Section 2-01.2(2) of the Standard Specifications.

2-02 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

2-02.1 Description

Section 2-02.1 is supplemented with the following:

All materials removed shall become the property of the Contractor and disposed of per Section 2-01.2 of these Special Provisions.

Temporary Fencing

As described in Section 1-07.24 of these Special Provisions, once any fencing has been removed from the listed parcels, temporary fencing shall be immediately provided, installed and maintained until permanent fencing is completed.

Debris Removal shall limited to the removal of existing concrete debris, angular rock riprap and concrete rubble riprap along the beach adjacent to the proposed outfall structure as required by the project permits requirements.

All materials removed shall become the property of the Contractor and disposed of per Section 2-01.2 of these Special Provisions, unless otherwise noted in the Plans or in these Special Provisions.

2-02.3 Construction Requirements

Section 2-02.3 is supplemented with the following:

(September 7, 2021 WSDOT GSP, Option 1)

Removal of Obstructions

The following miscellaneous Obstructions shall be removed and disposed of:

1. Wood Fence, 50 LF
2. Existing Signs, 2 EACH
3. Watermain, 6-IN, 200 LF

2-02.3(2) Removal of Bridges, Box Culverts, and Other Drainage Structures

Section 2-02.3(2) is supplemented with the following:

The table below lists drainage structures (catch basins and piping) to be removed in full and disposed of. All locations and lengths are approximate.

Drainage Structures:

Station	Offset	Structure
12+46	58-FT LT	TYPE 1 CB
13+08	55-FT LT	TYPE 1 CB
13+18	55-FT LT	TYPE 1 CB

Drainage Pipes:

Start Station, Offset	End Station, Offset	Length (LF)	Diam./Material
12+46	13+08	62	12-IN CONC
13+08	13+18	10	12-IN CONC

2-02.3(3) Removal of Pavement, Sidewalks, Curbs and Gutters

Section 2-02.3(3) is supplemented with the following:

Pavement Thickness

The approximate thickness of the existing asphalt pavement has not been observed and may vary throughout the project. It shall be the Bidder's responsibility to observe existing conditions and base their bid accordingly.

Saw Cut Asphalt Concrete Pavement

The equipment and procedures used to make the vertical cut shall be approved by the Engineer. No skip cutting will be allowed.

The Contractor shall make a vertical saw cut to delineate the areas of pavement to be removed from those areas of pavement to remain. The removed pavement shall become the property of the Contractor and shall be promptly removed from the project.

Damage caused to portions of the pavement to remain, due to the Contractor's operations, shall be repaired by the contractor at no expense to the Contracting Agency.

Removing Cement Concrete Sidewalks, Curbs, and Gutters

Removing sidewalks, curbs, and gutters shall be as shown in the Plans or as directed by the Engineer. Existing sidewalks, curbs, and gutters shall be removed in full panel sections and shall be removed or saw cut at expansion/contraction joints only.

Debris Removal

The Contractor shall identify and measure the concrete debris to be removed in the field prior to removal. Concrete to be removal shall be approved by the Engineer prior to removal. The Contractor shall confirm the right-of-way boundary along the beach prior to debris removal.

Concrete removal from the beach have a minimum accumulated surface area of 180 square feet as required by the HPA permit.

2-02.4 Vacant

Section 2-02.4, including title, is deleted and replaced with the following:

2-02.4 Measurement

Saw Cut Asphalt Concrete Pavement will be measured by the linear foot of saw cut actually completed.

Removing Cement Conc. Sidewalk will be measured by the square yard actually removed.

Removing Cement Conc. Curb and Gutter will be measured per linear foot of cement concrete curb and gutter actually removed.

Removal of concrete debris along the beach shall be measured in place prior to removal.

2-02.5 Payment

Section 2-02.5 is supplemented with the following:

“Saw Cut Asphalt Concrete Pavement”, per lineal foot.

The unit Contract price, per lineal foot, shown on the proposal for Saw Cut Asphalt Concrete Pavement shall be full compensation for all costs incurred for all tools, labor, materials and equipment necessary to complete the work.

“Removing Cement Conc. Sidewalk”, per square yard.

The unit Contract price, per square yard, shown on the proposal for Removing Asphalt Conc. Pavement and Removing Cement Conc. Sidewalk shall be full compensation for all costs incurred for all tools, labor, materials and equipment necessary to complete the work.

“Removing Cement Conc. Curb and Gutter”, per lineal foot.

The unit Contract price, per lineal foot, shown on the proposal for Removing Cement Conc. Curb and Gutter shall be full compensation for all costs incurred for all tools, labor, materials and equipment necessary to complete the work.

“Debris Removal”, per square foot.

The unit Contract price, per square foot, for Debris Removal shall be full compensation for all costs incurred for all tools, labor, materials and equipment necessary to complete the work. The bid item for Debris Removal shall limited to the removal of existing concrete debris, angular rock riprap and concrete rubble riprap along the beach adjacent to the proposed outfall structure.

2-03 ROADWAY EXCAVATION AND EMBANKMENT

2-03.1 Description

Section 2-03.1 is supplemented with the following:

This Work shall include the excavating, hauling and placing of Special Borrow to construct embankments to subgrade elevations and for backfill of trenches resulting from installation of storm sewer as shown in the Contract Plans.

This work shall include the re-grading of existing approach to meet the new roadway pavement constructed for this project as shown in the Plans. Approach is defined as a connection providing private vehicular access to and from the County road system.

2-03.2 Vacant

Section 2-03.2, including title, is deleted and replaced with the following:

2-03.2 Materials

Special Borrow shall meet the requirements of Section 9-03.14(5) of these Special Provisions.

2-03.3 Construction Requirements

2-03.3(7) Disposal of Surplus Material

Section 2-03.3(7) is revised to read:

A waste site has not been provided by the Contracting Agency for the disposal of excess materials and construction debris. The Contractor shall be solely responsible for loading, hauling and the disposal of all surplus material and construction debris in a manner complying with all local, state and federal statutes and regulations.

2-03.3(13) Borrow

Section 2-03.3(13) is supplemented with the following:

The Contractor must provide the Engineer with written notice at least 24 hours before hauling and placing backfill materials from off-site locations. This notice is essential in scheduling inspection personnel and item quantity ticket takers. Failure by the Contractor to begin hauling and placing materials at the agreed time may result in a penalty equal to the standby cost incurred by the County. The penalty will be calculated and deducted from the item being hauled.

2-03.3(14) Embankment Construction

Section 2-03.3(14) is supplemented with the following:

2-03.3(14)N Special Borrow Including Haul

Where shown in the Plans or as directed by the Engineer, the Contractor shall use Special Borrow Including Haul meeting the requirements of Section 9-03.14(5) of these Provisions to:

1. Build embankments.
2. Backfill excavation of unsuitable foundation materials.
3. Backfill trenches when select backfill material is required in accordance with Section 2-09 or Section 7-08.

Special Borrow shall be compacted according to Section 2-03.3(14)C, Method B and 2-03.3(14)D.

2-03.3(14)O Approach Excavation and Embankment Compaction

The Contractor shall grade each approach to the lines and grades established by the Engineer and as shown in the Plans. All fills shall be compacted in accordance with Section 2-03.3(14)C, Method B. Excess material and debris shall be removed from the site by the Contractor.

2-03.4 Measurement

Section 2-03.4 is supplemented with the following:

Special Borrow including Haul will be measured by the ton. Measurement when used to build embankments and to backfill for unsuitable foundation materials will be to the actual limits ordered by the Engineer. When used in backfill of sewer trenches, measurement will be for material placed inside the limits defined in Section 2-09.4.

Computation of Excavation and Embankment Quantities

Only one determination of the original ground elevation will be made on this project. Measurement for Roadway Excavation Including Haul and Embankment Compaction will be based on the original ground elevation recorded previous to the award of this Contract minus a factor to account for the removal of organic material during clearing and grubbing. It is anticipated that depth of removal of organic material during clearing and grubbing for this project will vary and a factor of minus 6 inches will be used to determine ground elevation after clearing and grubbing. Control stakes will be set during construction to provide the Contractor with all essential information for the construction of excavation and embankments.

If discrepancies are discovered in the ground elevations which will materially affect the quantities of earthwork, the original computations of earthwork quantities will be adjusted accordingly.

Earthwork quantities will be computed, either manually or by means of electronic data processing equipment, by use of the average end area method or by the finite element analysis method utilizing digital terrain modeling techniques.

2-03.5 Payment

Section 2-03.5 is supplemented with the following:

“Special Borrow including Haul”, per ton.

The unit contract price per ton for Special Borrow including Haul shall be full compensation for all costs incurred for excavating, loading, hauling and placing the material.

Approach excavation will be paid under “Roadway Excavation Including Haul”.

All costs involved in the loading, hauling and the disposal of all surplus material and construction debris shall be included in the bid prices of the items shown on the proposal and no further payment will be made.

2-09 STRUCTURE EXCAVATION

2-09.1 Description

Supplement this section by adding the following:

Structural Excavation Class A and Shoring and Extra Excavation Class A shall be used for the installation of the WQ Treatment Vault. Installation of the Pretreatment Vaults and other project elements shall be covered under Structural Excavation Class B and Shoring and Extra Excavation Class B.

2-09.3 Construction Requirements

2-09.3(1)A Staking, Cross-Sectioning, and Inspecting

Section 2-09.3(1)A is supplemented with the following:

At least 24 hours prior to commencing any excavation, the Contractor shall expose by pot-holing existing underground telephone cables, gas mains, sewer mains, water mains or any other underground utility shown in the Plans that crosses the location of the new structure to be installed under this

contract. Excavation immediately adjacent to the existing utilities shall be by hand methods in compliance with Washington State requirements.

When directed by the Engineer, the Contractor shall expose by pot-holing crossings of new pipe and utilities not shown in the Plans.

2-09.3(1)C Removal of Unstable Base Material

Section 2-09.3(1)C is revised to read:

When the material at the bottom of an excavation is not stable enough to support the Structure, the Contractor shall excavate below grade and replace the unstable material with special borrow. The excavation will be paid for as Unsuitable Foundation Excavation Incl. Haul per cubic yard in accordance with Section 2-03 of the Standard Specifications.

Special borrow shall meet the requirements of Section 9-03.14(5) of these Special Provisions. It shall be placed in layers not more than 6 inches thick with each layer compacted to 95 percent of the maximum density determined by the Compaction Control Test, Section 2-03.3(14)D.

2-09.3(2) Classification of Structural Excavation

Supplement this section by adding the following:

Structural Excavation Class A and Shoring and Extra Excavation Class A shall be used for the installation of the WQ Treatment Vault.

Installation of the Pretreatment Vaults and other project elements shall be covered under Structural Excavation Class B and Shoring and 2-09.4 Measurement

END OF DIVISION 2

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DIVISION 4 BASES

4-04 BALLAST AND CRUSHED SURFACING

4-04.3 Construction Requirements

4-04.3(7) Miscellaneous Requirements

Section 4-04.3(7) is supplemented with the following:

The Contractor must provide the Engineer with written notice at least 24 hours before hauling and placing surfacing materials from off-site locations. This notice is essential in scheduling inspection personnel and item quantity ticket takers. Failure by the Contractor to begin hauling and placing materials at the agreed time may result in a penalty equal to the standby cost incurred by the County. The penalty will be calculated and deducted from the item being hauled.

END OF DIVISION 4

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DIVISION 5 SURFACE TREATMENTS AND PAVEMENTS

5-04 HOT MIX ASPHALT

Delete Section 5-04, Hot Mix Asphalt, and replace it with the following:

5-04.1 Description

This Work shall consist of providing and placing one or more layers of plant-mixed hot mix asphalt (HMA) on a prepared foundation or base in accordance with these Specifications and the lines, grades, thicknesses, and typical cross-sections shown in the Plans. The manufacture of HMA may include warm mix asphalt (WMA) processes in accordance with these Specifications. WMA processes include organic additives, chemical additives, and foaming.

HMA shall be composed of asphalt binder and mineral materials as may be required, mixed in the proportions specified to provide a homogeneous, stable, and workable mixture.

5-04.2 Materials

Materials shall meet the requirements of the following sections:

Asphalt Binder	9-02.1(4)
Cationic Emulsified Asphalt	9-02.1(6)
Anti-Stripping Additive	9-02.4
HMA Additive	9-02.5
Aggregates	9-03.8
Recycled Asphalt Pavement (RAP)	9-03.8(3)B, 9-03.21
Reclaimed Asphalt Shingles (RAS)	9-03.8(3)B, 9-03.21
Mineral Filler	9-03.8(5)
Recycled Material	9-03.21

The Contract documents may establish that the various mineral materials required for the manufacture of HMA will be furnished in whole or in part by the Contracting Agency. If the documents do not establish the furnishing of any of these mineral materials by the Contracting Agency, the Contractor shall be required to furnish such materials in the amounts required for the designated mix. Mineral materials include coarse and fine aggregates, and mineral filler.

The Contractor may choose to utilize recycled asphalt pavement (RAP) in the production of HMA. The RAP may be from pavements removed under the Contract, if any, or pavement material from an existing stockpile.

The Contractor may use up to 20 percent RAP by total weight of HMA with no additional sampling or testing of the RAP.

If the Contractor wishes to utilize High RAP/Any RAS, the design must be listed on the WSDOT Qualified Products List (QPL).

The grade of asphalt binder shall be as required by the Contract. Blending of asphalt binder from different sources is not permitted.

The Contractor may only use warm mix asphalt (WMA) processes in the production of HMA with 20 percent or less RAP by total weight of HMA. The Contractor shall submit to the Engineer for approval the process that is proposed and how it will be used in the manufacture of HMA.

Production of aggregates shall comply with the requirements of Section 3-01. Preparation of stockpile site, the stockpiling of aggregates, and the removal of aggregates from stockpiles shall comply with the requirements of Section 3-02.

5-04.2(1) How to Get an HMA Mix Design on the QPL

If the Contractor wishes to submit a mix design for inclusion in the Qualified Products List (QPL), please follow the WSDOT process outlined in Standard Specification 5-04.2(1).

5-04.2(1)A Vacant

5-04.2(2) Mix Design - Obtaining Project Approval

No paving shall begin prior to the approval of the mix design by the Engineer.

Nonstatistical evaluation will be used for all HMA not designated as Commercial HMA in the Contract documents.

Commercial evaluation will be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, temporary pavement, and pavement repair. Other nonstructural applications of HMA accepted by commercial evaluation shall be as approved by the Project Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Project Engineer. The Proposal quantity of HMA that is accepted by commercial evaluation will be excluded from the quantities used in the determination of nonstatistical evaluation.

Nonstatistical Mix Design. Fifteen days prior to the first day of paving the Contractor shall provide one of the following mix design verification certifications for Contracting Agency review;

- The WSDOT Mix Design Evaluation Report from the current WSDOT QPL, or one of the mix design verification certifications listed below.
- The proposed HMA mix design on WSDOT Form 350-042 with the seal and certification (stamp & signature) of a valid licensed Washington State Professional Engineer.
- The Mix Design Report for the proposed HMA mix design developed by a qualified City or County laboratory that is within one year of the approval date.

The mix design shall be performed by a lab accredited by a national authority such as Laboratory Accreditation Bureau, L-A-B for Construction Materials Testing, The Construction Materials Engineering Council (CMEC's) ISO 17025 or AASHTO Accreditation Program (AAP) and shall supply evidence of participation in the AASHTO: resource proficiency sample program.

Mix designs for HMA accepted by Nonstatistical evaluation shall:

- Have the aggregate structure and asphalt binder content determined in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9-03.8(2), except that Hamburg testing for ruts and stripping are at the discretion of the Engineer, and 9-03.8(6).
- Have anti-strip requirements, if any, for the proposed mix design determined in accordance with AASHTO T 283 or T 324 or based on historic anti-strip and aggregate source compatibility from previous WSDOT lab testing.

At the discretion of the Engineer, agencies may accept verified mix designs older than 12 months from the original verification date with a certification from the Contractor that the materials and sources are the same as those shown on the original mix design.

Commercial Evaluation Mix Design. Approval of a mix design for “Commercial Evaluation” will be based on a review of the Contractor’s submittal of WSDOT Form 350-042 (for commercial mixes, AASHTO T 324 evaluation is not required) or a Mix Design from the current WSDOT QPL or from one of the processes allowed by this section. Testing of the HMA by the Contracting Agency for mix design approval is not required.

For the Bid Item Commercial HMA, the Contractor shall select a class of HMA and design level of ESALs appropriate for the required use.

5-04.2(2)B Using Warm Mix Asphalt Processes

The Contractor may elect to use additives that reduce the optimum mixing temperature or serve as a compaction aid for producing HMA. Additives include organic additives, chemical additives and foaming processes. The use of Additives is subject to the following:

- Do not use additives that reduce the mixing temperature more than allowed in Section 5-04.3(6) in the production of mixtures.
- Before using additives, obtain the Engineer’s approval using WSDOT Form 350-076 to describe the proposed additive and process.

5-04.3 Construction Requirements

5-04.3(1) Weather Limitations

Do not place HMA for wearing course on any Traveled Way beginning October 1st through March 31st of the following year without written concurrence from the Engineer.

Do not place HMA on any wet surface, or when the average surface temperatures are less than those specified below, or when weather conditions otherwise prevent the proper handling or finishing of the HMA.

Minimum Surface Temperature for Paving

Compacted Thickness (Feet)	Wearing Course	Other Courses
Less than 0.10	55°F	45°F
0.10 to .20	45°F	35°F
More than 0.20	35°F	35°F

5-04.3(2) Paving Under Traffic

When the Roadway being paved is open to traffic, the requirements of this Section shall apply.

The Contractor shall keep intersections open to traffic at all times except when paving the intersection or paving across the intersection. During such time, and provided that there has been an advance warning to the public, the intersection may be closed for the minimum time required to place and compact the mixture. In hot weather, the Engineer may require the application of water to the pavement to accelerate the finish rolling of the pavement and to shorten the time required before reopening to traffic.

Before closing an intersection, advance warning signs shall be placed, and signs shall also be placed marking the detour or alternate route.

During paving operations, temporary pavement markings shall be maintained throughout the project. Temporary pavement markings shall be installed on the Roadway prior to opening to traffic. Temporary pavement markings shall be in accordance with Section 8-23.

All costs in connection with performing the Work in accordance with these requirements shall be included in the unit Contract prices for the various Bid items involved in the Contract.

5-04.3(3) Equipment

5-04.3(3)A Mixing Plant

Plants used for the preparation of HMA shall conform to the following requirements:

1. **Equipment for Preparation of Asphalt Binder** – Tanks for the storage of asphalt binder shall be equipped to heat and hold the material at the required temperatures. The heating shall be accomplished by steam coils, electricity, or other approved means so that no flame shall be in contact with the storage tank. The circulating system for the asphalt binder shall be designed to ensure proper and continuous circulation during the operating period. A valve for the purpose of sampling the asphalt binder shall be placed in either the storage tank or in the supply line to the mixer.
2. **Thermometric Equipment** – An armored thermometer, capable of detecting temperature ranges expected in the HMA mix, shall be fixed in the asphalt binder feed line at a location near the charging valve at the mixer unit. The thermometer location shall be convenient and safe for access by Inspectors. The plant shall also be equipped with an approved dial-scale thermometer, a mercury actuated thermometer, an electric pyrometer, or another approved thermometric instrument placed at the discharge chute of the drier to automatically register or indicate the temperature of the heated aggregates. This device shall be in full view of the plant operator.
3. **Heating of Asphalt Binder** – The temperature of the asphalt binder shall not exceed the maximum recommended by the asphalt binder manufacturer nor shall it be below the minimum temperature required to maintain the asphalt binder in a homogeneous state. The asphalt binder shall be heated in a manner that will avoid local variations in heating. The heating method shall provide a continuous supply of asphalt binder to the mixer at a uniform average temperature with no individual variations exceeding 25°F. Also, when a WMA additive is included in the asphalt binder, the temperature of the asphalt binder shall not exceed the maximum recommended by the manufacturer of the WMA additive.
4. **Sampling and Testing of Mineral Materials** – The HMA plant shall be equipped with a mechanical sampler for the sampling of the mineral materials. The mechanical sampler shall meet the requirements of Section 1-05.6 for the crushing and screening operation. The Contractor shall

provide for the setup and operation of the field-testing facilities of the Contracting Agency as provided for in Section 3-01.2(2).

5. **Sampling HMA** – The HMA plant shall provide for sampling HMA by one of the following methods:
 - a. A mechanical sampling device attached to the HMA plant.
 - b. Platforms or devices to enable sampling from the hauling vehicle without entering the hauling vehicle.

5-04.3(3)B Hauling Equipment

Trucks used for hauling HMA shall have tight, clean, smooth metal beds and shall have a cover of canvas or other suitable material of sufficient size to protect the mixture from adverse weather. Whenever the weather conditions during the work shift include, or are forecast to include precipitation or an air temperature less than 45°F or when time from loading to unloading exceeds 30 minutes, the cover shall be securely attached to protect the HMA.

The Contractor shall provide an environmentally benign means to prevent the HMA mixture from adhering to the hauling equipment. Excess release agent shall be drained prior to filling hauling equipment with HMA. Petroleum derivatives or other coating material that contaminate or alter the characteristics of the HMA shall not be used. For live bed trucks, the conveyer shall be in operation during the process of applying the release agent.

5-04.3(3)C Pavers

HMA pavers shall be self-contained, power-propelled units, provided with an internally heated vibratory screed and shall be capable of spreading and finishing courses of HMA plant mix material in lane widths required by the paving section shown in the Plans.

The HMA paver shall be in good condition and shall have the most current equipment available from the manufacturer for the prevention of segregation of the HMA mixture installed, in good condition, and in working order. The equipment certification shall list the make, model, and year of the paver and any equipment that has been retrofitted.

The screed shall be operated in accordance with the manufacturer's recommendations and shall effectively produce a finished surface of the required evenness and texture without tearing, shoving, segregating, or gouging the mixture. A copy of the manufacturer's recommendations shall be provided upon request by the Contracting Agency. Extensions will be allowed provided they produce the same results, including ride, density, and surface texture as obtained by the primary screed. Extensions without augers and an internally heated vibratory screed shall not be used in the Traveled Way.

When specified in the Contract, reference lines for vertical control will be required. Lines shall be placed on both outer edges of the Traveled Way of each Roadway. Horizontal control utilizing the reference line will be permitted. The grade and slope for intermediate lanes shall be controlled automatically from reference lines or by means of a mat referencing device and a slope control device. When the finish of the grade prepared for paving is superior to the established tolerances and when, in the opinion of the Engineer, further improvement to the line, grade, cross-section, and smoothness can best be achieved without the use of the reference line, a mat referencing device may be substituted for the reference line. Substitution of the device will be subject to the continued approval of the Engineer. A joint matcher may be used subject to the approval of the Engineer. The reference line may be removed after the completion of the first course of HMA when approved by the Engineer. Whenever the Engineer determines that any of these methods are failing to provide the necessary vertical control, the reference lines will be reinstalled by the Contractor.

The Contractor shall furnish and install all pins, brackets, tensioning devices, wire, and accessories necessary for satisfactory operation of the automatic control equipment.

If the paving machine in use is not providing the required finish, the Engineer may suspend Work as allowed by Section 1-08.6. Any cleaning or solvent type liquids spilled on the pavement shall be thoroughly removed before paving proceeds.

5-04.3(3)D Material Transfer Device or Material Transfer Vehicle

A Material Transfer Device/Vehicle (MTD/V) shall only be used with the Engineer's approval, unless otherwise required by the Contract.

Where an MTD/V is required by the Contract, the Engineer may approve paving without an MTD/V, at the request of the Contractor. The Engineer will determine if an equitable adjustment in cost or time is due.

When used, the MTD/V shall mix the HMA after delivery by the hauling equipment and prior to laydown by the paving machine. Mixing of the HMA shall be sufficient to obtain a uniform temperature throughout the mixture. If a windrow elevator is used, the length of the windrow may be limited in urban areas or through intersections, at the discretion of the Engineer.

To be approved for use, an MTV:

1. Shall be self-propelled vehicle, separate from the hauling vehicle or paver.
2. Shall not be connected to the hauling vehicle or paver.

3. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.
4. Shall mix the HMA after delivery by the hauling equipment and prior to placement into the paving machine.
5. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the mixture.

To be approved for use, an MTD:

1. Shall be positively connected to the paver.
2. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.
3. Shall mix the HMA after delivery by the hauling equipment and prior to placement into the paving machine.
4. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the mixture.

5-04.3(3)E Rollers

Rollers shall be of the steel wheel, vibratory, oscillatory, or pneumatic tire type, in good condition and capable of reversing without backlash. Operation of the roller shall be in accordance with the manufacturer's recommendations. When ordered by the Engineer for any roller planned for use on the project, the Contractor shall provide a copy of the manufacturer's recommendation for the use of that roller for compaction of HMA. The number and weight of rollers shall be sufficient to compact the mixture in compliance with the requirements of Section 5-04.3(10). The use of equipment that results in crushing of the aggregate will not be permitted. Rollers producing pickup, washboard, uneven compaction of the surface, displacement of the mixture or other undesirable results shall not be used.

5-04.3(4) Preparation of Existing Paved Surfaces

When the surface of the existing pavement or old base is irregular, the Contractor shall bring it to a uniform grade and cross-section as shown on the Plans or approved by the Engineer.

Preleveling of uneven or broken surfaces over which HMA is to be placed may be accomplished by using an asphalt paver, a motor patrol grader, or by hand raking, as approved by the Engineer.

Compaction of preleveling HMA shall be to the satisfaction of the Engineer and may require the use of small steel wheel rollers, plate compactors, or pneumatic rollers to avoid bridging across preleveled areas by the compaction equipment. Equipment used for the compaction of preleveling HMA shall be approved by the Engineer.

Before construction of HMA on an existing paved surface, the entire surface of the pavement shall be clean. All fatty asphalt patches, grease drippings, and other objectionable matter shall be entirely removed from the existing pavement. All pavements or bituminous surfaces shall be thoroughly cleaned of dust, soil, pavement grindings, and other foreign matter. All holes and small depressions shall be filled with an appropriate class of HMA. The surface of the patched area shall be leveled and compacted thoroughly. Prior to the application of tack coat, or paving, the condition of the surface shall be approved by the Engineer.

A tack coat of asphalt shall be applied to all paved surfaces on which any course of HMA is to be placed or abutted; except that tack coat may be omitted from clean, newly paved surfaces at the discretion of the Engineer. Tack coat shall be uniformly applied to cover the existing pavement with a thin film of residual asphalt free of streaks and bare spots at a rate between 0.02 and 0.10 gallons per square yard of retained asphalt. The rate of application shall be approved by the Engineer. A heavy application of tack coat shall be applied to all joints. For Roadways open to traffic, the application of tack coat shall be limited to surfaces that will be paved during the same working shift. The spreading equipment shall be equipped with a thermometer to indicate the temperature of the tack coat material.

Equipment shall not operate on tacked surfaces until the tack has broken and cured. If the Contractor's operation damages the tack coat it shall be repaired prior to placement of the HMA.

The tack coat shall be CSS-1, or CSS-1h emulsified asphalt. The CSS-1 and CSS-1h emulsified asphalt may be diluted once with water at a rate not to exceed one-part water to one-part emulsified asphalt. The tack coat shall have sufficient temperature such that it may be applied uniformly at the specified rate of application and shall not exceed the maximum temperature recommended by the emulsified asphalt manufacturer.

5-04.3(4)A Crack Sealing

When the Proposal includes a pay item for crack sealing, seal cracks in accordance with Section 5-03.

5-04.3(4)B Vacant

5-04.3(4)C Pavement Repair

The Contractor shall excavate pavement repair areas and shall backfill these with HMA in accordance with the details shown in the Plans and as marked in the field. The Contractor shall conduct the excavation operations in a manner that will protect the pavement that is to remain. Pavement not designated to be removed that is damaged as a result of the Contractor's operations shall be repaired by the Contractor to the satisfaction of the Engineer at no cost to the Contracting Agency. The Contractor shall excavate only within one lane at a time unless approved otherwise by the Engineer. The Contractor shall not excavate more area than can be completely finished during the same shift, unless approved by the Engineer.

Unless otherwise shown in the Plans or determined by the Engineer, excavate to a depth of 1.0 feet. The Engineer will make the final determination of the excavation depth required. The minimum width of any pavement repair area shall be 40 inches unless shown otherwise in the Plans. Before any excavation, the existing pavement shall be sawcut or shall be removed by a pavement grinder. Excavated materials will become the property of the Contractor and shall be disposed of in a Contractor-provided site off the Right of Way or used in accordance with Sections 2-02.3(3) or 9-03.21.

Asphalt for tack coat shall be required as specified in Section 5-04.3(4). A heavy application of tack coat shall be applied to all surfaces of existing pavement in the pavement repair area.

Placement of the HMA backfill shall be accomplished in lifts not to exceed 0.35-foot compacted depth. Lifts that exceed 0.35-foot of compacted depth may be accomplished with the approval of the Engineer. Each lift shall be thoroughly compacted by a mechanical tamper or a roller.

5-04.3(5) Producing/Stockpiling Aggregates and RAP

Aggregates and RAP shall be stockpiled according to the requirements of Section 3-02. Sufficient storage space shall be provided for each size of aggregate and RAP. Materials shall be removed from stockpile(s) in a manner to ensure minimal segregation when being moved to the HMA plant for processing into the final mixture. Different aggregate sizes shall be kept separated until they have been delivered to the HMA plant.

5-04.3(5)A Vacant

5-04.3(6) Mixing

After the required amount of mineral materials, asphalt binder, recycling agent and anti-stripping additives have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials is ensured.

When discharged, the temperature of the HMA shall not exceed the optimum mixing temperature by more than 25°F as shown on the reference mix design report or as approved by the Engineer. Also, when a WMA additive is included in the manufacture of HMA, the discharge temperature of the HMA shall not exceed the maximum recommended by the manufacturer of the WMA additive. A maximum water content of 2 percent in the mix, at discharge, will be allowed providing the water causes no problems with handling, stripping, or flushing. If the water in the HMA causes any of these problems, the moisture content shall be reduced as directed by the Engineer.

Storing or holding of the HMA in approved storage facilities will be permitted with approval of the Engineer, but in no event shall the HMA be held for more than 24 hours. HMA held for more than 24 hours after mixing shall be rejected. Rejected HMA shall be disposed of by the Contractor at no expense to the Contracting Agency. The storage facility shall have an accessible device located at the top of the cone or about the third point. The device shall indicate the amount of material in storage. No HMA shall be accepted from the storage facility when the HMA in storage is below the top of the cone of the storage facility, except as the storage facility is being emptied at the end of the working shift.

Recycled asphalt pavement (RAP) utilized in the production of HMA shall be sized prior to entering the mixer so that a uniform and thoroughly mixed HMA is produced. If there is evidence of the recycled asphalt pavement not breaking down during the heating and mixing of the HMA, the Contractor shall immediately suspend the use of the RAP until changes have been approved by the Engineer. After the required amount of mineral materials, RAP, new asphalt binder and asphalt rejuvenator have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials, and RAP is ensured.

5-04.3(7) Spreading and Finishing

The mixture shall be laid upon an approved surface, spread, and struck off to the grade and elevation established. HMA pavers complying with Section 5-04.3(3) shall be used to distribute the mixture. Unless otherwise directed by the Engineer, the nominal compacted depth of any layer of any course shall not exceed the following:

HMA Class 1"	0.35 feet
HMA Class ¾" and HMA Class ½"	
wearing course	0.30 feet
other courses	0.35 feet
HMA Class ⅜"	0.15 feet

On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the paving may be done with other equipment or by hand.

When more than one JMF is being utilized to produce HMA, the material produced for each JMF shall be placed by separate spreading and compacting equipment. The intermingling of HMA produced from more than one JMF is prohibited. Each strip of HMA placed during a work shift shall conform to a single JMF established for the class of HMA specified unless there is a need to make an adjustment in the JMF.

5-04.3(8) Aggregate Acceptance Prior to Incorporation in HMA

For HMA accepted by nonstatistical evaluation, the aggregate properties of sand equivalent, uncompacted void content, and fracture will be evaluated in accordance with Section 3-04. Sampling and testing of aggregates for HMA accepted by commercial evaluation will be at the option of the Engineer.

5-04.3(9) HMA Mixture Acceptance

Acceptance of HMA shall be as provided under nonstatistical, or commercial evaluation.

Nonstatistical evaluation will be used for the acceptance of HMA unless Commercial Evaluation is specified.

Commercial evaluation will be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, temporary pavement, and pavement repair. Other nonstructural applications of HMA accepted by commercial evaluation shall be as approved by the Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Engineer.

The mix design will be the initial JMF for the class of HMA. The Contractor may request a change in the JMF. Any adjustments to the JMF will require the approval of the Engineer and may be made in accordance with this section.

HMA Tolerances and Adjustments

1. **Job Mix Formula Tolerances** – The constituents of the mixture at the time of acceptance shall be within tolerance. The tolerance limits will be established as follows:

For Asphalt Binder and Air Voids (V_a), the acceptance limits are determined by adding the tolerances below to the approved JMF values. These values will also be the Upper Specification Limit (USL) and Lower Specification Limit (LSL) required in Section 1-06.2(2)D2

Property	Non-Statistical Evaluation	Commercial Evaluation
Asphalt Binder	+/- 0.5%	+/- 0.7%
Air Voids, Va	2.5% min. and 5.5% max	N/A

For Aggregates in the mixture:

- a. First, determine preliminary upper and lower acceptance limits by applying the following tolerances to the approved JMF.

Aggregate Percent Passing	Non-Statistical Evaluation	Commercial Evaluation
1", ¾", ½", and 3/8" sieves	+/- 6%	+/- 8%
No. 4 sieve	+/-6%	+/- 8%
No. 8 Sieve	+/- 6%	+/-8%
No. 200 sieve	+/- 2.0%	+/- 3.0%

- b. Second, adjust the preliminary upper and lower acceptance limits determined from step (a) the minimum amount necessary so that none of the aggregate properties are outside the control points in Section 9-03.8(6). The resulting values will be the upper and lower acceptance limits for aggregates, as well as the USL and LSL required in Section 1-06.2(2)D2.

2. Job Mix Formula Adjustments – An adjustment to the aggregate gradation or asphalt binder content of the JMF requires approval of the Engineer. Adjustments to the JMF will only be considered if the change produces material of equal or better quality and may require the development of a new mix design if the adjustment exceeds the amounts listed below.
- a. **Aggregates** –2 percent for the aggregate passing the 1½", 1", ¾", ½", ⅜", and the No. 4 sieves, 1 percent for aggregate passing the No. 8 sieve, and 0.5 percent for the aggregate passing the No. 200 sieve. The adjusted JMF shall be within the range of the control points in Section 9-03.8(6).
- b. **Asphalt Binder Content** – The Engineer may order or approve changes to asphalt binder content. The maximum adjustment from the approved mix design for the asphalt binder content shall be 0.3 percent.

5-04.3(9)A Vacant

5-04.3(9)B Vacant

5-04.3(9)C Mixture Acceptance – Nonstatistical Evaluation

HMA mixture which is accepted by Nonstatistical Evaluation will be evaluated by the Contracting Agency by dividing the HMA tonnage into lots.

5-04.3(9)C1 Mixture Nonstatistical Evaluation – Lots and Sublots

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A subplot shall be equal to one day's production or 800 tons, whichever is less except that the final subplot will be a minimum of 400 tons and may be increased to 1200 tons.

All of the test results obtained from the acceptance samples from a given lot shall be evaluated collectively. If the Contractor requests a change to the JMF that is approved, the material produced after the change will be evaluated on the basis of the new JMF for the remaining sublots in the current lot and for acceptance of subsequent lots. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

Sampling and testing for evaluation shall be performed on the frequency of one sample per subplot.

5-04.3(9)C2 Mixture Nonstatistical Evaluation Sampling

Samples for acceptance testing shall be obtained by the Contractor when ordered by the Engineer. The Contractor shall sample the HMA mixture in the presence of the Engineer and in accordance with AASH-TO T 168. A minimum of three samples should be taken for each class of HMA placed on a project. If used in a structural application, at least one of the three samples shall be tested.

Sampling and testing HMA in a structural application where quantities are less than 400 tons is at the discretion of the Engineer.

For HMA used in a structural application and with a total project quantity less than 800 tons but more than 400 tons, a minimum of one acceptance test shall be performed. In all cases, a minimum of 3 samples will be obtained at the point of acceptance, a minimum of one of the three samples will be tested for conformance to the JMF:

- If the test results are found to be within specification requirements, additional testing will be at the Engineer's discretion.
- If test results are found not to be within specification requirements, additional testing of the remaining samples to determine a CPF shall be performed.

5-04.3(9)C3 Mixture Nonstatistical Evaluation – Acceptance Testing

Testing of HMA for compliance of V_a will at the option of the Contracting Agency. If tested, compliance of V_a will use WSDOT SOP 731.

Testing for compliance of asphalt binder content will be by WSDOT FOP for AASHTO T 308.

Testing for compliance of gradation will be by FOP for WAQTC T 27/T 11.

5-04.3(9)C4 Mixture Nonstatistical Evaluation – Pay Factors

For each lot of material falling outside the tolerance limits in 5-04.3(9), the Contracting Agency will determine a CPF using the following price adjustment factors:

Table of Price Adjustment Factors	
Constituent	Factor “f”
All aggregate passing: 1½", 1", ¾", ½", ⅜" and No.4 sieves	2
All aggregate passing No. 8 sieve	15
All aggregate passing No. 200 sieve	20
Asphalt binder	40
Air Voids (V_a) (where applicable)	20

Each lot of HMA produced under Nonstatistical Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the nonstatistical tolerance limits in the Job Mix Formula shown in Table of Price Adjustment Factors, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The nonstatistical tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the Roadway shall be tested to provide a minimum of three sets of results for evaluation.

5-04.3(9)C5 Vacant

5-04.3(9)C6 Mixture Nonstatistical Evaluation – Price Adjustments

For each lot of HMA mix produced under Nonstatistical Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The total job mix compliance price adjustment will be calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

If a constituent is not measured in accordance with these Specifications, its individual pay factor will be considered 1.00 in calculating the CPF.

5-04.3(9)C7 Mixture Nonstatistical Evaluation - Retests

The Contractor may request a subplot be retested. To request a retest, the Contractor shall submit a written request within 7 calendar days after the specific test results have been received. A split of the original acceptance sample will be retested. The split of the sample will not be tested with the same tester that ran the original acceptance test. The sample will be tested for a complete gradation analysis, asphalt binder content, and, at the option of the agency, V_a . The results of the retest will be used for the acceptance of the HMA in place of the original subplot sample test results. The cost of testing will be deducted from any monies due or that may come due the Contractor under the Contract at the rate of \$500 per sample.

5-04.3 (9)D Mixture Acceptance – Commercial Evaluation

If sampled and tested, HMA produced under Commercial Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the commercial tolerance limits in the Job Mix Formula shown in 5-04.3(9), the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The commercial tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the street shall be tested to provide a minimum of three sets of results for evaluation.

For each lot of HMA mix produced and tested under Commercial Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The Job Mix Compliance Price Adjustment will be calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

If a constituent is not measured in accordance with these Specifications, its individual pay factor will be considered 1.00 in calculating the CPF.

5-04.3(10) HMA Compaction Acceptance

HMA mixture accepted by nonstatistical evaluation that is used in traffic lanes, including lanes for intersections, ramps, truck climbing, weaving, and speed change, and having a specified compacted course thickness greater than 0.10-foot, shall be compacted to a specified level of relative density. The specified level of relative density shall be a CPF of not less than 0.75 when evaluated in accordance with Section 1-06.2, using a LSL of 92.0 (minimum of 92 percent of the maximum density). The maximum density shall be determined by WSDOT

FOP for AASHTO T 729. The specified level of density attained will be determined by the evaluation of the density of the pavement. The density of the pavement shall be determined in accordance with WSDOT FOP for WAQTC TM 8, except that gauge correlation will be at the discretion of the Engineer, when using the nuclear density gauge and WSDOT SOP 736 when using cores to determine density.

Tests for the determination of the pavement density will be taken in accordance with the required procedures for measurement by a nuclear density gauge or Roadway cores after completion of the finish rolling.

If the Contracting Agency uses a nuclear density gauge to determine density the test procedures FOP for WAQTC TM 8 and WSDOT SOP T 729 will be used on the day the mix is placed and prior to opening to traffic.

Roadway cores for density may be obtained by either the Contracting Agency or the Contractor in accordance with WSDOT SOP 734. The core diameter shall be 4-inches minimum, unless otherwise approved by the Engineer. Roadway cores will be tested by the Contracting Agency in accordance with WSDOT FOP for AASHTO T 166.

If the Contract includes the Bid item "Roadway Core", the cores shall be obtained by the Contractor in the presence of the Engineer on the same day the mix is placed and at locations designated by the Engineer. If the Contract does not include the Bid item "Roadway Core", the Contracting Agency will obtain the cores.

For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

HMA for preleveling shall be thoroughly compacted. HMA that is used for preleveling wheel rutting shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

Test Results

For a subplot that has been tested with a nuclear density gauge that did not meet the minimum of 92 percent of the reference maximum density in a compaction lot with a CPF below 1.00 and thus subject to a price reduction or rejection, the

Contractor may request that a core be used for determination of the relative density of the subplot. The relative density of the core will replace the relative density determined by the nuclear density gauge for the subplot and will be used for calculation of the CPF and acceptance of HMA compaction lot.

When cores are taken by the Contracting Agency at the request of the Contractor, they shall be requested by noon of the next workday after the test results for the subplot have been provided or made available to the Contractor. Core locations shall be outside of wheel paths and as determined by the Engineer. Traffic control shall be provided by the Contractor as requested by the Engineer. Failure by the Contractor to provide the requested traffic control will result in forfeiture of the request for cores. When the CPF for the lot based on the results of the HMA cores is less than 1.00, the cost for the coring will be deducted from any monies due or that may become due the Contractor under the Contract at the rate of \$200 per core and the Contractor shall pay for the cost of the traffic control.

5-04.3(10)A HMA Compaction – General Compaction Requirements

Compaction shall take place when the mixture is in the proper condition so that no undue displacement, cracking, or shoving occurs. Areas inaccessible to large compaction equipment shall be compacted by other mechanical means. Any HMA that becomes loose, broken, contaminated, shows an excess or deficiency of asphalt, or is in any way defective, shall be removed and replaced with new hot mix that shall be immediately compacted to conform to the surrounding area.

The type of rollers to be used and their relative position in the compaction sequence shall generally be the Contractor's option, provided the specified densities are attained. Unless the Engineer has approved otherwise, rollers shall only be operated in the static mode when the internal temperature of the mix is less than 175°F. Regardless of mix temperature, a roller shall not be operated in a mode that results in checking or cracking of the mat. Rollers shall only be operated in static mode on bridge decks.

5-04.3(10)B HMA Compaction - Cyclic Density

Low cyclic density areas are defined as spots or streaks in the pavement that are less than 90 percent of the theoretical maximum density. At the Engineer's discretion, the Engineer may evaluate the HMA pavement for low cyclic density, and when doing so will follow WSDOT SOP 733. A \$500 Cyclic Density Price Adjustment will be assessed for any 500-foot section with two or more density readings below 90 percent of the theoretical maximum density.

5-04.3(10)C Vacant

5-04.3(10)D HMA Nonstatistical Compaction

5-04.3(10)D1 HMA Nonstatistical Compaction - Lots and Sublots

HMA compaction which is accepted by nonstatistical evaluation will be based on acceptance testing performed by the Contracting Agency dividing the project into compaction lots.

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A subplot shall be equal to one day's production or 400 tons, whichever is less except that the final subplot will be a minimum of 200 tons and may be increased to 800 tons. Testing for compaction will be at the rate of 5 tests per subplot per WSDOT T 738.

The subplot locations within each density lot will be determined by the Engineer. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

HMA for preleveling shall be thoroughly compacted. HMA that is used to prelevel wheel ruts shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

5-04.3(10)D2 HMA Compaction Nonstatistical Evaluation – Acceptance Testing

The location of the HMA compaction acceptance tests will be randomly selected by the Engineer from within each subplot, with one test per subplot.

5-04.3(10)D3 HMA Nonstatistical Compaction – Price Adjustments

For each compaction lot with one or two sublots, having all sublots attain a relative density that is 92 percent of the reference maximum density the HMA shall be accepted at the unit Contract price with no further evaluation. When a subplot does not attain a relative density that is 92 percent of the reference maximum density, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The maximum CPF shall be 1.00, however, lots with a calculated CPF in excess of 1.00 will be used to offset lots with CPF values below 1.00 but greater than 0.90. Lots with CPF lower than 0.90 will be evaluated for compliance per 5-04.3(11). Additional testing by either a nuclear

moisture-density gauge or cores will be completed as required to provide a minimum of three tests for evaluation.

For compaction below the required 92%, a Non-Conforming Compaction Factor (NCCF) will be determined. The NCCF equals the algebraic difference of CPF minus 1.00 multiplied by 40 percent. The Compaction Price Adjustment will be calculated as the product of CPF, the quantity of HMA in the compaction control lot in tons, and the unit Contract price per ton of mix.

5-04.3(11) Reject Work

5-04.3(11)A Reject Work General

Work that is defective or does not conform to Contract requirements shall be rejected. The Contractor may propose, in writing, alternatives to removal and replacement of rejected material. Acceptability of such alternative proposals will be determined at the sole discretion of the Engineer. HMA that has been rejected is subject to the requirements in Section 1-06.2(2) and this specification, and the Contractor shall submit a corrective action proposal to the Engineer for approval.

5-04.3(11)B Rejection by Contractor

The Contractor may, prior to sampling, elect to remove any defective material and replace it with new material. Any such new material will be sampled, tested, and evaluated for acceptance.

5-04.3(11)C Rejection Without Testing (Mixture or Compaction)

The Engineer may, without sampling, reject any batch, load, or section of Roadway that appears defective. Material rejected before placement shall not be incorporated into the pavement. Any rejected section of Roadway shall be removed.

No payment will be made for the rejected materials or the removal of the materials unless the Contractor requests that the rejected material be tested. If the Contractor elects to have the rejected material tested, a minimum of three representative samples will be obtained and tested. Acceptance of rejected material will be based on conformance with the nonstatistical acceptance Specification. If the CPF for the rejected material is less than 0.75, no payment will be made for the rejected material; in addition, the cost of sampling and testing shall be borne by the Contractor. If the CPF is greater than or equal to 0.75, the cost of sampling and testing will be borne by the Contracting Agency. If the material is rejected before placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at a CPF of 0.75. If rejection occurs after placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at the calculated CPF with an addition of 25 percent of the unit Contract price added for the cost of removal and disposal.

5-04.3(11)D Rejection - A Partial Sublot

In addition to the random acceptance sampling and testing, the Engineer may also isolate from a normal sublot any material that is suspected of being defective in relative density, gradation or asphalt binder content. Such isolated material will not include an original sample location. A minimum of three random samples of the suspect material will be obtained and tested. The material will then be statistically evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)E Rejection - An Entire Sublot

An entire sublot that is suspected of being defective may be rejected. When a sublot is rejected a minimum of two additional random samples from this sublot will be obtained. These additional samples and the original sublot will be evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)F Rejection - A Lot in Progress

The Contractor shall shut down operations and shall not resume HMA placement until such time as the Engineer is satisfied that material conforming to the Specifications can be produced:

1. When the CPF of a lot in progress drops below 1.00 and the Contractor is taking no corrective action, or
2. When the Pay Factor (PF) for any constituent of a lot in progress drops below 0.95 and the Contractor is taking no corrective action, or
3. When either the PF for any constituent or the CPF of a lot in progress is less than 0.75.

5-04.3(11)G Rejection - An Entire Lot (Mixture or Compaction)

An entire lot with a CPF of less than 0.75 will be rejected.

5-04.3(12) Joints

5-04.3(12)A HMA Joints

5-04.3(12)A1 Transverse Joints

The Contractor shall conduct operations such that the placing of the top or wearing course is a continuous operation or as close to continuous as possible. Unscheduled transverse joints will be allowed, and the roller may pass over the unprotected end of the freshly laid mixture only when the placement of the course must be discontinued for such a length of time that the mixture will cool below compaction temperature. When the Work is resumed, the previously compacted mixture shall be cut back to produce a slightly beveled edge for the full thickness of the course.

A temporary wedge of HMA constructed on a 20H:1V shall be constructed where a transverse joint as a result of paving or planing is open to traffic. The HMA in the temporary wedge shall be separated from the permanent HMA by strips of heavy wrapping paper or other methods approved by the Engineer. The wrapping paper shall be removed and the joint trimmed to a slightly beveled edge for the full thickness of the course prior to resumption of paving.

The material that is cut away shall be wasted and new mix shall be laid against the cut. Rollers or tamping irons shall be used to seal the joint.

5-04.3(12)A2 Longitudinal Joints

The longitudinal joint in any one course shall be offset from the course immediately below by not more than 6 inches nor less than 2 inches. All longitudinal joints constructed in the wearing course shall be located at a lane line or an edge line of the Traveled Way. A notched wedge joint shall be constructed along all longitudinal joints in the wearing surface of new HMA unless otherwise approved by the Engineer. The notched wedge joint shall have a vertical edge of not less than the maximum aggregate size or more than $\frac{1}{2}$ of the compacted lift thickness and then taper down on a slope not steeper than 4H:1V. The sloped portion of the HMA notched wedge joint shall be uniformly compacted.

5-04.3(12)B Bridge Paving Joint Seals

Bridge Paving Joint Seals shall be in accordance with Section 5-03.

5-04.3(13) Surface Smoothness

The completed surface of all courses shall be of uniform texture, smooth, uniform as to crown and grade, and free from defects of all kinds. The completed surface of the wearing course shall not vary more than $\frac{1}{8}$ inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline. The transverse slope of the completed surface of the wearing course shall vary not more than $\frac{1}{4}$ inch in 10 feet from the rate of transverse slope shown in the Plans.

When deviations in excess of the above tolerances are found that result from a high place in the HMA, the pavement surface shall be corrected by one of the following methods:

1. Removal of material from high places by grinding with an approved grinding machine, or
2. Removal and replacement of the wearing course of HMA, or
3. By other method approved by the Engineer.

Correction of defects shall be carried out until there are no deviations anywhere greater than the allowable tolerances.

Deviations in excess of the above tolerances that result from a low place in the HMA and deviations resulting from a high place where corrective action, in the opinion of the Engineer, will not produce satisfactory results will be accepted with a price adjustment. The Engineer shall deduct from monies due or that may become due to the Contractor the sum of \$500.00 for each and every section of single traffic lane 100 feet in length in which any excessive deviations described above are found.

When utility appurtenances such as manhole covers and valve boxes are located in the traveled way, the utility appurtenances shall be adjusted to the finished grade prior to paving. This requirement may be waived when requested by the Contractor, at the discretion of the Engineer or when the adjustment details provided in the project plan or specifications call for utility appurtenance adjustments after the completion of paving.

Utility appurtenance adjustment discussions will be included in the Pre-Paving and Pre-Planing Briefing (5-04.3(14)B3). Submit a written request to waive this requirement to the Engineer prior to the start of paving.

5-04.3(14) Planing Bituminous Pavement

The planing plan must be approved by the Engineer and a pre-planing meeting must be held prior to the start of any planing. See Section 5-04.3(14)B2 for information on planing submittals.

Where planing an existing pavement is specified in the Contract, the Contractor must remove existing surfacing material and to reshape the surface to remove irregularities. The finished product must be a prepared surface acceptable for receiving an HMA overlay.

Use the cold milling method for planing unless otherwise specified in the Contract. Do not use the planer on the final wearing course of new HMA.

Conduct planing operations in a manner that does not tear, break, burn, or otherwise damage the surface which is to remain. The finished planed surface must be slightly grooved or roughened and must be free from gouges, deep grooves, ridges, or other imperfections. The Contractor must repair any damage to the surface by the Contractor's planing equipment, using an Engineer approved method.

Repair or replace any metal castings and other surface improvements damaged by planing, as determined by the Engineer.

A tapered wedge cut must be planed longitudinally along curb lines sufficient to provide a minimum of 4 inches of curb reveal after placement and compaction of

the final wearing course. The dimensions of the wedge must be as shown on the Drawings or as specified by the Engineer.

A tapered wedge cut must also be made at transitions to adjoining pavement surfaces (meet lines) where butt joints are shown on the Drawings. Cut butt joints in a straight line with vertical faces 2 inches or more in height, producing a smooth transition to the existing adjoining pavement.

After planing is complete, planed surfaces must be swept, cleaned, and if required by the Contract, patched and preleveled.

The Engineer may direct additional depth planing. Before performing this additional depth planing, the Contractor must conduct a hidden metal in pavement detection survey as specified in Section 5-04.3(14)A.

5-04.3(14)A Pre-Planing Metal Detection Check

Before starting planing of pavements, and before any additional depth planing required by the Engineer, the Contractor must conduct a physical survey of existing pavement to be planed with equipment that can identify hidden metal objects.

Should such metal be identified, promptly notify the Engineer.

See Section 1-07.16(1) regarding the protection of survey monumentation that may be hidden in pavement.

The Contractor is solely responsible for any damage to equipment resulting from the Contractor's failure to conduct a pre-planing metal detection survey, or from the Contractor's failure to notify the Engineer of any hidden metal that is detected.

5-04.3(14)B Paving and Planing Under Traffic

5-04.3(14)B1 General

In addition, the requirements of Section 1-07.23 and the traffic controls required in Section 1-10, and unless the Contract specifies otherwise or the Engineer approves, the Contractor must comply with the following:

1. Intersections:
 - a. Keep intersections open to traffic at all times, except when paving or planing operations through an intersection requires closure. Such closure must be kept to the minimum time required to place and compact the HMA mixture, or plane as appropriate. For paving, schedule such closure to individual lanes or portions thereof that allows the traffic volumes and schedule of traffic volumes required in

the approved traffic control plan. Schedule work so that adjacent intersections are not impacted at the same time and comply with the traffic control restrictions required by the Traffic Engineer. Each individual intersection closure or partial closure must be addressed in the traffic control plan, which must be submitted to and accepted by the Engineer, see Section 1-10.2(2).

- b. When planing or paving and related construction must occur in an intersection, consider scheduling and sequencing such work into quarters of the intersection, or half or more of an intersection with side street detours. Be prepared to sequence the work to individual lanes or portions thereof.
 - c. Should closure of the intersection in its entirety be necessary, and no trolley service is impacted, keep such closure to the minimum time required to place and compact the HMA mixture, plane, remove asphalt, tack coat, and as needed.
 - d. Any work in an intersection requires advance warning in both signage and a number of Working Days advance notice as determined by the Engineer, to alert traffic and emergency services of the intersection closure or partial closure.
 - e. Allow new compacted HMA asphalt to cool to ambient temperature before any traffic is allowed on it. Traffic is not allowed on newly placed asphalt until approval has been obtained from the Engineer.
2. Temporary centerline marking, post-paving temporary marking, temporary stop bars, and maintaining temporary pavement marking must comply with Section 8-23.
 3. Permanent pavement marking must comply with Section 8-22.

5-04.3(14)B2 Submittals - Planing Plan and HMA Paving Plan

The Contractor must submit a separate planing plan and a separate paving plan to the Engineer at least 5 Working Days in advance of each operation's activity start date. These plans must show how the moving operation and traffic control are coordinated, as they will be discussed at the pre-planing briefing and pre-paving briefing. When requested by the Engineer, the Contractor must provide each operation's traffic control plan on 24 x 36 inch or larger size Shop Drawings with a scale showing both the area of operation and sufficient detail of traffic beyond the area of operation where detour traffic may be required. The scale on the Shop Drawings is 1 inch = 20 feet, which may be changed if the Engineer agrees sufficient detail is shown.

The planing operation and the paving operation include, but are not limited to, metal detection, removal of asphalt and temporary asphalt of any kind, tack coat and drying, staging of supply trucks, paving trains, rolling, scheduling, and as may be discussed at the briefing.

When intersections will be partially or totally blocked, provide adequately sized and noticeable signage alerting traffic of closures to come, a minimum 2 Working Days in advance. The traffic control plan must show where police officers will be stationed when signalization is or may be, countermanded, and show areas where flaggers are proposed.

At a minimum, the planing and the paving plan must include:

1. A copy of the accepted traffic control plan, see Section 1-10.2(2), detailing each day's traffic control as it relates to the specific requirements of that day's planing and paving. Briefly describe the sequencing of traffic control consistent with the proposed planing and paving sequence, and scheduling of placement of temporary pavement markings and channelizing devices after each day's planing, and paving.
2. A copy of each intersection's traffic control plan.
3. Haul routes from supplier facilities, and locations of temporary parking and staging areas, including return routes. Describe the complete round trip as it relates to the sequencing of paving operations.
4. Names and locations of HMA supplier facilities to be used.
5. List of all equipment to be used for paving.
6. List of personnel and associated job classification assigned to each piece of paving equipment.
7. Description (geometric or narrative) of the scheduled sequence of planing and of paving and intended area of planing and of paving for each day's work, must include the directions of proposed planing and of proposed paving, sequence of adjacent lane paving, sequence of skipped lane paving, intersection planing and paving scheduling and sequencing, and proposed notifications and coordination to be timely made. The plan must show HMA joints relative to the final pavement marking lane lines.
8. Names, job titles, and contact information for field, office, and plant supervisory personnel.
9. A copy of the approved Mix Designs.

10. Tonnage of HMA to be placed each day.

11. Approximate times and days for starting and ending daily operations.

5-04.3(14)B3 Pre-Paving and Pre-Planing Briefing

At least 2 Working Days before the first paving operation and the first planing operation, or as scheduled by the Engineer for future paving and planing operations to ensure the Contractor has adequately prepared for notifying and coordinating as required in the Contract, the Contractor must be prepared to discuss that day's operations as they relate to other entities and to public safety and convenience, including driveway and business access, garbage truck operations, transit operations and working around energized overhead wires, school and nursing home and hospital and other accesses, other Contractors who may be operating in the area, pedestrian and bicycle traffic, and emergency services. The Contractor, and Subcontractors that may be part of that day's operations, must meet with the Engineer and discuss the proposed operation as it relates to the submitted planing plan and paving plan, approved traffic control plan, and public convenience and safety. Such discussion includes, but is not limited to:

1. General for both the Paving and Planing:
 - a. The actual times of starting and ending daily operations.
 - b. In intersections, how to break up the intersection, and address traffic control and signalization for that operation, including use of peace officers.
 - c. The sequencing and scheduling of paving operations and of planing operations, as applicable, as it relates to traffic control, public convenience and safety, and other Contractors who may operate in the Project limits.
 - d. Notifications required of Contractor activities and coordinating with other entities and the public as necessary.
 - e. Description of the sequencing of installation and types of temporary pavement markings as it relates to planning and paving.
 - f. Description of the sequencing of installation of, and the removal of, temporary pavement patch material around exposed castings and as may be needed.
 - g. Description of procedures and equipment to identify hidden metal in the pavement, such as survey monumentation, monitoring wells,

streetcar rail, and castings, before planing as per Section 5-04.3(14)B2.

- h. Description of how flaggers will be coordinated with the planing, paving, and related operations.
 - i. Description of sequencing of traffic controls for the process of rigid pavement base repairs.
 - j. Other items the Engineer deems necessary to address.
2. Paving – additional topics:
- a. When to start applying tack and coordinating with paving.
 - b. Types of equipment and numbers of each type of equipment to be used. If more pieces of equipment than personnel are proposed, describe the sequencing of the personnel operating the types of equipment. Discuss the continuance of operator personnel for each type of equipment as it relates to meeting Specification requirements.
 - c. Number of JMFs to be placed, and if more than one JMF is used, how the Contractor will ensure different JMFs are distinguished, how pavers and how MTVs are distinguished, and how pavers and MTVs are cleaned so that one JMF does not adversely influence the other JMF.
 - d. Description of contingency plans for that day's operations such as equipment breakdown, rain out, and supplier shutdown of operations.
 - e. Number of sublots to be placed, sequencing of density testing, and other sampling and testing.

5-04.3(15) Sealing Pavement Surfaces

Apply a fog seal where shown in the plans. Construct the fog seal in accordance with Section 5-02.3. Unless otherwise approved by the Engineer, apply the fog seal prior to opening to traffic.

5-04.3(16) HMA Road Approaches

Construct HMA approaches at the locations shown in the Plans or where staked by the Engineer, in accordance with Section 5-04.

5-04.4 Measurement

HMA CL. 1/2 IN. PG 58H-22 will be measured by the ton in accordance with Section 1-09.2, with no deduction being made for the weight of asphalt binder, mineral filler, or any other component of the mixture. If the Contractor elects to remove and replace mix as allowed by Section 5-04.3(11), the material removed will not be measured.

Planing bituminous pavement will be measured by the square yard.

Temporary pavement marking will not be measured. All costs for providing and removal of temporary pavement marking shall be included the unit contract price per ton for HMA Class ½ inch PG 64-22 shown in the proposal.

5-04.5 Payment

Payment will be made for each of the following Bid items that are included in the Proposal:

“HMA CL. 1/2 IN. PG 58H-22”, per ton.

The unit Contract price per ton for “HMA CL. 1/2 IN. PG 58H-22” shall be full compensation for all costs, including anti-stripping additive, incurred to carry out the requirements of Section 5-04 except for those costs included in other items which are included in this Subsection and which are included in the Proposal.

“Planing Bituminous Pavement”, per square yard.

The unit Contract price per square yard for “Planing Bituminous Pavement” shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(14).

END OF DIVISION 5

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DIVISION 6 STRUCTURES

6-11 REINFORCED CONCRETE WALLS

6-11.1 Description

Section 6-11.1 is supplemented with the following:

This work also includes construction of the Outfall Pipe Anchor within the proposed catch basin, the cutoff wall along the pipe towards the bluff and the trench bluff backfill with Tensar welded wire, geogrid and reinforced fill.

6-11.3(3)B Description

Section 6-11.3(3)B is supplemented with the following:

Cutoff wall shall be Concrete Class 4000. No reinforcement is required.

6-11.4 Measurement

Supplement this section with the following:

Outfall Pipe Anchor shall be measured per each.

6-11.5 Payment

Supplement this section with the following:

“Outfall Pipe Anchor,” each.

Payment for Outfall Pipe Anchor shall be full payment to perform the Work shown in the Plans. The cost for Outfall Pipe Anchor shall include constructing the cutoff wall as shown in the Plans. The contractor shall furnish all labor, materials, equipment and incidentals required and install all precast concrete wall and appurtenances, trench bluff back fill with reinforced fill, welded wire form, and geogrid, and geotextile along top of HDPE pipe. Payment for the catch basin is included under 7-05.

6-20 BURIED STRUCTURES

6-20.1 Description

Supplement this section with the following:

This work also includes furnishing and installing Pretreatment Units and WQ Treatment Vault.

6-20.2 Materials

Supplement this section with the following:

Gravel Backfill for Walls	9-03.12(2)
Gravel Backfill for Drains	9-03.12(4)
Special Borrow	9-03.14(1) SP
Bank Run Gravel for Trench Backfill	9-03.19
Ballast	9-03.9(1)
Perforated PVC Underdrain Pipe	9-05.2(6)
StormMix Media	9-14.2(4)
Media Mulch	9-14.5(3)A
Geotextile	9-33.1
Tideflex Series CheckMate Valve	

In accordance with the Drawings, the Pretreatment Unit shall be a Vortechs® device manufactured by:

Contech Engineered Solutions LLC
9025 Centre Pointe Drive
West Chester, OH, 45069
Phone: (800) 338-1122

The WQ Treatment Vault shall be a high flow rate biofiltration stormwater treatment system using StormMix media, is housed in a concrete vault structure. The treatment system shall remove sediment, dissolved metals, nutrients, gross solids, trash and debris as well as petroleum hydrocarbons.

The WQ Treatment Vault shall be a BioPod Biofilter System (BioPod) as manufactured by:

Oldcastle Infrastructure
7100 Longe St
Stockton
California 9520.
Phone: (800) 579-8819.

The backflow prevention valve shall be Tideflex CheckMate UltraFlex Inline Check Valve as manufactured by:

Tideflex Technologies

600 N Bel Ave.
Carnegie, PA 15106
(412) 279-0044

Add the following new subsections:

6-20.2(A) Pretreatment Unit

Pretreatment Unit VX-9000 shall have an internal swirl chamber diameter of 9 feet with a minimum sump storage capacity of 4.8 cubic yards.

Pretreatment Unit VX-16000 shall have an internal swirl chamber diameter of 16 feet with a minimum sump storage capacity of 7.1 cubic yards.

The pretreatment units shall have a single orifice to provide a maximum backwater elevation during design flows. There shall not be an internal bypass weir within these units. The target treatment flow rate for the VX-9000 is 4.77 cfs with a maximum backwater elevation at the upstream flow splitter structure of 43.3ft. The target treatment flow rate for the VX-16000 is 7.13 cfs with a maximum backwater elevation at the upstream flow splitter structure of 44.19ft. Documentation of flow rate and backwater elevations shall be provided by the manufacture, with engineer stamped calculations.

Housing unit of stormwater treatment device shall be constructed of pre-cast or cast-in-place concrete. Concrete for precast stormwater treatment systems shall conform to ASTM C 857 and C 858 and meet the following additional requirements.

1. The wall thickness shall not be less than 6 inches (152 mm) or as shown on the dimensional drawings. In all cases the wall thickness shall be no less than the minimum thickness necessary to sustain HS20-44 (MS18) loading requirements as determined by a Licensed Professional Engineer.
2. Sections shall have tongue and groove or ship-lap joints with a butyl mastic sealant conforming to ASTM C 990.
3. Cement shall be Type II Portland cement conforming to ASTM C 150.
4. All sections shall be cured by an approved method. Sections shall not be shipped until the concrete has attained a compressive strength of 4,000 psi (28 MPa) or until 5 days after fabrication and/or repair, whichever is the longer.
5. Pipe openings shall be sized to accept pipes of the specified size(s) and material(s), and shall be sealed by the Contractor with a hydraulic cement conforming to ASTM C 595M
6. Brick or masonry used to build the manhole frame to grade shall conform to ASTM C 32 or ASTM C 139 and shall be installed in

conformance with all local requirements.

7. Casting for manhole frames and covers shall be in accordance with ASTM A48, CL.35B and AASHTO M105.

Internal Components and appurtenances shall conform to the following:

1. Internal aluminum plate components shall be aluminum alloy 5052-H32 in accordance with ASTM B 209.
2. Sealant to be utilized at the base of the swirl chamber shall be 60 durometer extruded nitrile butadiene rubber (Buna N) and shall be provided to the concrete precaster for installation.

The Pretreatment Unit shall be

The Pretreatment Unit shall be capable of achieving an 80 percent average annual reduction of TSS or an 80% reduction of TSS based on a treatment flow rate or calculation as specified by local regulatory requirements unless otherwise stated.

The Pretreatment Unit shall have completed field tested following TARP Tier II protocol requirements based on independent third party field testing.

Stormwater treatment systems shall be completely housed within one rectangular structure with elevations as defined in the Plans.

6-20.2(B) WQ Treatment Vault

The stormwater treatment system shall have a General Use Level Designation (GULD) for Basic, Phosphorus and Enhanced Treatment from the Washington Department of Ecology and shall be approved for use with integrated high flow bypass capability. Based on the GULD, each system shall be designed for an operating rate of 1.6 gpm/ft² and shall be capable of:

- Greater than 80% removal of TSS;
- Greater than 50% removal of total phosphorus;
- Greater than 60% removal of dissolved zinc; and
- Greater than 30% removal of dissolved copper.

Concrete for precast stormwater treatment systems shall conform to ASTM A478 or ASTM C890 and C913 and meet the following additional requirements:

1. In all cases the wall thickness shall be no less than the minimum thickness necessary to sustain HS20-44 (MS18) loading requirements as determined by a Licensed Professional Engineer.
2. Sections shall have tongue and groove or ship-lap joints with a butyl mastic sealant conforming to ASTM C990.

3. Cement shall be Type I, II, or III Portland cement conforming to ASTM C150.
4. All sections shall be cured by an approved method. Sections shall not be shipped until the concrete has attained a compressive strength of 4,000 psi (28 MPa) or other designate suitable handling strength.
5. Pipe openings shall be sized to accept pipes of the specified size(s) and material(s), and shall be sealed by the contractor with hydraulic cement conforming to ASTM C595M or ASTM C1107.
6. Aggregates shall conform to ASTM C33, except that the requirement for gradation shall not apply.
7. Reinforcement shall consist of wire conforming to ASTM A82 or A496, of wire mesh conforming to ASTM A185 or A497, or Grade 40 steel bars conforming to ASTM A615.
8. Castings for manhole frames and covers shall be in accordance with ASTM A48, CL.30B and AASHTO M105. The access cover/s shall be designed for HS20-44 traffic loading and shall provide a minimum of 36-inch clear opening over the media cells with 24-in clear opening for the 12 access lids along the center of the structure above the inflow pipe bay.
9. Access lids above the vault shall be 36-inch diameter with secondary internal 24-inch openings for inspections. All access locations shall include ladder or steps from lid to the bottom of the vault per OSHA and WSDOT requirements.
10. Brick or masonry used to build the structure or manhole frame to grade shall conform to ASTM C32 or ASTM C139 and shall be installed in conformance with all local requirements.
11. All mounting hardware for internal components shall be made of 304SS and shall conform to ASTM A240.

All internal components including underdrain stone, media, mulch, PVC underdrain piping and flow control outlet orifice needed for a compliant stormwater treatment system, must be included as part of the biofiltration system.

1. PVC underdrain piping shall have slots, as required by the manufacture, to allow collection of treated effluent for discharge and shall conform to ASTM D1785. PVC fittings used to complete the underdrain piping shall conform to ASTM 2466.
2. Flow control outlet orifice shall be made from a PVC cap fitting and conform to ASTM 2466. The size of the flow control orifice shall be determined by the manufacturer with Engineer approval.

6-20.3 Construction Requirements

Supplement this section with the following:

Standing water and ground water shall be removed from the excavation for the pretreatment units and vault, and during backfill operations.

Backfill for underground vaults shall be mechanically compacted in maximum 6-inch lifts at 95% of the maximum density as determined by the compaction control tests described in Section 2-03.3(14)D.

Working drawings per 1-05.3, including requirements under 6-02.3(9)A, shall be submitted for Engineer approval for the Pretreatment Units and WQ Treatment Vault prior to ordering the vaults from the manufacturers.

Rim elevations shall be set level with the adjacent finished grade.

The Pretreatment Unit and WQ Treatment Vault shall not be staged within 20-ft of top of the bluff.

The required lifting weights of the Pretreatment Unit and WQ Treatment Vault sections shall be confirmed with the manufacturers.

6-20.3(5)A Construction Dewatering

Supplement Section 6-20.3(5)A with the following:

This section specifies the definition, responsibilities and execution for dewatering associated with trench excavation for pipes, manholes, catch basins, cleanouts, vaults and other buried utility work. Implement trench dewatering measures where necessary or directed by the Engineer. Implementation shall include, but not be limited to, the design, furnishing, installation, operation, maintenance, monitoring, reporting and removal of dewatering systems to achieve proper completion of Work performed under this Contract.

Prevent the flow of surface water runoff into the trench excavation. Control surface water and other erosion control measures associated the Work in accordance with 8-01 of the Standard Specifications and modified in these Special Provisions.

Maintain groundwater level at or below the bottom of the excavation in all Work areas during excavation, foundation preparation, pipe and structure installation and backfilling. Trench dewatering shall sufficiently control groundwater to prevent softening of the bottom of the excavations or formation of "quick" conditions or "boils" during excavation. Use gravel or

non-moisture sensitive trench backfill in areas encountering groundwater. If foundation soils are disturbed or oversaturated with water, then over excavate and replace the affected areas with suitable fill at no additional cost to the Owner. Upon completion of dewatering operations, restore the normal water table to its natural level in such a manner as to not disturb the pipe, its foundation and structures. Contractor shall be solely responsible to control the rate and effect of the dewatering in a manner to avoid all objectionable settlement and subsidence.

Direct discharge flow from trench dewatering to a nearby sewer or storm drain system unless otherwise directed by the Engineer. A discharge permit from the County will be required prior to discharging trench dewatering flows into the County sewer or storm drain system. Control groundwater by trench dewatering systems designed and operated to minimize turbidity of the discharged flow and to prevent removal of the natural soils or imported fill.

Soils data for use in planning the dewatering system is available in the project Geotechnical Investigation Report, including as an appendix to the specifications or the Contractor may perform its own soils investigation. Contractor shall be responsible for cost of additional investigative work Contractor requires for designing the dewatering system. Plan and implement dewatering systems using accepted and professional methods of design and engineering consistent with the best modern practice. Dewatering systems shall be comprised of gravel-lined sumps, dewatering pumps, piping and conveyance components necessary for complete and reliable function. Discharge to a baker tank may be required prior to discharge from the site.

Before dewatering operations begin, the Contractor shall have available on the Work site sufficient pumping equipment, or other machinery, or both, to assure maintaining continuous operation of the trench dewatering system. Supply power service to dewatering pumps including, but not limited to, electrical, hydraulic, gas, or diesel, Maintain the dewatering system to allow for continuous operation without interruptions. If necessary, provide 24-hour supervision and follow-up by personnel skilled in the operation, maintenance, and replacement of dewatering system components. Damage to Work in place and the excavation, including damage to the trench bottom, due to "boiling", material removal, or discharge pumping from the excavated area, that may result from negligence, inadequate or improper installation, maintenance and operation of the dewatering system, or mechanical or electrical failure of the dewatering system shall be Contractor's responsibility to repair at no cost to the City.

The contractor shall submit a Type 3E Working Drawing detailing the construction dewatering approach for the project.

Add the following new subsections:

6-20.3(8)C Pretreatment Unit

The Contractor shall submit a Type 2E Working Drawing for the Pretreatment Units. The submittal shall, at a minimum, contain the dimensions and length of vault and internal elements, location of access lids and a detailed description of the flow hydraulics and calculations.

The WQ pretreatment system must include the capability to partition flows, directing treatment flows into the biofiltration chamber. Flows exceeding the treatment capacity of the unit shall be diverted through the upstream flow splitter structure.

The backfill for the unit walls shall be Gravel Backfill for Walls.

The installation of the units includes the removal and replace of the communication vault as shown on the Plans.

Each Stormwater Pretreatment Unit shall be constructed according to the sizes shown on the Drawings and as specified herein. Install at elevations and locations shown on the Plans.

Place the precast base unit on a granular subbase of minimum thickness as shown on the Plans after compaction. The granular subbase shall be checked for level prior to setting and the precast base section of the trap shall be checked for level at all four corners after it is set. If the slope from any corner to any other corner exceeds 0.5% the base section shall be removed and the granular subbase material re-leveled.

Prior to setting subsequent sections place bitumen sealant in conformance with ASTM C 990-91 along the construction joint in the section that is already in place.

After setting the base and wall or riser sections, prepare to install the swirl chamber (if not installed prior to delivery). Place the butyl mastic sealant vertically on the outside of the swirl chamber starting one inch above the bottom of the swirl chamber and continuing to a height equal to the elevation of the bottom of the upper aperture of the swirl chamber. The butyl mastic sealant should abut the downstream side of the pre-drilled mounting holes that attach the swirl chamber to the long walls of the concrete vault. Next, install the extruded Buna N seal on the bottom edge of the 180 degree downstream section of the swirl chamber by first applying a bead of Sikaflex-1a polyurethane elastomeric sealant into the extruded slot then slide the seal onto the swirl chamber. The extruded seal should extend 3-inches (76 mm) upstream of the mounting holes, toward the inlet end of the vault. Set the swirl chamber into position and keep the seal approximately ½-inch (13 mm) above the floor of the concrete vault. Apply a continuous bead of Sikaflex-1a

sealant under the cupped bottom of the seal. Set the circular swirl chamber on the floor of the vault and anchor it by bolting the swirl chamber to the side walls of the concrete vault at the three (3) tangent points and at the inlet tab using HILTI brand stainless steel drop-in wedge anchors or equivalent 3/8-inch (10 mm) diameter by 2-3/4 inch (70 mm) minimum length at heights of approximately three inches (3") (76 mm) off the floor and at fifteen inch (15") (381 mm) intervals to approximately the same height of the butyl mastic sealant (at locations of pre-drilled holes in aluminum components). Apply a continuous bead of Sikaflex-1a sealant to the intersection of the inside bottom edge of the extruded seal and the vault floor.

Prior to setting the precast roof section, bitumen sealant equal to ASTM C 990 shall be placed along the top of the wall using more than one layer of mastic if necessary, to a thickness at least 1-inch (25 mm) greater than the nominal gap between the top of the baffle and the roof section. The nominal gap shall be determined either by field measurement or the shop drawings. After placement of the roof section has compressed the butyl mastic sealant in the gap finish sealing the gap with an approved non-shrink grout on both sides of the gap using the butyl mastic as a backing material to which to apply the grout. If roof section is "clamshell" or "bathtub" halves, then finish sealing the ends of the Baffle walls by applying non-shrink grout or Sikaflex-1a sealant to each end upstream intersection with the side walls of the concrete vault and to each end the downstream intersection with the side walls of the concrete vault.

After setting the precast roof section of the stormwater treatment system, set precast concrete manhole riser sections, to the height required to bring the cast iron manhole covers to grade, so that the sections are vertical and in true alignment with a 1/4-inch (6 mm) maximum tolerance allowed. Backfill in a careful manner, bringing the fill up in 6-inch (152 mm) lifts on all sides. If leaks appear, clean the inside joints and caulk with lead wool, or approved method, to the satisfaction of the Engineer. Precast sections shall be set in a manner that will result in a watertight joint. In all instances, installation of Stormwater Treatment Systems shall conform to ASTM specification C 891 "Standard Practice for Installation of Underground Precast Utility Structures".

Holes made in the concrete sections for handling or other purposes shall be plugged with a nonshrink grout or by using grout in combination with concrete plugs.

Where holes must be cut in the precast sections to accommodate pipes, do all cutting before setting the sections in place to prevent any subsequent jarring which may loosen the mortar joints. The Contractor shall make all pipe connections.

6-20.3(8)D WQ Treatment Vault

The Contractor shall submit a Type 3E Working Drawing for the WQ Treatment Vault. The submittal shall, at a minimum, contain the dimensions and length of

vault and internal elements, location of access lids and a detailed description of the flow hydraulics calculations and structural design.

The WQ Treatment Vault shall be capable of providing Ecology approved treatment at a target flow rate of 11.90 cfs. The internal system hydraulics shall be able to bypass additional flows above the target treatment flow at or above the maximum design flow rate of 14.65 cfs. Documentation of flow rate capacities along with documentation of equalized flow distribution through the inlet windows and across media, underdrain pipe capacities and control orifice sizes and flow rates shall be provided by the manufacture, with engineer stamped calculations.

The Contractor shall schedule a preconstruction meeting with the manufacturer within 10 working days after the notice to proceed to confirm manufacturing schedule, order of deliveries, and installation practices.

A subsurface drainage system shall be installed around the vault to control ground water and seepage. A channel 2 feet wide by 18 inches deep shall be installed on both the north and south sides of the vault. The channel shall be backfilled with Gravel Backfill for Drains with a 6-inch 40 PVC perforated pipe wrapped with geotextile fabric. The perforated pipe shall be connected to the downstream catch basin.

The backfill for the vault walls shall be Gravel Backfill for Walls with Gravel Backfill for Drains along underdrain pipes per the Plans. The Gravel Backfill for Walls shall be installed around the perimeter of the vault from base of the vault to subgrade for pavement at a 2 foot minimum width, excluding the area of the subsurface drain.

All WQ Treatment Vault components shall be delivered and unloaded with handling that conforms to the manufacturer's instructions for reasonable care. Concrete and internal components shall not be rolled or dragged over gravel or rock during handling. The contractor shall take necessary precautions to ensure the method used in lifting or placing the treatment system does not induce stress fatigue in the concrete.

Vault perimeter underdrain shall be connected to 4ft of solid PVC pipe prior to backflow prevention valves within the downstream manhole. One backflow prevention valve shall be installed on each perimeter pipe within the downstream manhole. The backflow prevention valve shall be clamped to the PVC pipe per manufacturer's recommendations with minimum clearance to the manhole wall.

Steps over the weir walls and interior walls shall be provide walls that are greater than 1.5-ft tall above the vault floor or media surface elevation. Steps along interior baffle wall shall be located between 2 and 5 feet of each access ladder from the 24-inch lids. Interior wall shall not be located within the vertical clear zone on an access opening.

Installation

1. Site Access – The general contractor shall be responsible for providing adequate access to the site to facilitate hauling, storage, and proper handling of the precast concrete units.
2. Vault Installation – Precast concrete units shall be installed: to the lines and grades shown on the contract documents or otherwise specified; be lifted by suitable lifting devices at points provided by the precast concrete producer; in accordance with applicable industry standards. Upon request, the precast concrete producer shall provide installation instructions.
3. Plumbing – Inlet and outlet piping, as required, shall be installed and connected in accordance with applicable piping specification. All connections shall be watertight.
4. Leak Resistance – Where leak resistance is a necessary performance characteristic of the precast concrete unit's end use, joint sealant, pipe-entry connectors and other penetrations shall be sealed according to manufacturer's requirements to ensure the integrity of the system.

Backfilling and Restoration

1. Complete backfilling as soon as possible after the structure has been placed.
2. Backfill material shall be granular and free from large stones, rocks, and pavement. Expansive soil material shall not be used as backfill around the structure.
3. Backfilling shall be achieved by lifts (layers) to the required compaction.
4. Follow up inspections for settlements are required. Should settlement occur, the contractor shall be responsible for all necessary repairs.

Field Quality Control

Job Site Tests – When leak resistance testing is required for a precast concrete structure, one of the following methods may be followed:

1. Vacuum Testing
 - a. Prior to backfill, vacuum test system according to ASTM C1244 for manholes and ASTM C1227 for septic tanks.

2. Hydrostatic Testing

- a. First Backfill the structure, then fill to the normal water level, let stand for 24 hours. Refill to the original water line and measure the water level change over a 24-hour period. Leak shall not exceed 5% of volume.

Inspection

1. Final field elevations and compaction properties shall be verified and documented.
2. A separate leak test shall be completed for the vault and inflow dispersion trench.
3. Elevations of inlet windows, pipe inverts and weir elevations shall be surveyed and documented. Inlet window adjustment plates shall be within 1/8-inch total tolerance across all inlet windows once secured to the vault wall.
4. Contractor shall coordinate with the unit's manufacturer during inspection to ensure proper installation and functionality of the unit. Final inspection reports for WQ Treatment Vault, completed by the Contractor and approved by the manufacturer's representative, are to be submitted to the Owner for each component of the units including:
 - a. Precast structure.
 - b. Proper connection to proposed storm system for correct function of the units.
 - c. Placement of underdrain stone, media and mulch.

Media Placement

1. Only media produced and provided by the manufacturer shall be placed in the treatment structure.
2. The underdrain stone, treatment media and mulch shall be placed inside the vault after the vault roof panel has been installed. The Contractor shall place the media, supplied by the manufacture, to a depth of 18" over the underdrain stone. Contractor shall be responsible for facilitating hauling, storage, and proper handling of the media.
3. Media shall be placed directly on the underdrain stone without using a geotextile or other fabric to separate the media from the underdrain stone.
4. The surface of the media shall be smoothed and leveled prior to planting, if required.

Mulch Placement

1. Only mulch provided by the manufacturer shall be placed in the treatment structure. Contractor shall be responsible for facilitating hauling, storage, and proper handling of the mulch.
2. Mulch shall be placed in an even 2-inch layer across the top of the media bed. Mulch shall be placed evenly around plantings, as necessary.

Activation

1. Treatment system shall be protected from construction runoff and construction sediment using appropriate erosion control practices and pipe plugs, as necessary.
2. The treatment system shall not be activated until all sediment is swept from gutters and plugged stormwater collection system piping is flushed and cleaned, as appropriate.
3. Remove the plug from the inlet pipe to active the treatment unit, as applicable.
4. Should the unit be activated prior to site stabilization, resulting in silt and/or sediment deposition in the media, or if silt and/or sediment and construction debris enters the unit during construction, the Contractor shall be responsible for cleaning or replacing the media as directed by the Engineer, at no cost to the Owner.

6-20.4 Measurement

Supplement this section with the following:

“Pretreatment Unit _____” will be measured per each.

“WQ Treatment Vault” will be measured per each.

No specific unit of measurement shall apply to the lump sum bid item Construction Dewatering.

6-20.5 Payment

Supplement this section with the following:

“Pretreatment Unit ____” per each.

Payment for Pretreatment Vault shall be full payment to perform the Work as specified in Section 6-20.3 and shown in the Plans. The contractor shall furnish all labor, materials, equipment and incidentals required to install the precast concrete stormwater treatment systems and appurtenances, include, but not limited to risers, lids, catch basin sections above vault, access ladders and steps, gravel backfill for walls, crushed surfacing base course, special borrow for vault backfill, and soil and gravel compaction, removal and replacement of communication vault.

“WQ Treatment Vault,” per each.

Payment for WQ Treatment Vault shall be full payment to perform the Work as specified in Section 6-20 and shown in the Plans. The contractor shall furnish all labor, materials, equipment and incidentals required to install all concrete stormwater treatment systems and appurtenances, include, but not limited to vault, risers, catch basin sections above vault, lids, access ladders and steps, slotted PVC underdrain pipe, schedule 40 perforated underdrain pipe along vault perimeter, backflow prevention valves, shear gate and lift handle, stainless steel adjustment plate and accessories, gravel backfill for drains, gravel backfill for walls, crushed surfacing base course, special borrow for vault backfill, ballast rock below the vault, soil and gravel compaction, control density fill at pipe connections, geotextile, cleanouts, StormMix Media, ladders, interior walls and baffle walls.

“Construction Dewatering,” per lump sum.

The lump sum Contract price for Construction Dewatering shall be full payment to perform the Work as specified in Section 6-20 and shown in the Plans. The contractor shall furnish all labor, materials, equipment and incidentals required to dewater all site excavation areas as required to complete proposed improvements.

END OF DIVISION 6

DIVISION 7 DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWERS, WATERMANS AND CONDUITS

7-01 DRAINS

7-01.3 Construction Requirements

Supplement this section with the following:

Cleanouts shall consist of a wye branch in the side sewer. All cleanouts located in public rights of way shall be extended to grade.

Cleanouts shall follow the construction requirements of Section 7-19 and County Standard Plan PD-12.

7-01.4 Measurement

Section 7-01.4 is supplemented with the following:

“Storm Sewer Cleanout In. Diam.” will be measured per each.

7-01.5 Payment

Section 7-04.5 is supplemented with the following:

“Storm Sewer Cleanout In. Diam.”, per each.

7-04 STORM SEWERS

7-04.2 Materials

Section 7-04.2 is supplemented with the following:

Butterfly Valve 9-30.3(3)

The HDPE material shall be solid wall High Density Polyethylene (HDPE) Pipe. HDPE pipe and fittings shall meet the requirements in the AASHTO M326 Specification.

HDPE Pipe shall be Solid Wall DR21, minimum wall thickness of 0.95 inches. Joints shall be welded by butt fusion per 9-05.23. Completed connection shall exhibit a pull-out strength of 15,000 lbs. or greater without changing the OD or the ID of the liner pipe.

PVC pipe shall be Schedule 40.

7-04.3 Construction Requirements

Special Provisions

7-1

Supplement this section with the following:

Testing of the installed HDPE liner pipe for leaks shall be per the manufacturer's recommendations.

The butterfly valve shall be located 4 feet from the upstream catch basin. The valve shall be installed on compacted foundation with 6-inch base of CSTC. Once the valve and connecting pipes has been installed, tested and connections approved by Engineer, backfill around the valve for minimum of 2 feet shall be CDF.

7-04.3(1) Cleaning and Testing

Add the following new subsection:

7-04.3(1)G Television Inspection

Following the air testing, Contracting Agency reserves the right to inspect the pipe using a TV camera and measuring equipment. Contracting Agency will be responsible for this inspection. The costs incurred in making the initial inspection shall be borne by Contracting Agency. Contractor shall provide two weeks advance notice and accommodate and allow up to five (5) days for this inspection to be made.

Any departure from that normally achieved with good construction practices such as pipeline misalignment (vertical or horizontal) will be deemed a deficiency. Pipe shall be excavated, the joint repaired, and the bedding and backfill re-compacted and replaced, as necessary. The maximum allowable pipe deflection will be five (5.0) percent (in either horizontal or vertical). The pipe's internal diameter will be based on the inside dimensions and reasonable tolerances obtained from the pipe manufacturer. Pipe that is misaligned or exceeds the allowable deflection shall be excavated and the bedding and backfill re-compacted and replaced as necessary. Contractor shall bear the cost of correcting such deficiencies as well as the costs of any TV inspections that are required to verify the deficiency has been corrected.

7-04.5 Payment

Section 7-04.5 is supplemented with the following:

"High-Density Polyethylene (HDPE) Pipe ___ In. Diam.", per linear foot.

The unit contract price per linear foot for "High-Density Polyethylene (HDPE) Pipe ___ In. Diam." shall be full pay for all labor, tools, materials, and equipment necessary to complete the installation of the storm sewer including, but not

limited to, laying and fused jointing pipe and fittings, bends, fused flange within Outlet Pipe Anchor and Outfall Structure, vent/access bend, concentric reducers, HDPE pipe sleeve, approved couplings and adaptors, import pipe bedding and cleanup as shown in the Plans.

“Butterfly Valve ___ In.”, per each.

The unit contract price for “Butterfly Valve ___ In.” shall be full pay for all labor, tools, materials, and equipment necessary to complete the installation of the storm sewer including, but not limited to couplings and adaptors, CDF backfill, and valve can lids.

7-05 MANHOLES, INLETS, CATCH BASINS, AND DRYWELLS

7-05.1 Description

Section 7-05.1 is supplemented with the following:

Outfall structure shall include constructing outfall structure and materials along the bluff for outfall protection as shown on the Plans. This work will also include the removal of concrete debris and the existing outfall pipe as shown on the Plans.

Helical Ground Anchor shall be SS5 Helical Anchors as manufactured by Hubbell Power Systems, or approved equal:

Hubbell Power Systems
210 N. Allen
Centralia, MO 65240

7-05.2 Materials

Section 7-05.2 is supplemented with the following:

Epoxy-Coated Steel Reinforcing Bars	9-07.3
Beach Cobble Mix	9-13.2

Catch basins, manholes, and inlets shall have bolt down and locking type lids with the words “KITSAP COUNTY” cast into the top surface, as shown on the Plans.

The existing lids removed by the Contractor shall remain the property of the Owner and be delivered upon installation of the new locking lid.

Stainless steel cable and marine grade turnbuckle for earth anchor.

Helical Earth Anchor shall be a Square Shaft (SS 5) Lead Section, 3-ft long with 10-inch helices as manufactured by Hubbell or approved equal with a minimum of two helices. Anchor shall be hot dipped galvanized per ASTM A153.

7-05.3 Construction Requirements

Supplement this section with the following:

The existing outfall pipe shall be removed from the bluff face to the extent feasible without damaging existing vegetation or cause erosion along the steep slope. Buried sections of the outfall pipe that are not removed shall be filled with CDF.

Excavate material from the beach shall be used to fill voids from debris removal.

Helical Ground Anchor shall be installed per manufacturer recommendation to provide a minimum holding capacity of 23,000 lbs. The earth anchors shall be field tested to confirm holding capacity. The cable and turnbuckle shall be installed to hold the vault securely to the earth anchors with a minimum tension of 1,500 lbs. The turnbuckles shall be wired closed to prevent unwinding.

The salvaged stormwater items shall be delivered to Kitsap County at the address provided below. The Contractor shall provide notice a minimum of five working days prior to delivery of any materials.

Kitsap County Stormwater Division
Public Works Annex
8600 SW Imperial Way
Bremerton, WA 98312
Contact: Jeff Jayroe
Telephone: 360-516-0800

The placement of CB#8, at the intersection with Angeline Ave NE, shall be field verified to position the structure a close to parallel to the new curb as feasible and allow for connections of the existing and proposed pipes.

7-05.4 Measurement

Section 7-05.4 is supplemented with the following:

“Outfall Structure” will be measured per each.

“Catch Basin Type 2 72-Inch Diameter With Flow Splitter” will be measured per each.

7-05.5 Payment

Supplement the second paragraph of this Section with the following:

All costs for connecting new structures to existing pipes shall be included in the unit Contract price for the items installed.

Section 7-05.5 is supplemented with the following:

Supplement this section with the following:

“Catch Basin Type 2 72-Inch Diameter With Flow Splitter” per each.

The unit Contract price per each for “Catch Basin Type 2 72-Inch Diameter With Flow Splitter” shall be full pay for furnishing and installing the flow splitter as Shown in the Plans, including connections to existing pipes.

“Outfall Structure” per each.

The unit Contract price per each for “Outfall Structure” shall be full pay for furnishing and installing the cast-in-place outfall structure, all structure excavation, gravel backfill, epoxy-coated steel reinforcing bars, 4-inches of crushed surfacing base course below the structure, beach cobble mix, anchored logs, helical ground anchors, stainless steel cable, stainless steel turnbuckles, reinforced lid with gaskets and locks, and abandoning and removing existing outfall pipe. The removal and haul of the existing outfall pipe are included.

All costs associated with furnishing and installing bolt down, locking type manhole and catch basin grates and covers with the words “KITSAP COUNTY” cast into the top surface shall be included in the unit Contract price for the item installed or adjusted.

7-08 GENERAL PIPE INSTALLATION REQUIREMENTS

7-08.3 Construction Requirements

7-08.3(1) Excavation and Preparation of Trenches

Section 7-08.3(1) is supplemented with the following:

Pot-hole Existing Utility

At least 24 hours prior to commencing installation of any pipe, the Contractor shall expose by pot-holing existing underground telephone cables, gas mains, sewer mains or services, water mains or services or any other underground utility shown in the Plans that crosses the route of any new pipe to be installed under this Contract. Excavation immediately adjacent to

the existing utilities shall be by hand methods in compliance with Washington State requirements.

When directed by the Engineer, the Contractor shall expose by pot-holing crossings of new pipe and utilities not shown in the Plans.

7-08.3(1)A Trenches

The sixth paragraph in Section 7-08.3(1) is revised to read:

When, after excavating to the foundation level, the material remaining in the trench bottom is determined to be unsuitable by the Engineer, the excavation shall be continued to such additional depth and width as required by the Engineer. Unsuitable foundation materials shall be disposed of at an approved site. The trench foundation shall be backfilled to the bottom of the pipe zone with Special Borrow including Haul and compacted to form a uniformly dense, unyielding foundation.

7-08.4 Measurement

Section 7-08.4 is supplemented with the following:

Pot-holing of utilities not shown in the Plans as crossing the route of the new pipe will be measure by force account in accordance with Sections 1-09.6.

7-08.5 Payment

The fifth and sixth paragraphs of Section 7-08.5 is deleted.

Section 7-08.5 is supplemented with the following:

“Force Account Pot-hole Utility Crossing”, per force account.

Payment will be made for the bid item “Force Account Pot-hole Utility Crossing”, per force account, as provided in Section 1-09.6 for exposing any utility crossing the new pipe or drainage structure that is not shown in the Plans. To provide a common proposal for all Bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the Contractor’s total bid.

7-09 WATER MAINS

7-09. 3 Construction Requirements

Section 7-09.3 is supplemented with the following:

The contractor shall install a temporary cap on the new water line. The cap shall include a 2-inch plug and 1-inch blowoff attached to the cap for cleaning and testing of the water main.

A representative from Kitsap Public Utility District shall be notified 5-days in advance and be onsite during water line installation.

7-09.4 Measurement

Section 7-09.4 is supplemented with the following:

Ductile Iron Pipe For Water Main 8 In. Diam will be measured per linear foot of pipe installed.

Bends will be measured per each bend installed.

7-09.5 Payment

Replace this Section 7-09.5 with the following:

Payment will be made for each of the following Bid items that are included in the Proposal:

“Ductile Iron Pipe For Water Main 8 In. Diam.” per linear foot.

The unit Contract price per linear foot for “Ductile Iron Pipe For Water Main 8 In. Diam.” shall be full pay for all Work to complete the installation of the water main, including but not limited to, trench excavation, bedding, laying and jointing pipe and fittings, valves and can lids, backfilling, bends, tie-back block, temporary water cap and plug, testing, temporary water blowoff, disinfecting the pipeline, flushing, dechlorination of water used for flushing, cleanup, and temporary removal and replacement of two (2) irrigation vaults.

“Bends” per each.

The unit Contract price per linear foot for “Bends” shall be full pay for all Work to complete the installation of the water main bends, including but not limited to, furnishing and connecting the bend and connection hardware to the water main pipe.

END OF DIVISION 7

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DIVISION 8 MISCELLANEOUS CONSTRUCTION

8-01 EROSION CONTROL AND WATER POLLUTION CONTROL

8-01.1 Description

Section 8-01.1 is supplemented with the following:

This work shall include the preparation and implementation of a Temporary Erosion and Sedimentation Control (TESC) Plan by the Contractor for this contract.

8-01.3 Construction Requirements

8-01.3(1) General

8-01.3(1)A Submittals

8-01.3(1)A1 Temporary Erosion and Control Plan

Section 8-01.3(1)A1 is revised to read:

The Contractor shall prepare a temporary erosion and sedimentation control (TESC) Plan for the contract and shall submit this TESC Plan to the Engineer 5 days prior to the preconstruction conference.

A TESC Plan consists of a narrative section and plan sheets that meets Ecology's Stormwater Pollution Prevention Plan (SWPPP) requirement in the CSWGP. When the Contracting Agency has developed a TESC Plan for a Contract the narrative is included in the appendix to the Special Provisions and the TESC plan sheets are included in the Contract Plans. The Contracting Agency TESC plan will not include off-site areas used to directly support construction activity.

A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared by the Contractor and submitted for approval by the Engineer. The plan shall consist of the Contractor's complete strategy to meet the requirements of the CSWGP. The SWPPP shall include and modify as necessary the TESC Plan drawings if provided as part of the Contract Plans. The Contractor shall prepare, review and modify the SWPPP as necessary to be consistent with the actual work schedule, sequencing, and construction methods that will be used on the project.

The SWPPP shall document all the erosion and sediment control Best Management Practices (BMPs) proposed, whether permanent or temporary. The plan shall document installation procedures, materials, scheduling, and maintenance procedures for each erosion and sediment control BMP. The

Contractor shall submit the SWPPP for the Engineer's approval before any work begins. The Contractor shall allow at least five working days for the Engineer's review of the initial SWPPP or any revisions to the modified SWPPP. Failure to approve all or part of any such plan shall not make the Contracting Agency liable to the Contractor for any work delays. The Contractor may not begin work without an approved Contractor's SWPPP.

Contractor TESC Plans shall include all high visibility fence delineation shown on the Contracting Agency Contract Plans. All TESC Plans shall meet the requirements of the current edition of the WSDOT Temporary Erosion and Sediment Control Manual M 3109 and be adapted as needed throughout construction based on site inspections and discharge samples to maintain compliance with the CSWGP. The Contractor shall develop a schedule for implementation of the TESC work and incorporate it into the Contractor's progress schedule.

The Contractor shall submit their TESC Plan and implementation schedule as Type 2 Working Drawings. At the request of the Engineer, updated TESC Plans shall be submitted as Type 1 Working Drawings.

8-01.3(2) Temporary Seeding and Mulching

8-01.3(2)B Temporary Seeding

Replace the first paragraph of this section with the following:

Seed: Grass seed, of the following composition, proportion, and quality shall be applied at the rate of 80 pounds per acre on all areas requiring roadside seeding within the project:

Kind and Variety of Seed in Mixture	% By Weight	Minimum % Pure Seed	Minimum % Germination
Chewing Fescue	40	39.2	90
Colonial Bentgrass (Var.Astoria)	10	9.8	85
Perennial Rye	40	39.2	90
White Dutch Clover	10	9.8	90
Weed Seed		0.5 % maximum	
Inert and Other Crop		1.5 % maximum	
TOTAL		100.00 %	

8-01.3(2)D Temporary Mulching

Supplement this section with the following:

Mulch for Erosion Control Seeding:

Mulch shall be Short Term Mulch applied at a rate of 2500 pounds per acre.

8-01.5 Payment

8-01.5(1) Lump Sum Bid for Project (No Unit Items)

The second and third paragraphs in Section 8-01.5(1) are deleted and replaced with the following:

“Erosion / Water Pollution Control”, per lump sum.

The lump sum Contract price for Erosion/Water Pollution Control shall be full pay for all labor, tools, equipment, and materials for the installation, maintenance, and removal of erosion and water pollution control measures including the preparation and implementation of the TESC Plan.

8-02 ROADSIDE RESTORATION

8-02.2 Materials

Section 7-05.2 is supplemented with the following:

Root Barrier 9-14.8

8-02.3 Construction Requirements

8-02.3(1) Responsibility During Construction

Supplement this section with the following:

Throughout planting operations, the Contractor shall keep the premises clean, free of excess soils, plants, and other materials, including refuse and debris, resulting from the Contractor's work. At the end of each workday, and as each planting area is completed, it shall be neatly dressed, and all surrounding walks and paved areas shall be swept to remove soil and plant debris. At the conclusion of work, the Contractor shall remove surplus soils, materials, and debris from the construction site.

The planting plan is designed to replicate natural plant communities in species composition and arrangement. Even spacing and straight row planting are not desired.

Planting location is within the areas shown on Plans. Trees shall not be installed in areas with standing or ponding water.

Plant procurement, transport, storage, handling, planting techniques, care of existing soil and vegetation, and watering are to be performed per landscape industry standards.

All plant material shall be healthy, nursery-grown stock. Weak or damaged plants will be rejected by the Engineer.

Depending on the availability of natural rainfall, the Contractor may need to provide supplemental watering to ensure plant survival until the end of the warranty period.

The Contractor shall warrant 100 percent plant survival through a 1-year warranty period. Plants shall be in a healthy and flourishing condition.

Prior to plant installation, the Contractor shall notify the Engineer of any conditions that are judged to impair plant survival. Alternatives will be approved by the Resident Engineer prior to plant substitution.

The Boulder Memorial with the Chief Sealth plaque shall be temporarily stored on the pavilion property, north of NE Parkway Street. Location shall be coordinated with the County and property owner. The existing boulder and plaque shall be moved as one unit and relocated as shown on the Plans. Approval for moving and storing location of the boulder shall be coordinated with the Owner at least 2-weeks before the boulder needs to be moved for approval from the Tribal Historical Officer.

8-02.3(4) Topsoil

8-02.3(4)A Topsoil Type A

Supplement this section with the following:

Topsoil Type A per 9-14.2(1) Special Provisions

8-02.3(5) Roadside Seeding, Lawn and Planting Area Preparation

Supplement this section with the following:

Finish grades of planting and seeding areas shall allow for soil preparation and mulch.

Perform all excavation and backfill necessary to provide finish grade of landscape areas as indicated and specified. Remove from site excess and unsuitable material. Any fill material required to bring landscape areas to finish grade shall be imported Topsoil Type A. Landscape areas shall be graded to lines, grades, and cross sections indicated. Grades shall meet the following: Maximum 3:1 slope, unless otherwise indicated.

Smooth and round off surfaces at abrupt grade changes.

Feather grades to meet existing gradually.

Provide minimum 2 percent crown or slope in all landscape areas. The Contractor is responsible for any adverse drainage conditions that may affect plant growth, unless he contacts the Project Engineer immediately indicating any possible problem.

Finish grades shall be inspected and accepted by the Project Engineer prior to commencing planting or seeding work.

The costs of removing all excess material and debris shall be incidental to other contract pay items.

Notify Engineer of possible poor draining or heavily compacted soil conditions prior to proceeding with construction.

The planting area shall be compacted to 85% maximum density to establish proper finish grade unless specified elsewhere.

8-02.3(8) Planting

Supplement this section with the following:

Planting materials shall be native plants, nursery grown in the Puget Sound area of Washington.

Plants shall be handled so as to avoid all damage, including breaking, brushing, root damage, sunburn, drying, freezing or other injury. Plants must be covered during transport. Plants shall not be bound with wire or rope in a manner that could damage branches. Protect plant roots with shade and wet soil in the time period between delivery and installation. Do not lift container stock by trunks, stems or tops. Do not remove from containers until ready to plant.

The Contractor shall provide supplemental water to all plants as necessary to keep moisture levels appropriate to the species' horticultural requirements.

Plants shall not be allowed to dry out. All plants shall be watered thoroughly immediately upon installation. Soak all containerized plants thoroughly prior to installation. Plants whose roots have dried out from exposure will not be accepted at installation inspection. All rejected plants shall be immediately removed from the site.

All plants shall be tagged for easy identification for future monitoring.

Plants shall be normal in pattern of growth, healthy, well-branched, vigorous, with well-developed root systems and free of pests and disease. Damages, diseased, pest-infested, scraped, bruised, dried-out, burned, broken or defective plants will be rejected. Plants with pruning wounds over 1 inch in diameter will be rejected.

Plant substitutions are not permitted without the permission of the project biologist. Same-species substitutions of larger or smaller sized plants and the substitution of bare-root plants for container plants also require permission of the Contracting Agency. Small plants and bare root plants often experience less transplant shock and adapt more quickly to site conditions, resulting in a higher success rate. However, same-species substitutions will only be approved based on certain site-specific conditions. Landscaping varieties are not acceptable substitutions.

Immediately before installation, plants with minor root damage (some broken and/or twisted roots) must be root-pruned. Matted or circling roots of containerized plantings must be pruned or straightened, and the sides of the root ball must be roughened from top to bottom to a depth of approximately 1/2 inch in two or four places. Plants with any other type of root damage will be rejected. All rejected plants will be immediately removed from the site.

If plantings fall over for any reason, they shall be replanted or replaced as necessary.

Most shrubs and trees do not require staking. If the plant can stand alone without staking in a moderate wind, do not use a stake. However, if the plant needs support, then use a stake with strapping or webbing placed as low as possible on the trunk to loosely brace the tree with two stakes. Do not brace the plant tightly or too high on the stem. If the plant is unable to sway, it will further lose the ability to support itself. Do not use wire in a rubber hose for strapping or other strapping that exerts pressure on the bark under normal conditions. As soon as supporting the plant becomes unnecessary, remove the stakes. All stakes shall be removed prior to the completion of the 1-year warranty period.

8-02.3(11) Mulch

8-02.3(11)B Bark or Woodchip Mulch

Supplement this section with the following:

Bark or wood chip mulch shall be placed to a uniform non-compacted depth of three (3) inches over “All Planting Areas, excluding seeded areas and wetlands” as shown on plans. Bark or wood chip mulch shall not be placed in wetlands, or below ordinary high water (OHW).

Measurement shall be by “Square Yard”

Add the following new subsection:

8-02.3(17) Root Barrier

Work shall consist of providing and installing root barriers per the manufacturer’s recommendations where indicated on the plans.

8-02.4 Measurement

Section 8-02.4 is supplemented with the following:

Landscape Planting will be measured by the square foot

Topsoil Type A will be measured by the cubic yard.

Fine compost will be measured by the cubic yard.

Hydroseed will be measured by the square foot.

Root Barrier shall be measured along the finished installation length.

No specific unit of measurement shall apply to the lump sum bid item Relocate Boulder Memorial.

8-02.5 Payment

Section 8-02.5 is supplemented with the following:

“Landscape Planting” per square foot.

The unit Contract price per square foot “Landscape Planting” shall be full pay for all Work necessary to prepare the area for planting of shrubs, ground cover, and establish lawn areas and for furnishing all labor, tools, equipment, and materials necessary to complete the Work as shown on the Plans.

“Topsoil Type A” per cubic yard.

The unit Contract price per cubic yard “Topsoil Type A” shall be full pay for all Work necessary to for furnishing all labor, tools, equipment, and materials necessary to complete the Work as shown on the Plans.

“Fine Compost” per cubic yard.

The unit Contract price per cubic yard “Fine Compost” shall be full pay for all Work necessary to for furnishing all labor, tools, equipment, and materials necessary to complete the Work as shown on the Plans.

“Hydroseed” per square foot.

The unit Contract price per square foot “Hydroseed” shall be full pay for all Work necessary to for furnishing all labor, tools, equipment, and materials necessary to complete the Work as shown on the Plans.

“Root Barrier”, per linear foot

The unit Contract price per linear foot for “Root Barrier” shall be full pay for all costs for furnishing labor, equipment, materials, backfill, excavation, preparation of materials, and disposal of waste as necessary to complete the work.

“Relocate Boulder Memorial”, per Lump Sum.

The lump sum Contract price for Relocate Boulder Memorial shall be full pay for all labor, tools, equipment, and materials required to remove, store in a protected location and reinstall the monument at the location shown on the Plan, including but not limited to excavation, backfill and finished grading.

8-06 CEMENT CONCRETE DRIVEWAY ENTRANCES

8-06.4 Measurement

Replace this section with the following:

“Driveway Entrance” will be measured by the square yard of finished surface.

8-06.5 Payment

Supplement this section with the following:

“Driveway Entrance”, per square yard.

All costs in constructing the driveway entrance in segments and installing and removing the temporary approach shall be included.

8-12 CHAIN LINK FENCE AND WIRE FENCE

8-12.1 Description

Section 8-12.1 is supplemented with the following:

This work shall include the construction of a 4.5-foot wooden dowel fence where shown in the Plans.

8-12.2 Materials

Section 8-12.2 is supplemented with the following:

All posts shall be for three-rail round dowel fencing. All line posts shall be 4 ½" to 5" diameter, and all end or corner posts shall 5" to 6" diameter. Holes for a three-rail system shall be pre drilled by manufacturer into all posts.

Rails shall be 2-1/4" to 2-1/2" diameter round, 4' or 8' lengths, and factory treated with preservative.

Wood preservatives shall be non-arsenic containing preservatives registered with the EPA. ACQ (ammonium copper quaternary) and copper boron azole (CBA) are acceptable preservative alternatives.

Nails, screws, fasteners, and other metal hardware shall be galvanized, or zinc coated to prevent oxidation

8-12.3 Construction Requirements

Section 8-12.3 is supplemented with the following:

All wooden fence posts shall be set in commercial concrete with a minimum width of three inches of concrete on all sides of the posts. Posts shall have a minimum bury of 24 inches and a maximum spacing of 8 feet on center between posts.

Install all round dowels into pre-drilled holes on end, corner, and line posts.

8-12.4 Measurement

Section 8-12.4 is supplemented with the following:

"Wood fence" will be measured by the linear foot of completed fence, along the ground line, including gates.

8-12.5 Payment

Section 8-12.5 is supplemented with the following:

“Wood Fence”, per linear foot.

8-15 RIPRAP

8-15.2 Materials

Section 8-15.2 is supplemented with the following:

Streambed Boulders 9-03.11(5)

8-15.3 Construction Requirements

Section 8-15.3 is supplemented with the following:

Streambed Boulders shall be installed at the locations shown on the plans. The final location and alignment shall be confirmed by the Engineer.

8-15.4 Measurement

Section 8-15.4 is supplemented with the following:

“Streambed Boulder ___” will be measured by each boulder installed.

8-15.5 Payment

Section 8-15.5 is supplemented with the following:

“Streambed Boulder ___”, per each.

The unit contract price per each for Streambed Boulder ___ shall be full pay for all labor, tools, equipment required to furnish and install the boulders in accordance with the Plans, including but not limited to concrete and mortar as shown on the Plans.

8-21 PERMANENT SIGNING

8-21.4 Measurement

Replace this section with the following:

No specific unit of measurement shall apply to the lump sum bid item Permanent Signing.

8-21.5 Payment

Replace this section with the following:

Payment will be made for each of the following Bid items that are included in the Proposal:

“Permanent Signing” per lump sum.

The unit Contract price per lump sum for Permanent Signing” shall be full pay for all Work as shown in the Plans, including but not limited to removing and relocation of existing signs.

8-23 TEMPORARY PAVEMENT MARKINGS

8-23.4 Measurement

Section 8-23.4 is revised to read:

Installation, removal, and reconfiguration of temporary pavement markings as needed to maintain traffic and inform the traveling public shall be considered essential to the project and shall not be measured for payment.

8-26 VACANT

Section 8-26, including title, is deleted and replaced with the following:

8-26 SITE FURNISHING

8-26.1 Description

This Work consists of furnishing and installing site furnishings, including “Crushed Stone Path”, and “Cobbles in Concrete”.

8-26.2 Materials

Concrete	6-02
Crushed Surfacing Top Course	9-03.9(3)
Streambed Cobbles 6 inch	9-03.11(2)
DuplicateMortar	9-20.4

8-26.3 Construction Requirements

Cobbles shall be obtained through one source for consistency of appearance with Streambed Boulder under 8-15.

SUBMITTALS

Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, finishes, field-assembly requirements, and installation details.

Provide 1 quart plastic bag sample for ¼" minus crushed rock and 5/8" minus crushed rock.

Provide mock-up for cobbles in concrete minimum 24 inches square.

"Streambed Cobble 6 In" Product data and sample pieces for verification and consistency purposes of stone consisting of cobble stone pieces not less than 6 inches square and not greater than 9 inches square. Include 26 or more stones in each set of samples showing the full range of variations in appearance characteristics to be expected in the completed work.

"Streambed Boulder" Product data, photographs and sample pieces for verification and consistency purposes.

8-26.4 Measurement

"Crushed Stone Path" will be measured by square feet.

"Cobbles in Concrete", will be measured per square feet.

8-26.5 Payment

"Crushed Stone Path", per square feet.

"Cobbles in Concrete.", per square feet.

The unit contract price per square feet for Cobbles in Concrete. shall be full pay for all labor, tools, equipment required to furnish and install the boulders and cobbles in accordance with the Plans, including but not limited to concrete and mortar.

8-27 VACANT

Section 8-27, including title, is deleted and replaced with the following:

(August 7, 2017 WSDOT GSP)

8-27 FIELD OFFICE BUILDING

8-27.1 Description

This work shall consist of furnishing and setting-up a temporary office building for the sole use of the Contracting Agency.

8-27.3 Construction Requirements

The Contractor shall provide a field office on or adjacent to the Project Site for the use of the Engineer's staff within five (5) Calendar Days from the Notice to Proceed Date. The field office, its location, and an alternate date if necessary, shall be subject to the approval of the Engineer and shall be established at the pre-construction meeting.

The building shall be weather-tight, installed plumb and level, and provided with the following as a minimum:

1. 240 square feet of floor space
2. Above ground floor
3. Heat
4. Electric lights
5. Adequate windows
6. Six square feet of shelving
7. Plan table: 3 feet 6 inches deep by 6 feet wide by 3 feet 3 inches high
8. Drafting stool
9. Conference table: 4 foot by 8 foot
10. Four chairs
11. Cylinder door lock and six keys
12. Sanitary facilities (unless existing facilities are available)

The building shall remain the property of the Contractor and removed from the site upon physical completion of the contract, or when designated by the Engineer.

8-27.5 Payment

Payment will be made for the following bid item when included in the proposal:

"Field Office Building", lump sum.

The lump sum contract price for "Field Office Building" shall be full pay for furnishing, installing, maintaining, and removing the facility, including all costs associated with all required utility hook-ups and disconnects, and monthly utility charges for all utilities except telephone.

The monthly telephone costs will be paid by the Contracting Agency.

END OF DIVISION 8

DIVISION 9 MATERIALS

9-03 AGGREGATES

9-03.8 Aggregates for Hot Mix Asphalt

9-03.8(2) HMA Test Requirements

Section 9-03.8(2) is supplemented with the following:

ESAL's

The number of ESAL's for the design and acceptance of the HMA shall be in the range of more than 300,000 to less than 3 million.

9-03.8(7) HMA Tolerances and Adjustments

Section 9-03.8(7) is supplemented with the following:

Delete item 1 and replace with:

1. Job Mix Formula Tolerances. After the JMF is determined as required in 5-04.3(7)A, the constituents of the mixture at the time of acceptance shall conform to the following tolerances:

	Nonstatistical Evaluation	Commercial Evaluation
	Aggregate, percent passing	
1", ¾", ½" and ⅜" sieves	±6.0%	±8.0%
U.S. No. 4 sieve	±6.0%	±8.0%
U.S. No. 8 sieve	±6.0%	±8.0%
U.S. No. 200 sieve	±2.0%	±3.0%
Asphalt Binder	±0.5%	±0.7%
Air Voids	2.5% Minimum and 5.5% Maximum	

9-03.14 Borrow

Add the following new subsection:

9-03.14(5) Special Borrow

Material for special 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
3 in	100
1.5 in	70-100
3/4 in.	50-85
No. 4	30-60
No. 40	8-24
No. 200	3-10
Sand Equivalent	35 Min.

9-03.21 Recycled Materials

Section 9-03.21 is supplemented with the following:

The Contracting Agency encourages bidders to use recycled materials to the maximum extent feasible.

9-05 DRAINAGE STRUCTURES AND CULVERTS

9-05.1 Drain Pipe

Add the following new subsection:

9-05.1(8) Trench Drains

Trench Drains

Vehicular Trench Drain shall consist of a trench grate and frame as shown in the Plans. The trench drain grate shall have a nominal dimension of 12" width. The frame shall be embedded as shown in the Plans with #3 rebar. Frames to be H-20 rated. Trench Grates to be supplied in the pattern shown in Plans and shall be H-20 rated. Grates shall be made of raw ductile iron meeting ASTM A48 class 35B or better. Grates shall be ADA compliant. Locking and securing hardware shall be as supplied by the trench drain manufacturer.

9-05.15 Metal Casings

9-05.15(1) Manhole Ring and Cover

Section 9-05.15(1) is revised to read:

All covers shall be interchangeable within the dimensions shown on the Drawings. All mating surfaces shall be machine finished to ensure a non-rocking fit. Sanitary and storm sewer manholes frames and covers shall have the words "KITSAP SEWER" or "KITSAP STORM" cast into the top surface of the cover and shall be the bolt down and locking type and size as shown on the Plans. Covers shall contain integral heavy duty cam locks with 1/4" round neoprene

gaskets. Cam lock wrench shall only be removable when the cover is in the locked position. Subject to compliance with the contract documents the following manufacturers are acceptable:

1. EJ Group, Inc.
2. Neenah Foundry.
3. Deeter Foundry.
4. Olympic Foundry.
5. Approved Equal, shall be determined based on requirements within this section, materials specifications, and conformity with the dimensions and custom logo design provided on the Kitsap County Standard Details.

9-13 RIPRAP, QUARRY SPALLS, SLOPE PROTECTION, AND ROCK FOR EROSION AND SCOUR PROTECTION AND ROCK WALLS

9-13.2 Vacant

Section 9-13.2, including title, is deleted and replaced with the following:

9-13.2 Beach Cobble Mix

Beach Cobble Mix shall meet the following gradation. Rock shall be streambed cobbles. The exact point of acceptance will be determined by the Engineer.

Sieve Size	Minimum Percent Passing	Maximum Percent Passing
12"	85	100
8"	50	85
6"	35	50
4"	20	35
1"	10	20
No. 200	5	10

9-14 EROSION CONTROL AND ROADSIDE PLANTING

9-14.2 Topsoil

9-14.2(1) Topsoil Type A

Section 9-14.2(1) is supplemented with the following:

(September 12, 2019 WSDOT NWR GSP)

Topsoil Type A shall consist of a uniform blend composed by volume of 60 percent to 70 percent Sandy Loam and 30 percent to 40 percent Fine Compost.

Sandy Loam

Sandy Loam shall be as defined by the US Department of Agriculture Natural Resource Conservation Services Soil Texture Triangle. Testing shall be performed by a Washington State Department of Ecology accredited testing laboratory approved through the North American Proficiency Testing Performance Assessment Program (NAPT-PAP) on a sample size of no less than 2 pounds. Testing shall not occur more than 90 days prior to installation and shall be submitted to the Engineer for approval a minimum of 14 calendar days prior to use or installation. The Sandy Loam analysis shall meet the following requirements:

Tested Item	Method*	Units	Specification Range
pH 1:1	S-2.20	S.U.	5.5 – 7.5
E.C. 1:1	S-2.20	mmhos/cm	≤ 2
Nitrate Nitrogen	S-3.10	mg/Kg	***
Ammonium Nitrogen	S-3.50	mg/Kg	***
Organic Matter	S-9.10	%	3 – 10
Phosphorus (P)	S-4.20 (Bray)	mg/Kg	***
Calcium (Ca)	S-5.10 (NH ₄ OAC)	meq/100g	***
Magnesium (Mg)	S-5.10 (NH ₄ OAC) S-6.11 (DTPA/Sorbitol)	meq/100g Mg/Kg	***
Sodium (Na)			***
Potassium (K)			***
Zinc (Zn)			***
Manganese (Mn)	S-6.11 (DTPA/Sorbitol) EPA 908/S- 10.10	Mg/Kg meq/100g	***
Copper (Cu)			***
Iron (Fe)			***
Sulfur (SO ₄ -S)			***

Tested Item	Method*	Units	Specification Range
Boron (B)			***
Molybdenum (Mo)			***
Cation Exchange (CEC)			5 Min.
Total Nitrogen	AOAC 990.3	%	***
Total Carbon	AOAC 972.3	%	***
C:N Ratio			20:1 or less
Exchangeable Sodium Percentage (ESP)	ESP	%	10 Max.
Particle Size Analysis (Sand, Clay, Silt)	S-14.10 (Hydrometer)	%	Sandy Loam
Heavy Metals Testing	EPA 6010D	mg/Kg	From WAC 173-350-220 Table 220-B unless otherwise noted
Arsenic			≤ 20
Cadmium			≤ 10
Chromium			≤ 42**
Copper			≤ 100**
Lead			≤ 150
Molybdenum			≤ 9
Nickel			≤ 100**
Selenium			≤ 18
Zinc			≤ 270**
Mercury	EPA 7473		≤ 8
*Methods are from "Soil, Plant, and Water Reference Methods For the Western Region" 2005, 3 rd Ed., Dr. R. Gavlak, Dr. D. Horneck, Dr. R.O. Miller.			**From WAC 173-340-900 Table 749-2 for Unrestricted Land Uses ***Testing for soil-testing laboratory recommendations for soil treatments and amendments

The soil-testing laboratory shall state recommendations for soil treatments and soil amendments to be incorporated based on the results of the tests. Recommendations shall be in pounds per acre, or volume per cu. yd. for nitrogen, phosphorus, potash nutrients, and soil amendments to be added to produce satisfactory planting soil suitable for healthy, viable plants.

Compost

Compost shall conform to the requirements of Section 9-14.5(8).

Mixing Requirements

Topsoil Type A shall be thoroughly mixed by the supplier prior to delivery to the site. The Contractor shall submit certification from the supplier that the Topsoil Type A has been mixed according to the above percentages at the point of delivery.

Acceptance of Topsoil Type A for use on a project shall be on the basis of visual verification by the Engineer that the delivered material is representative of the laboratory analysis documentation and certification.

Delete this section and replace it with the following:

9-14.2(1)A Mineral Aggregate for Topsoil Type A

Mineral aggregate for Top Soil Type A shall meet the following gradation:

Sieve Size	Percent Passing
1 inch	100
No. 4	60 – 100
No. 10	40 – 100
No. 40	15 - 50
No. 200	2 - 5

Add the following new subsection:

9-14.2(4) StormMix Media

StormMix media shall be of consistent quality, manufactured in a controlled environment, and composed of components that are sustainable and do not leach pollutants. The treatment system, a high flow rate biofiltration stormwater treatment system using StormMix media from BioPod Biofilter System (BioPod) as manufactured by:

Oldcastle Infrastructure
7100 Longe St
Stockton
California 9520.
Phone: (800) 579-8819.

9-14.3 Seed

Section 9-14.3 is supplemented with the following:

Seed shall be a mix of dwarf, drought tolerant grasses and microclover per the following Seed Mix Blend:

- 35% ± 5% Quatro Tetraploid Sheep Fescue (*Festuca ovina*)
- 30% ± 5% Eureka II Hard Fescue (*Festuca ovina duriuscula*)
- 30% ± 5% Banfield Perennial Ryegrass (*Lolium perenne*)
- 5% ± 1% Microclover (*Trifolium repens v. microclover*)

Application rate: 5 lbs. per 1000 square feet.

9-14.4 Fertilizer

Section 9-14.4 is supplemented with the following:

Fertilizer shall be as follows:

- Lawn/sod: 15% nitrogen, 22% phosphoric acid, 15% soluble potash (15-22-15)
- Trees: 16% nitrogen, 4% phosphoric acid, 8% soluble potash (16-4-8).
- Shrubs: 24% nitrogen, 8% phosphoric acid, 16% soluble potash (24-8-16)

Fertilizer shall be a slow release variety of a type and brand suitable for the use specified. Application rate shall be per manufacturer's recommendation.

9-14.5 Mulch and Amendments

Add the following new subsections:

9-14.5(3) Media Mulch

Media Mulch 9-14.5(3)A

The Media Mulch shall be composed of clean, coarse-ground or shredded hardwood and shall not contain excessive tree bark or artificial coloring.

Add the following new subsections:

9-14.8 Root Barrier

Root barriers shall be injection molded, minimum 50% post-consumer recycled plastic, minimum twelve (12) inch wide and eighteen (18) inch high panels with ½” raised 90% molded root deflecting ribs, and meet or exceed the following criteria:

Test	ASTM Test Method	Value Copolymer Polypropylene
Tensile Stress @ yield	D638	3800 PS
Elongation @ yield	D638	6.3%
Flexural Modulus	D790B	150,000 PSI
Notched Izod Impact	D256A	7.1
Rockwell Hardness r. scale	D785A	68

END OF DIVISION 9

(February 26, 2024 WSDOT GSP)

STANDARD PLANS

The State of Washington Standard Plans for Road, Bridge and Municipal Construction M21-01, effective September 13, 2021, is made a part of this contract.

The Standard Plans are revised as follows:

B-90.40

Valve Detail – DELETED

C-8

DELETED

C-8A

DELETED

C-20.10

Note 1: “Refer to Standard Plan C-1b and C-20.11 for additional details not shown on this plan.” is revised to read: “Refer to Standard Plan C-1b for additional details not shown on this plan.”

C-60.10

Sheet 1, ADD Note: NOTE: STEEL WELDED WIRE REINFORCEMENT DEFORMED FOR CONCRETE MAY BE SUBSTITUTED FOR REINFORCING STEEL IN ACCORDANCE WITH STANDARD SPECIFICATION, SECTION 6-10.3

Sheet 2, New Note 5: The connecting pin may be fabricated with a forged head as shown on Standard Plan C-60.15.”

C-60.80

DELETED

C-85.16

DELETED

C-85.20

DELETED

D-10.10

Wall Type 1 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT Bridge Design Manual (BDM) and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.15

Wall Type 2 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.30

Wall Type 5 may be used in all cases.

D-10.35

Wall Type 6 may be used in all cases.

D-10.40

Wall Type 7 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.45

Wall Type 8 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the revisions stated in the 11/3/15 Bridge Design memorandum.

D-15.10

STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

D-15.20

STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

D-15.30

STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

G-90.11

DELETED

G-90.40

DELETED

J-10.16

Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14

J-10.17

Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14

J-10.18

Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14

J-20.26

Add Note 1, "1. One accessible pedestrian pushbutton station per pedestrian pushbutton post."

J-20.16

View A, callout, was – LOCK NIPPLE, is revised to read; CHASE NIPPLE

J-21.10

Sheet 1, Elevation View, Round Concrete Foundation Detail, callout – "ANCHOR BOLTS ~ 3/4" (IN) x 30" (IN) FULL THREAD ~ THREE REQ'D. PER ASSEMBLY" IS REVISED TO READ: "ANCHOR BOLTS ~ 3/4" (IN) x 30" (IN) FULL THREAD ~ FOUR REQ'D. PER ASSEMBLY"

Sheet 1 of 2, Elevation view (Round), add dimension depicting the distance from the top of the foundation to find 2 #4 reinforcing bar shown, to read; 3" CLR.. Delete "(TYP.)" from the 2 1/2" CLR. dimension, depicting the distance from the bottom of the foundation to find 2 # 4 reinf. Bar.

Sheet 1 of 2, Elevation view (Square), add dimension depicting the distance from the top of the foundation to find 1 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 1/2" CLR. dimension, depicting the distance from the bottom of the foundation to find 1 # 4 reinf. Bar.

Sheet 2 of 2, Elevation view (Round), add dimension depicting the distance from the top of the foundation to find 2 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 1/2" CLR. dimension, depicting the distance from the bottom of the foundation to find 2 # 4 reinf. Bar.

Sheet 2 of 2, Elevation view (Square), add dimension depicting the distance from the top of the foundation to find 1 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 1/2" CLR. dimension, depicting the distance from the bottom of the foundation to find 1 # 4 reinf. Bar.

Detail F, callout, "Heavy Hex Clamping Bolt (TYP.) ~ 3/4" (IN) Diam. Torque Clamping Bolts (see Note 3)" is revised to read; "Heavy Hex Clamping Bolt (TYP.) ~ 3/4" (IN) Diam. Torque Clamping Bolts (see Note 1)"

Detail F, callout, "3/4" (IN) x 2' – 6" Anchor Bolt (TYP.) ~ Four Required (See Note 4)" is revised to read; "3/4" (IN) x 2' – 6" Anchor Bolt (TYP.) ~ Three Required (See Note 2)"

J-21.15

Partial View, callout, was – LOCK NIPPLE ~ 1 ½” DIAM., is revised to read; CHASE NIPPLE ~ 1 ½” (IN) DIAM.

J-21.16

Detail A, callout, was – LOCKNIPPLE, is revised to read; CHASE NIPPLE

J-22.15

Ramp Meter Signal Standard, elevation, dimension 4’ - 6” is revised to read; 6’-0” (2x) Detail A, callout, was – LOCK NIPPLE ~ 1 ½” DIAM. is revised to read; CHASE NIPPLE ~ 1 ½” (IN) DIAM.

J-40.10

Sheet 2 of 2, Detail F, callout, “12 – 13 x 1 ½” S.S. PENTA HEAD BOLT AND 12” S. S. FLAT WASHER” is revised to read; “12 – 13 x 1 ½” S.S. PENTA HEAD BOLT AND 1/2” (IN) S. S. FLAT WASHER”

J-40.36

Note 1, second sentence; ”Finish shall be # 2B for backbox and # 4 for the cover.” Is revised to read; ”Finish shall be # 2B for barrier box and HRAP (Hot Rolled Annealed and Pickled) for the cover.

J-40.37

Note 1, second sentence; ”Finish shall be # 2B for backbox and # 4 for the cover.” Is revised to read; ”Finish shall be # 2B for barrier box and HRAP (Hot Rolled Annealed and Pickled) for the cover.

J-75.20

Key Notes, note 16, second bullet point, was: “1/2” (IN) x 0.45” (IN) Stainless Steel Bands”, add the following to the end of the note: “Alternate: Stainless steel cable with stainless steel ends, nuts, bolts, and washers may be used in place of stainless steel bands and associated hardware.”

The following are the Standard Plan numbers applicable at the time this project was advertised. The date shown with each plan number is the publication approval date shown in the lower right-hand corner of that plan. Standard Plans showing different dates shall not be used in this contract.

A-10.10-00.....8/7/07	A-30.35-00.....10/12/07	A-50.10-01.....8/17/21
A-10.20-00.....10/5/07	A-40.00-00.....8/11/09	A-50.40-01.....8/17/21
A-10.30-00.....10/5/07	A-40.10-04.....7/31/19	A-60.10-03.....12/23/14
A-20.10-00.....8/31/07	A-40.15-00.....8/11/09	A-60.20-03.....12/23/14
A-30.10-00.....11/8/07	A-40.20-04.....1/18/17	A-60.30-01.....6/28/18
A-30.30-01.....6/16/11	A-40.50-02.....12/23/14	A-60.40-00.....8/31/07

B-5.20-03.....9/9/20	B-30.50-03.....2/27/18	B-75.20-03.....8/17/21
B-5.40-02.....1/26/17	B-30.60-00.....9/9/20	B-75.50-01.....6/10/08
B-5.60-02.....1/26/17	B-30.70-04.....2/27/18	B-75.60-00.....6/8/06
B-10.20-02.....3/2/18	B-30.80-01.....2/27/18	B-80.20-00.....6/8/06
B-10.40-02.....8/17/21	B-30.90-02.....1/26/17	B-80.40-00.....6/1/06
B-10.70-02.....8/17/21	B-35.20-00.....6/8/06	B-85.10-01.....6/10/08
B-15.20-01.....2/7/12	B-35.40-00.....6/8/06	B-85.20-00.....6/1/06
B-15.40-01.....2/7/12	B-40.20-00.....6/1/06	B-85.30-00.....6/1/06
B-15.60-02.....1/26/17	B-40.40-02.....1/26/17	B-85.40-00.....6/8/06
B-20.20-02.....3/16/12	B-45.20-01.....7/11/17	B-85.50-01.....6/10/08
B-20.40-04.....2/27/18	B-45.40-01.....7/21/17	B-90.10-00.....6/8/06
B-20.60-03.....3/15/12	B-50.20-00.....6/1/06	B-90.20-00.....6/8/06
B-25.20-02.....2/27/18	B-55.20-03.....8/17/21	B-90.30-00.....6/8/06
B-25.60-02.....2/27/18	B-60.20-02.....9/9/20	B-90.40-01.....1/26/17
B-30.05-00.....9/9/20	B-60.40-01.....2/27/18	B-90.50-00.....6/8/06
B-30.10-03.....2/27/18	B-65.20-01.....4/26/12	B-95.20-02.....8/17/21
B-30.15-00.....2/27/18	B-65.40-00.....6/1/06	B-95.40-01.....6/28/18
B-30.20-04.....2/27/18	B-70.20-00.....6/1/06	
B-30.30-03.....2/27/18	B-70.60-01.....1/26/17	
B-30.40-03.....2/27/18		

C-1.....9/9/20	C-22.16-07.....9/16/20	C-60.70-00.....9/24/20
C-1b.....9/9/20	C-22.40-08.....9/16/20	C-60.80-00.....8/17/21
C-1d.....10/31/03	C-22.45-05.....9/16/20	C-70.15-00.....8/17/21
C-2c.....8/12/19	C-23.60-04.....7/21/17	C-70.10-03.....8/20/21
C-4f.....8/12/19	C.24.10-02.....8/12/19	C-75.10-02.....9/16/20
C-6a.....10/14/09	C-25.20-07.....8/20/21	C-75.20-03.....8/20/21
C-7.....6/16/11	C-25.22-06.....8/20/21	C-75.30-03.....8/20/21
C-7a.....6/16/11	C-25.26-05.....8/20/21	C-80.10-02.....9/16/20
C-8.....2/10/09	C-25.30-01.....8/20/21	C-80.20-01.....6/11/14
C-8a.....7/25/97	C-25.80-05.....8/12/19	C-80.30-02.....8/20/21
C-20.10-07.....8/20/21	C-60.10-01.....9/24/20	C-80.40-01.....6/11/14
C-20.14-04.....8/12/19	C-60.15-00.....8/17/21	C-85.10-00.....4/8/12
C-20.15-02.....6/11/14	C-60.20-00.....9/24/20	C-85.11-01.....9/16/20
C-20.18-03.....8/12/19	C-60.30-01.....8/17/21	C-85.15-02.....8/27/21
C-20.40-08.....8/20/21	C-60.40-00.....8/17/21	C-85-18-02.....8/20/21
C-20.41-03.....8/20/21	C-60.45-00.....8/17/21	
C-20.42-05.....7/14/15	C-60.50-00.....8/17/21	
C-20.45.02.....8/12/19	C-60.60-00.....8/17/21	

D-2.04-00.....11/10/05	D-2.80-00.....11/10/05	D-10.10-01.....12/2/08
D-2.06-01.....1/6/09	D-2.84-00.....11/10/05	D-10.15-01.....12/2/08
D-2.08-00.....11/10/05	D-2.88-00.....11/10/05	D-10.20-01.....8/7/19
D-2.32-00.....11/10/05	D-2.92-00.....11/10/05	D-10.25-01.....8/7/19
D-2.34-01.....1/6/09	D-3.09-00.....5/17/12	D-10.30-00.....7/8/08
D-2.36-03.....6/11/14	D-3.10-01.....5/29/13	D-10.35-00.....7/8/08

D-2.46-02.....8/13/21	D-3.11-03.....6/11/14	D-10.40-01.....12/2/08
D-2.60-00.....11/10/05	D-3.15-02.....6/10/13	D-10.45-01.....12/2/08
D-2.62-00.....11/10/05	D-3.16-02.....5/29/13	
D-2.64-01.....1/6/09	D-3.17-02.....5/9/16	
D-2.66-00.....11/10/05	D-4.....12/11/98	
D-2.68-00.....11/10/05	D-6.....6/19/98	
E-1.....2/21/07	E-4.....8/27/03	
E-2.....5/29/98	E-4a.....8/27/03	
F-10.12-04.....9/24/20	F-10.62-02.....4/22/14	F-40.15-04.....9/25/20
F-10.16-00.....12/20/06	F-10.64-03.....4/22/14	F-40.16-03.....6/29/16
F-10.18-02.....9/24/20	F-30.10-04.....9/25/20	F-45.10-03.....8/13/21
F-10.40-04.....9/24/20	F-40.12-03.....6/29/16	F-80.10-04.....7/15/16
F-10.42-00.....1/23/07	F-40.14-03.....6/29/16	
G-10.10-00.....9/20/07	G-26.10-00.....7/31/19	
G-20.10-03.....8/20/21	G-30.10-04.....6/23/15	
G-22.10-04.....6/28/18	G-50.10-03.....6/28/18	
G-24.10-00.....11/8/07	G-90.10-03.....7/11/17	
G-24.20-01.....2/7/12	G-90.20-05.....7/11/17	
G-24.30-02.....6/28/18	G-90.30-04.....7/11/17	
G-24.40-07.....6/28/18	G-95.10-02.....6/28/18	
G-24.50-05.....8/7/19	G-95.20-03.....6/28/18	
G-24.60-05.....6/28/18	G-95.30-03.....6/28/18	
G-25.10-05.....9/16/20		
H-10.10-00.....7/3/08	H-32.10-00.....9/20/07	H-70.10-02.....8/17/21
H-10.15-00.....7/3/08	H-60.10-01.....7/3/08	H-70.20-02.....8/17/21
H-30.10-00.....10/12/07	H-60.20-01.....7/3/08	
I-10.10-01.....8/11/09	I-30.20-00.....9/20/07	I-40.20-00.....9/20/07
I-30.10-02.....3/22/13	I-30.30-02.....6/12/19	I-50.20-01.....6/10/13
I-30.15-02.....3/22/13	I-30.40-02.....6/12/19	I-60.10-01.....6/10/13
I-30.16-01.....7/11/19	I-30.60-02.....6/12/19	I-60.20-01.....6/10/13
I-30.17-01.....6/12/19	I-40.10-00.....9/20/07	I-80.10-02.....7/15/16
J-10.....7/18/97	J-28.40-02.....6/11/14	J-60.13-00.....6/16/10
J-10.10-04.....9/16/20	J-28.42-01.....6/11/14	J-60.14-01.....7/31/19
J-10.12-00.....9/16/20	J-28.43-01.....6/28/18	J-75.10-02.....7/10/15
J-10.14-00.....9/16/20	J-28.45-03.....7/21/16	J-75.20-01.....7/10/15
J-10.15-01.....6/11/14	J-28.50-03.....7/21/16	J-75.30-02.....7/10/15
J-10.16-02.....8/18/21	J-28.60-03.....8/27/21	J-75.41-01.....6/29/16
J-10.17-02.....8/18/21	J-28.70-03.....7/21/17	J-75.45-02.....6/1/16
J-10.18-02.....8/18/21	J-29.10-01.....7/21/16	J-80.10-01.....8/18/21
J-10.20-04.....8/18/21	J-29.15-01.....7/21/16	J-80.12-00.....8/18/21

J-10.21-02.....8/18/21	J-29.16-02.....7/21/16	J-80.15-00.....6/28/18
J-10.22-02.....8/18/21	J-30.10-00.....6/18/15	J-81.10-02.....8/18/21
J-10.25-00.....7/11/17	J-40.05-00.....7/21/16	J-81.12-00.....9/3/21
J-12.15-00.....6/28/18	J-40.10-04.....4/28/16	J-86.10-00.....6/28/18
J-12.16-00.....6/28/18	J-40.20-03.....4/28/16	J-90.10-03.....6/28/18
J-15.10-01.....6/11/14	J-40.30-04.....4/28/16	J-90.20-03.....6/28/18
J-15.15-02.....7/10/15	J-40.35-01.....5/29/13	J-90.21-02.....6/28/18
J-20.10-04.....7/31/19	J-40.36-02.....7/21/17	J-90.50-00.....6/28/18
J-20.11-03.....7/31/19	J-40.37-02.....7/21/17	
J-20.15-03.....6/30/14	J-40.38-01.....5/20/13	
J-20.16-02.....6/30/14	J-40.39-00.....5/20/13	
J-20.20-02.....5/20/13	J-40.40-02.....7/31/19	
J-20.26-01.....7/12/12	J-45.36-00.....7/21/17	
J-21.10-04.....6/30/14	J-50.05-00.....7/21/17	
J-21.15-01.....6/10/13	J-50.10-01.....7/31/19	
J-21.16-01.....6/10/13	J-50.11-02.....7/31/19	
J-21.17-01.....6/10/13	J-50.12-02.....8/7/19	
J-21.20-01.....6/10/13	J-50.13-00.....8/22/19	
J-22.15-02.....7/10/15	J-50.15-01.....7/21/17	
J-22.16-03.....7/10/15	J-50.16-01.....3/22/13	
J-26.10-03.....7/21/16	J-50.18-00.....8/7/19	
J-26.15-01.....5/17/12	J-50.19-00.....8/7/19	
J-26.20-01.....6/28/18	J-50.20-00.....6/3/11	
J-27.10-01.....7/21/16	J-50.25-00.....6/3/11	
J-27.15-00.....3/15/12	J-50.30-00.....6/3/11	
J-28.10-02.....8/7/19	J-60.05-01.....7/21/16	
J-28.22-00.....8/07/07	J-60.11-00.....5/20/13	
J-28.24-02.....9/16/20	J-60.12-00.....5/20/13	
J-28.26-01.....12/02/08		
J-28.30-03.....6/11/14		
K-70.20-01.....6/1/16	K-80.35-01.....9/16/20	
K-80.10-02.....9/25/20	K-80.37-01.....9/16/20	
K-80.20-00.....12/20/06		
K-80.32-00.....8/17/21		
K-80.34-00.....8/17/21		
L-10.10-02.....6/21/12	L-40.15-01.....6/16/11	L-70.10-01.....5/21/08
L-20.10-03.....7/14/15	L-40.20-02.....6/21/12	L-70.20-01.....5/21/08
L-30.10-02.....6/11/14		
M-1.20-04.....9/25/20	M-11.10-03.....8/7/19	M-40.20-00.....10/12/07
M-1.40-03.....9/25/20	M-12.10-02.....9/25/20	M-40.30-01.....7/11/17
M-1.60-03.....9/25/20	M-15.10-01.....2/6/07	M-40.40-00.....9/20/07
M-1.80-03.....6/3/11	M-17.10-02.....7/3/08	M-40.50-00.....9/20/07
M-2.20-03.....7/10/15	M-20.10-03.....9/25/20	M-40.60-00.....9/20/07

M-2.21-00.....7/10/15	M-20.20-02.....4/20/15	M-60.10-01.....6/3/11
M-3.10-04.....9/25/20	M-20.30-04.....2/29/16	M-60.20-03.....8/17/21
M-3.20-03.....9/25/20	M-20.40-03.....6/24/14	M-65.10-03.....8/17/21
M-3.30-04.....9/25/20	M-20.50-02.....6/3/11	M-80.10-01.....6/3/11
M-3.40-04.....9/25/20	M-24.20-02.....4/20/15	M-80.20-00.....6/10/08
M-3.50-03.....9/25/20	M-24.40-02.....4/20/15	M-80.30-00.....6/10/08
M-5.10-03.....9/25/20	M-24.60-04.....6/24/14	
M-7.50-01.....1/30/07	M-24.65-00.....7/11/17	
M-9.50-02.....6/24/14	M-24.66-00.....7/11/17	
M-9.60-00.....2/10/09	M-40.10-03.....6/24/14	

ATTACHMENTS

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ATTACHMENT A

WASHINGTON STATE PREVAILING WAGE RATES, STATE BENEFIT
CODE KEY AND SUPPLEMENTAL (L&I STATEMENT)

State of Washington
 Department of Labor & Industries
 Prevailing Wage Section - Telephone 360-902-5335
 PO Box 44540, Olympia, WA 98504-4540

Washington State Prevailing Wage

The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, worker's wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements are provided on the Benefit Code Key.

Prevailing wage rates which have been published On: 8/1/2024 and will be effective from: 8/31/2024

<u>County</u>	<u>Trade</u>	<u>Job Classification</u>	<u>Wage</u>	<u>Holiday</u>	<u>Overtime</u>	<u>Note</u>
Kitsap	Asbestos Abatement Workers	Journey Level	\$63.87	<u>5D</u>	<u>1H</u>	
Kitsap	Boilermakers	Journey Level	\$81.48	<u>5N</u>	<u>1C</u>	
Kitsap	Brick Mason	Journey Level	\$71.82	<u>7E</u>	<u>1N</u>	
Kitsap	Brick Mason	Pointer-Caulker-Cleaner	\$71.82	<u>7E</u>	<u>1N</u>	
Kitsap	Building Service Employees	Janitor	\$16.28		<u>1</u>	
Kitsap	Building Service Employees	Shampooer	\$16.28		<u>1</u>	
Kitsap	Building Service Employees	Waxer	\$16.28		<u>1</u>	
Kitsap	Building Service Employees	Window Cleaner	\$16.28		<u>1</u>	
Kitsap	Cabinet Makers (In Shop)	Journey Level	\$23.72		<u>1</u>	
Kitsap	Carpenters	Acoustical Worker	\$78.96	<u>15J</u>	<u>11U</u>	
Kitsap	Carpenters	Bridge Dock and Wharf Carpenter	\$80.50	<u>15J</u>	<u>11U</u>	<u>9L</u>
Kitsap	Carpenters	Floor Layer & Floor Finisher	\$78.96	<u>15J</u>	<u>11U</u>	
Kitsap	Carpenters	General Carpenter	\$78.96	<u>15J</u>	<u>11U</u>	
Kitsap	Carpenters	Scaffold Erector	\$78.96	<u>15J</u>	<u>11U</u>	
Kitsap	Cement Masons	Application of all Composition Mastic	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Application of all Epoxy Material	\$76.78	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Application of all Plastic Material	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Application of Sealing Compound	\$76.78	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Application of Underlayment	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Building General	\$76.78	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Composition or Kalman Floors	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Concrete Paving	\$76.78	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Curb & Gutter Machine	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Curb & Gutter, Sidewalks	\$76.78	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Curing Concrete	\$76.78	<u>15J</u>	<u>4U</u>	

Kitsap	Cement Masons	Finish Colored Concrete	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Floor Grinding	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Floor Grinding/Polisher	\$76.78	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Green Concrete Saw, self-powered	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Grouting of all Plates	\$76.78	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Grouting of all Tilt-up Panels	\$76.78	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Guniting Nozzleman	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Hand Powered Grinder	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Journey Level	\$76.78	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Patching Concrete	\$76.78	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Pneumatic Power Tools	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Power Chipping & Brushing	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Sand Blasting Architectural Finish	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Screed & Rodding Machine	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Spackling or Skim Coat Concrete	\$76.78	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Troweling Machine Operator	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Troweling Machine Operator on Colored Slabs	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Cement Masons	Tunnel Workers	\$77.30	<u>15J</u>	<u>4U</u>	
Kitsap	Divers & Tenders	Bell/Vehicle/Submersible Operator (not under pressure)	\$156.25	<u>15J</u>	<u>11T</u>	<u>9I</u>
Kitsap	Divers & Tenders	Dive Supervisor	\$157.75	<u>15J</u>	<u>11T</u>	<u>9I</u>
Kitsap	Divers & Tenders	Diver	\$156.25	<u>15J</u>	<u>11T</u>	<u>9I</u>
Kitsap	Divers & Tenders	Diver Tender	\$86.86	<u>15J</u>	<u>11T</u>	<u>9I</u>
Kitsap	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	\$118.99	<u>15J</u>	<u>11U</u>	
Kitsap	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	\$109.76	<u>15J</u>	<u>11U</u>	
Kitsap	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	\$128.22	<u>15J</u>	<u>11U</u>	
Kitsap	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	\$137.45	<u>15J</u>	<u>11U</u>	
Kitsap	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	\$146.67	<u>15J</u>	<u>11U</u>	
Kitsap	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	\$155.90	<u>15J</u>	<u>11U</u>	
Kitsap	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	\$165.13	<u>15J</u>	<u>11U</u>	

Kitsap	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	\$174.36	<u>15J</u>	<u>11U</u>	
Kitsap	Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	\$183.59	<u>15J</u>	<u>11U</u>	
Kitsap	Divers & Tenders	Lead Diver (Dive Master)	\$101.32	<u>15J</u>	<u>11T</u>	<u>9I</u>
Kitsap	Divers & Tenders	Manifold Operator (Life Support Technician)	\$86.86	<u>15J</u>	<u>11T</u>	<u>9I</u>
Kitsap	Divers & Tenders	Remote Operated Vehicle Operator/Technician	\$86.86	<u>15J</u>	<u>11T</u>	<u>9I</u>
Kitsap	Divers & Tenders	Remote Operated Vehicle Operator/Technician	\$86.86	<u>15J</u>	<u>11T</u>	<u>9I</u>
Kitsap	Divers & Tenders	Remote Operated Vehicle Tender	\$80.55	<u>15J</u>	<u>11T</u>	<u>9I</u>
Kitsap	Divers & Tenders	Stand-by Diver	\$96.32	<u>15J</u>	<u>11T</u>	<u>9I</u>
Kitsap	Dredge Workers	Assistant Engineer	\$83.92	<u>5D</u>	<u>3F</u>	
Kitsap	Dredge Workers	Assistant Mate (Deckhand)	\$83.28	<u>5D</u>	<u>3F</u>	
Kitsap	Dredge Workers	Boatmen	\$83.92	<u>5D</u>	<u>3F</u>	
Kitsap	Dredge Workers	Engineer Welder	\$85.53	<u>5D</u>	<u>3F</u>	
Kitsap	Dredge Workers	Leverman, Hydraulic	\$87.24	<u>5D</u>	<u>3F</u>	
Kitsap	Dredge Workers	Mates	\$83.92	<u>5D</u>	<u>3F</u>	
Kitsap	Dredge Workers	Oiler	\$83.28	<u>5D</u>	<u>3F</u>	
Kitsap	Drywall Applicator	Journey Level	\$78.76	<u>15O</u>	<u>11S</u>	
Kitsap	Drywall Tapers	Journey Level	\$78.76	<u>15O</u>	<u>11S</u>	
Kitsap	Electrical Fixture Maintenance Workers	Journey Level	\$38.69	<u>5L</u>	<u>1E</u>	
Kitsap	Electricians - Inside	Cable Splicer	\$109.35	<u>7C</u>	<u>4E</u>	
Kitsap	Electricians - Inside	Cable Splicer (tunnel)	\$117.52	<u>7C</u>	<u>4E</u>	
Kitsap	Electricians - Inside	Certified Welder	\$105.63	<u>7C</u>	<u>4E</u>	
Kitsap	Electricians - Inside	Certified Welder (tunnel)	\$113.43	<u>7C</u>	<u>4E</u>	
Kitsap	Electricians - Inside	Construction Stock Person	\$51.53	<u>7C</u>	<u>4E</u>	
Kitsap	Electricians - Inside	Journey Level	\$101.92	<u>7C</u>	<u>4E</u>	
Kitsap	Electricians - Inside	Journey Level (tunnel)	\$109.35	<u>7C</u>	<u>4E</u>	
Kitsap	Electricians - Motor Shop	Craftsman	\$16.28		<u>1</u>	
Kitsap	Electricians - Motor Shop	Journey Level	\$16.28		<u>1</u>	
Kitsap	Electricians - Powerline Construction	Cable Splicer	\$97.76	<u>5A</u>	<u>4D</u>	
Kitsap	Electricians - Powerline Construction	Certified Line Welder	\$89.71	<u>5A</u>	<u>4D</u>	
Kitsap	Electricians - Powerline Construction	Groundperson	\$56.79	<u>5A</u>	<u>4D</u>	
Kitsap	Electricians - Powerline Construction	Heavy Line Equipment Operator	\$89.71	<u>5A</u>	<u>4D</u>	
Kitsap	Electricians - Powerline Construction	Journey Level Lineperson	\$89.71	<u>5A</u>	<u>4D</u>	
Kitsap	Electricians - Powerline Construction	Line Equipment Operator	\$77.13	<u>5A</u>	<u>4D</u>	
Kitsap	Electricians - Powerline Construction	Meter Installer	\$56.79	<u>5A</u>	<u>4D</u>	<u>8W</u>

Kitsap	Electricians - Powerline Construction	Pole Sprayer	\$89.71	<u>5A</u>	<u>4D</u>	
Kitsap	Electricians - Powerline Construction	Powderperson	\$66.84	<u>5A</u>	<u>4D</u>	
Kitsap	Electronic Technicians	Journey Level	\$65.66	<u>7E</u>	<u>1E</u>	
Kitsap	Elevator Constructors	Mechanic	\$111.26	<u>7D</u>	<u>4A</u>	
Kitsap	Elevator Constructors	Mechanic In Charge	\$120.27	<u>7D</u>	<u>4A</u>	
Kitsap	Fabricated Precast Concrete Products	Journey Level	\$16.28		<u>1</u>	
Kitsap	Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	\$16.28		<u>1</u>	
Kitsap	Fence Erectors	Fence Erector	\$53.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Fence Erectors	Fence Laborer	\$53.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Flaggers	Journey Level	\$53.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Glaziers	Journey Level	\$82.16	<u>7L</u>	<u>1Y</u>	
Kitsap	Heat & Frost Insulators And Asbestos Workers	Journey Level	\$91.81	<u>15H</u>	<u>11C</u>	
Kitsap	Heating Equipment Mechanics	Journey Level	\$99.92	<u>7F</u>	<u>1E</u>	
Kitsap	Hod Carriers & Mason Tenders	Journey Level	\$66.10	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Industrial Power Vacuum Cleaner	Journey Level	\$29.89		<u>1</u>	
Kitsap	Inland Boatmen	Boat Operator	\$61.41	<u>5B</u>	<u>1K</u>	
Kitsap	Inland Boatmen	Cook	\$56.48	<u>5B</u>	<u>1K</u>	
Kitsap	Inland Boatmen	Deckhand	\$57.48	<u>5B</u>	<u>1K</u>	
Kitsap	Inland Boatmen	Deckhand Engineer	\$58.81	<u>5B</u>	<u>1K</u>	
Kitsap	Inland Boatmen	Launch Operator	\$58.89	<u>5B</u>	<u>1K</u>	
Kitsap	Inland Boatmen	Mate	\$57.31	<u>5B</u>	<u>1K</u>	
Kitsap	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator	\$51.27	<u>15M</u>	<u>11O</u>	
Kitsap	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Foamer Operator	\$51.27	<u>15M</u>	<u>11O</u>	
Kitsap	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	\$51.27	<u>15M</u>	<u>11O</u>	
Kitsap	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	\$49.20	<u>15M</u>	<u>11O</u>	
Kitsap	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	\$42.99	<u>15M</u>	<u>11O</u>	
Kitsap	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	TV Truck Operator	\$46.10	<u>15M</u>	<u>11O</u>	
Kitsap	Insulation Applicators	Journey Level	\$78.96	<u>15J</u>	<u>11U</u>	
Kitsap	Ironworkers	Journeyman	\$87.80	<u>15K</u>	<u>11N</u>	
Kitsap	Laborers	Air, Gas Or Electric Vibrating Screed	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>

Kitsap	Laborers	Airtrac Drill Operator	\$64.51	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Ballast Regular Machine	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Batch Weighman	\$53.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Brick Pavers	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Brush Cutter	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Brush Hog Feeder	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Burner	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Caisson Worker	\$64.51	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Carpenter Tender	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Cement Dumper-paving	\$63.76	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Cement Finisher Tender	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Change House Or Dry Shack	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Chipping Gun (30 Lbs. And Over)	\$63.76	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Chipping Gun (Under 30 Lbs.)	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Choker Setter	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Chuck Tender	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Clary Power Spreader	\$63.76	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Clean-up Laborer	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Concrete Dumper/Chute Operator	\$63.76	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Concrete Form Stripper	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Concrete Placement Crew	\$63.76	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Concrete Saw Operator/Core Driller	\$63.76	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Crusher Feeder	\$53.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Curing Laborer	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Demolition: Wrecking & Moving (Incl. Charred Material)	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Ditch Digger	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Diver	\$64.51	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Drill Operator (Hydraulic, Diamond)	\$63.76	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Dry Stack Walls	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Dump Person	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Epoxy Technician	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Erosion Control Worker	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Faller & Bucker Chain Saw	\$63.76	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Fine Graders	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Firewatch	\$53.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Form Setter	\$63.76	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Gabian Basket Builders	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	General Laborer	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Grade Checker & Transit Person	\$66.10	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Grinders	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>
Kitsap	Laborers	Grout Machine Tender	\$62.68	<u>15J</u>	<u>11P</u>	<u>8Y</u>

Kitsap	Laborers	Groutmen (Pressure) Including Post Tension Beams	\$63.76	15J	11P	8Y
Kitsap	Laborers	Guardrail Erector	\$62.68	15J	11P	8Y
Kitsap	Laborers	Hazardous Waste Worker (Level A)	\$64.51	15J	11P	8Y
Kitsap	Laborers	Hazardous Waste Worker (Level B)	\$63.76	15J	11P	8Y
Kitsap	Laborers	Hazardous Waste Worker (Level C)	\$62.68	15J	11P	8Y
Kitsap	Laborers	High Scaler	\$64.51	15J	11P	8Y
Kitsap	Laborers	Jackhammer	\$63.76	15J	11P	8Y
Kitsap	Laborers	Laserbeam Operator	\$63.76	15J	11P	8Y
Kitsap	Laborers	Maintenance Person	\$62.68	15J	11P	8Y
Kitsap	Laborers	Manhole Builder-Mudman	\$63.76	15J	11P	8Y
Kitsap	Laborers	Material Yard Person	\$62.68	15J	11P	8Y
Kitsap	Laborers	Mold Abatement Worker	\$62.68	15J	11P	8Y
Kitsap	Laborers	Motorman-Dinky Locomotive	\$66.20	15J	11P	8Y
Kitsap	Laborers	nozzleman (concrete pump, green cutter when using combination of high pressure air & water on concrete & rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster)	\$66.10	15J	11P	8Y
Kitsap	Laborers	Pavement Breaker	\$63.76	15J	11P	8Y
Kitsap	Laborers	Pilot Car	\$53.68	15J	11P	8Y
Kitsap	Laborers	Pipe Layer (Lead)	\$66.10	15J	11P	8Y
Kitsap	Laborers	Pipe Layer/Tailor	\$63.76	15J	11P	8Y
Kitsap	Laborers	Pipe Pot Tender	\$63.76	15J	11P	8Y
Kitsap	Laborers	Pipe Reliner	\$63.76	15J	11P	8Y
Kitsap	Laborers	Pipe Wrapper	\$63.76	15J	11P	8Y
Kitsap	Laborers	Pot Tender	\$62.68	15J	11P	8Y
Kitsap	Laborers	Powderman	\$64.51	15J	11P	8Y
Kitsap	Laborers	Powderman's Helper	\$62.68	15J	11P	8Y
Kitsap	Laborers	Power Jacks	\$63.76	15J	11P	8Y
Kitsap	Laborers	Railroad Spike Puller - Power	\$63.76	15J	11P	8Y
Kitsap	Laborers	Raker - Asphalt	\$66.10	15J	11P	8Y
Kitsap	Laborers	Re-timberman	\$64.51	15J	11P	8Y
Kitsap	Laborers	Remote Equipment Operator	\$63.76	15J	11P	8Y
Kitsap	Laborers	Rigger/Signal Person	\$63.76	15J	11P	8Y
Kitsap	Laborers	Rip Rap Person	\$62.68	15J	11P	8Y
Kitsap	Laborers	Rivet Buster	\$63.76	15J	11P	8Y
Kitsap	Laborers	Rodder	\$63.76	15J	11P	8Y
Kitsap	Laborers	Scaffold Erector	\$62.68	15J	11P	8Y
Kitsap	Laborers	Scale Person	\$62.68	15J	11P	8Y
Kitsap	Laborers	Sloper (Over 20")	\$63.76	15J	11P	8Y
Kitsap	Laborers	Sloper Sprayer	\$62.68	15J	11P	8Y
Kitsap	Laborers	Spreader (Concrete)	\$63.76	15J	11P	8Y
Kitsap	Laborers	Stake Hopper	\$62.68	15J	11P	8Y

Kitsap	Laborers	Stock Piler	\$62.68	15J	11P	8Y
Kitsap	Laborers	Swinging Stage/Boatswain Chair	\$53.68	15J	11P	8Y
Kitsap	Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	\$63.76	15J	11P	8Y
Kitsap	Laborers	Tamper (Multiple & Self-propelled)	\$63.76	15J	11P	8Y
Kitsap	Laborers	Timber Person - Sewer (Lagger, Shorer & Cribber)	\$63.76	15J	11P	8Y
Kitsap	Laborers	Toolroom Person (at Jobsite)	\$62.68	15J	11P	8Y
Kitsap	Laborers	Topper	\$62.68	15J	11P	8Y
Kitsap	Laborers	Track Laborer	\$62.68	15J	11P	8Y
Kitsap	Laborers	Track Liner (Power)	\$63.76	15J	11P	8Y
Kitsap	Laborers	Traffic Control Laborer	\$57.15	15J	11P	9C
Kitsap	Laborers	Traffic Control Supervisor	\$60.34	15J	11P	9C
Kitsap	Laborers	Truck Spotter	\$62.68	15J	11P	8Y
Kitsap	Laborers	Tugger Operator	\$63.76	15J	11P	8Y
Kitsap	Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	\$200.40	15J	11P	9B
Kitsap	Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	\$205.43	15J	11P	9B
Kitsap	Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	\$209.11	15J	11P	9B
Kitsap	Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	\$214.81	15J	11P	9B
Kitsap	Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	\$216.93	15J	11P	9B
Kitsap	Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	\$222.03	15J	11P	9B
Kitsap	Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	\$223.93	15J	11P	9B
Kitsap	Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	\$225.93	15J	11P	9B
Kitsap	Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	\$227.93	15J	11P	9B
Kitsap	Laborers	Tunnel Work-Guage and Lock Tender	\$66.20	15J	11P	8Y
Kitsap	Laborers	Tunnel Work-Miner	\$66.20	15J	11P	8Y
Kitsap	Laborers	Vibrator	\$63.76	15J	11P	8Y
Kitsap	Laborers	Vinyl Seamer	\$62.68	15J	11P	8Y
Kitsap	Laborers	Watchman	\$49.12	15J	11P	8Y
Kitsap	Laborers	Welder	\$63.76	15J	11P	8Y
Kitsap	Laborers	Well Point Laborer	\$63.76	15J	11P	8Y
Kitsap	Laborers	Window Washer/Cleaner	\$49.12	15J	11P	8Y
Kitsap	Laborers - Underground Sewer & Water	General Laborer & Topman	\$62.68	15J	11P	8Y
Kitsap	Laborers - Underground Sewer & Water	Pipe Layer	\$63.76	15J	11P	8Y
Kitsap	Landscape Construction	Landscape Construction/Landscaping Or Planting Laborers	\$49.12	15J	11P	8Y

Kitsap	Landscape Construction	Landscape Operator	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Landscape Maintenance	Groundskeeper	\$16.28		<u>1</u>	
Kitsap	Lathers	Journey Level	\$78.76	<u>15O</u>	<u>11S</u>	
Kitsap	Marble Setters	Journey Level	\$71.82	<u>7E</u>	<u>1N</u>	
Kitsap	Metal Fabrication (In Shop)	Fitter	\$26.96		<u>1</u>	
Kitsap	Metal Fabrication (In Shop)	Laborer	\$16.28		<u>1</u>	
Kitsap	Metal Fabrication (In Shop)	Machine Operator	\$16.28		<u>1</u>	
Kitsap	Metal Fabrication (In Shop)	Welder	\$16.28		<u>1</u>	
Kitsap	Millwright	Journey Level	\$80.28	<u>15J</u>	<u>4C</u>	
Kitsap	Modular Buildings	Cabinet Assembly	\$16.28		<u>1</u>	
Kitsap	Modular Buildings	Electrician	\$16.28		<u>1</u>	
Kitsap	Modular Buildings	Equipment Maintenance	\$16.28		<u>1</u>	
Kitsap	Modular Buildings	Plumber	\$16.28		<u>1</u>	
Kitsap	Modular Buildings	Production Worker	\$16.28		<u>1</u>	
Kitsap	Modular Buildings	Tool Maintenance	\$16.28		<u>1</u>	
Kitsap	Modular Buildings	Utility Person	\$16.28		<u>1</u>	
Kitsap	Modular Buildings	Welder	\$16.28		<u>1</u>	
Kitsap	Painters	Journey Level	\$51.71	<u>6Z</u>	<u>11J</u>	
Kitsap	Pile Driver	Crew Tender	\$86.81	<u>15J</u>	<u>11U</u>	<u>9L</u>
Kitsap	Pile Driver	Journey Level	\$80.50	<u>15J</u>	<u>11U</u>	<u>9L</u>
Kitsap	Plasterers	Journey Level	\$73.54	<u>7Q</u>	<u>1R</u>	
Kitsap	Plasterers	Nozzleman	\$77.54	<u>7Q</u>	<u>1R</u>	
Kitsap	Playground & Park Equipment Installers	Journey Level	\$16.28		<u>1</u>	
Kitsap	Plumbers & Pipefitters	Journey Level	\$90.87	<u>5A</u>	<u>1G</u>	
Kitsap	Power Equipment Operators	Asphalt Plant Operators	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Assistant Engineer	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Barrier Machine (zipper)	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Batch Plant Operator: concrete	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Boat Operator	\$84.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Bobcat	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Brokk - Remote Demolition Equipment	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Brooms	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Bump Cutter	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Cableways	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Chipper	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Compressor	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Concrete Finish Machine - Laser Screed	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>

Kitsap	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Conveyors	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Cranes Friction: 200 tons and over	\$86.68	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Cranes, A-frame: 10 tons and under	\$79.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	\$84.97	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Cranes: 20 tons through 44 tons with attachments	\$83.38	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$85.84	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$86.68	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments)	\$84.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Cranes: Friction cranes through 199 tons	\$85.84	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Cranes: through 19 tons with attachments, a-frame over 10 tons	\$82.74	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Crusher	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Deck Engineer/Deck Winches (power)	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Derricks, On Building Work	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Dozers D-9 & Under	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Drilling Machine	\$84.93	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Elevator and man-lift: permanent and shaft type	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Forklift: 3000 lbs and over with attachments	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Forklifts: under 3000 lbs. with attachments	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Gradechecker/Stakeman	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Guardrail Punch	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>

Kitsap	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Horizontal/Directional Drill Locator	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Horizontal/Directional Drill Operator	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Hydralifts/Boom Trucks Over 10 Tons	\$82.74	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Hydralifts/boom trucks: 10 tons and under	\$79.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Leverman	\$85.79	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Loaders, Overhead Under 6 Yards	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Loaders, Plant Feed	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Loaders: Elevating Type Belt	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Locomotives, All	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Material Transfer Device	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Mechanics: All (Leadmen - \$0.50 per hour over mechanic)	\$84.93	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Motor Patrol Graders	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Outside Hoists (Elevators and Manlifts), Air Tuggers, Strato	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Overhead, bridge type Crane: 20 tons through 44 tons	\$83.38	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Overhead, bridge type: 100 tons and over	\$84.97	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Overhead, bridge type: 45 tons through 99 tons	\$84.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Pavement Breaker	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Pile Driver (other Than Crane Mount)	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Plant Oiler - Asphalt, Crusher	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Posthole Digger, Mechanical	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Power Plant	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Pumps - Water	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Quad 9, Hd 41, D10 And Over	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Quick Tower: no cab, under 100 feet in height base to boom	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>

		Equipment				
Kitsap	Power Equipment Operators	Rigger and Bellman	\$79.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Rigger/Signal Person, Bellman(Certified)	\$82.74	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Rollagon	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Roller, Other Than Plant Mix	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Roto-mill, Roto-grinder	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Saws - Concrete	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Scrapers - Concrete & Carry All	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Service Engineers: Equipment	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Shotcrete/Gunite Equipment	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$84.93	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$85.79	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Slipform Pavers	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Spreader, Topsider & Screedman	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Subgrader Trimmer	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Tower Bucket Elevators	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Tower Crane: over 175' through 250' in height, base to boom	\$85.84	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Tower crane: up to 175' in height base to boom	\$84.97	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Tower Cranes: over 250' in height from base to boom	\$86.68	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Transporters, All Track Or Truck Type	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Trenching Machines	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Truck Crane Oiler/Driver: 100 tons and over	\$83.38	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Truck crane oiler/driver: under 100 tons	\$82.74	<u>7A</u>	<u>11H</u>	<u>8X</u>

Kitsap	Power Equipment Operators	Truck Mount Portable Conveyor	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Vac Truck (Vactor Guzzler, Hydro Excavator)	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Welder	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Wheel Tractors, Farmall Type	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators	Yo Yo Pay Dozer	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Asphalt Plant Operators	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Assistant Engineer	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Barrier Machine (zipper)	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Batch Plant Operator, Concrete	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Boat Operator	\$84.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Bobcat	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Brokk - Remote Demolition Equipment	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Brooms	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Bump Cutter	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Cableways	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Chipper	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Compressor	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Concrete Finish Machine - Laser Screed	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Conveyors	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Cranes Friction: 200 tons and over	\$86.68	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Cranes, A-frame: 10 tons and under	\$79.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	\$84.97	<u>7A</u>	<u>11H</u>	<u>8X</u>

Kitsap	Power Equipment Operators-Underground Sewer & Water	Cranes: 20 tons through 44 tons with attachments	\$83.38	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$85.84	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$86.68	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments)	\$84.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Cranes: Friction cranes through 199 tons	\$85.84	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Cranes: through 19 tons with attachments, a-frame over 10 tons	\$82.74	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Crusher	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Deck Engineer /Deck Winches (power)	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Derricks, On Building Work	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Dozers D-9 & Under	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Drilling Machine	\$84.93	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Elevator and man-lift: permanent and shaft type	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Forklift: 3000 lbs and over with attachments	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Forklifts: under 3000 lbs. with attachments	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Gradechecker/Stakeman	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Guardrail Punch	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Horizontal/Directional Drill Locator	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Horizontal/Directional Drill Operator	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>

Kitsap	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom trucks: 10 tons and under	\$79.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom trucks: over 10 tons	\$82.74	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Leverman	\$85.79	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Loaders, Overhead Under 6 Yards	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Loaders, Plant Feed	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Loaders: Elevating Type Belt	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Locomotives, All	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Material Transfer Device	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Mechanics: All (Leadmen - \$0.50 per hour over mechanic)	\$84.93	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Motor Patrol Graders	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Outside Hoists (Elevators and Manlifts), Air Tuggers, Strato	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type Crane: 20 tons through 44 tons	\$83.38	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type: 100 tons and over	\$84.97	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Overhead, bridge type: 45 tons through 99 tons	\$84.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Pavement Breaker	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Pile Driver (other Than Crane Mount)	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Posthole Digger, Mechanical	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Power Plant	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Pumps - Water	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Quad 9, Hd 41, D10 And Over	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>

Kitsap	Power Equipment Operators-Underground Sewer & Water	Quick Tower: no cab, under 100 feet in height base to boom	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Rigger and Bellman	\$79.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Rigger/Signal Person, Bellman(Certified)	\$82.74	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Rollagon	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Roller, Other Than Plant Mix	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Roto-mill, Roto-grinder	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Saws - Concrete	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Scrapers - Concrete & Carry All	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Shotcrete/Gunite Equipment	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$84.93	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$85.79	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Slipform Pavers	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Spreader, Topsider & Screedman	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Subgrader Trimmer	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Tower Bucket Elevators	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Tower Crane: over 175' through 250' in height, base to boom	\$85.84	<u>7A</u>	<u>11H</u>	<u>8X</u>

Kitsap	Power Equipment Operators-Underground Sewer & Water	Tower crane: up to 175' in height base to boom	\$84.97	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Tower Cranes: over 250' in height from base to boom	\$86.68	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Transporters, All Track Or Truck Type	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Trenching Machines	\$82.71	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Truck Crane Oiler/Driver: 100 tons and over	\$83.38	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Truck crane oiler/driver: under 100 tons	\$82.74	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Truck Mount Portable Conveyor	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Vac Truck (Vactor Guzzler, Hydro Excavator)	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Welder	\$84.08	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Wheel Tractors, Farmall Type	\$79.09	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Equipment Operators-Underground Sewer & Water	Yo Yo Pay Dozer	\$83.33	<u>15J</u>	<u>11G</u>	<u>8X</u>
Kitsap	Power Line Clearance Tree Trimmers	Journey Level In Charge	\$61.73	<u>5A</u>	<u>4A</u>	
Kitsap	Power Line Clearance Tree Trimmers	Spray Person	\$58.44	<u>5A</u>	<u>4A</u>	
Kitsap	Power Line Clearance Tree Trimmers	Tree Equipment Operator	\$61.73	<u>5A</u>	<u>4A</u>	
Kitsap	Power Line Clearance Tree Trimmers	Tree Trimmer	\$55.14	<u>5A</u>	<u>4A</u>	
Kitsap	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	\$41.68	<u>5A</u>	<u>4A</u>	
Kitsap	Refrigeration & Air Conditioning Mechanics	Journey Level	\$90.96	<u>5A</u>	<u>1G</u>	
Kitsap	Residential Brick Mason	Journey Level	\$22.01		<u>1</u>	
Kitsap	Residential Carpenters	Journey Level	\$26.25		<u>1</u>	
Kitsap	Residential Cement Masons	Journey Level	\$39.88		<u>1</u>	
Kitsap	Residential Drywall Applicators	Journey Level	\$51.52	<u>15J</u>	<u>4C</u>	
Kitsap	Residential Drywall Tapers	Journey Level	\$25.84		<u>1</u>	
Kitsap	Residential Electricians	Journey Level	\$44.11		<u>1</u>	
Kitsap	Residential Glaziers	Journey Level	\$54.00	<u>7L</u>	<u>1H</u>	
Kitsap	Residential Insulation Applicators	Journey Level	\$18.03		<u>1</u>	
Kitsap	Residential Laborers	Journey Level	\$16.28		<u>1</u>	
Kitsap	Residential Marble Setters	Journey Level	\$22.01		<u>1</u>	
Kitsap	Residential Painters	Journey Level	\$20.85		<u>1</u>	
Kitsap	Residential Plumbers & Pipefitters	Journey Level	\$40.60		<u>1</u>	
Kitsap	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	\$45.45		<u>1</u>	

Kitsap	Residential Sheet Metal Workers	Journey Level	\$32.91		<u>1</u>	
Kitsap	Residential Soft Floor Layers	Journey Level	\$22.03		<u>1</u>	
Kitsap	Residential Sprinkler Fitters (Fire Protection)	Journey Level	\$53.48		<u>1</u>	
Kitsap	Residential Stone Masons	Journey Level	\$71.82	<u>7E</u>	<u>1N</u>	
Kitsap	Residential Terrazzo Workers	Journey Level	\$16.28		<u>1</u>	
Kitsap	Residential Terrazzo/Tile Finishers	Journey Level	\$39.09		<u>1</u>	
Kitsap	Residential Tile Setters	Journey Level	\$35.40		<u>1</u>	
Kitsap	Roofers	Journey Level	\$64.45	<u>5A</u>	<u>3H</u>	
Kitsap	Roofers	Using Irritable Bituminous Materials	\$67.39	<u>5A</u>	<u>3H</u>	
Kitsap	Sheet Metal Workers	Journey Level (Field or Shop)	\$99.92	<u>7F</u>	<u>1E</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Boilermaker	\$58.73	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Carpenter	\$51.85	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Crane Operator	\$43.00	<u>7V</u>	<u>1</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Electrician	\$58.77	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Heat & Frost Insulator	\$91.81	<u>15H</u>	<u>11C</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Laborer	\$58.41	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Machinist	\$58.59	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Operating Engineer	\$43.00	<u>7V</u>	<u>1</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Painter	\$58.53	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Pipefitter	\$58.77	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Rigger	\$58.73	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Sheet Metal	\$58.49	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Shipwright	\$51.85	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Warehouse/Teamster	\$43.00	<u>7V</u>	<u>1</u>	
Kitsap	Shipbuilding & Ship Repair	New Construction Welder / Burner	\$58.73	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	Ship Repair Boilermaker	\$58.73	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	Ship Repair Carpenter	\$51.85	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	Ship Repair Crane Operator	\$45.06	<u>7Y</u>	<u>4K</u>	
Kitsap	Shipbuilding & Ship Repair	Ship Repair Electrician	\$58.77	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	Ship Repair Heat & Frost Insulator	\$91.81	<u>15H</u>	<u>11C</u>	
Kitsap	Shipbuilding & Ship Repair	Ship Repair Laborer	\$58.41	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	Ship Repair Machinist	\$58.59	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	Ship Repair Operating Engineer	\$45.06	<u>7Y</u>	<u>4K</u>	
Kitsap	Shipbuilding & Ship Repair	Ship Repair Painter	\$58.53	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	Ship Repair Pipefitter	\$58.77	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	Ship Repair Rigger	\$58.73	<u>7X</u>	<u>4J</u>	

Kitsap	Shipbuilding & Ship Repair	Ship Repair Sheet Metal	\$58.49	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	Ship Repair Shipwright	\$51.85	<u>7X</u>	<u>4J</u>	
Kitsap	Shipbuilding & Ship Repair	Ship Repair Warehouse / Teamster	\$45.06	<u>7Y</u>	<u>4K</u>	
Kitsap	Sign Makers & Installers (Electrical)	Journey Level	\$58.04	<u>0</u>	<u>1</u>	
Kitsap	Sign Makers & Installers (Non-Electrical)	Journey Level	\$37.08	<u>0</u>	<u>1</u>	
Kitsap	Soft Floor Layers	Journey Level	\$78.98	<u>15J</u>	<u>4C</u>	
Kitsap	Solar Controls For Windows	Journey Level	\$16.28		<u>1</u>	
Kitsap	Sprinkler Fitters (Fire Protection)	Journey Level	\$96.99	<u>5C</u>	<u>1X</u>	
Kitsap	Stage Rigging Mechanics (Non Structural)	Journey Level	\$16.28		<u>1</u>	
Kitsap	Stone Masons	Journey Level	\$71.82	<u>7E</u>	<u>1N</u>	
Kitsap	Street And Parking Lot Sweeper Workers	Journey Level	\$16.28		<u>1</u>	
Kitsap	Surveyors	Assistant Construction Site Surveyor	\$82.74	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Surveyors	Chainman	\$79.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Surveyors	Construction Site Surveyor	\$84.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Surveyors	Drone Operator (when used in conjunction with survey work only)	\$79.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Surveyors	Ground Penetrating Radar Operator	\$79.12	<u>7A</u>	<u>11H</u>	<u>8X</u>
Kitsap	Telecommunication Technicians	Journey Level	\$65.66	<u>7E</u>	<u>1E</u>	
Kitsap	Telephone Line Construction - Outside	Cable Splicer	\$41.35	<u>5A</u>	<u>2B</u>	
Kitsap	Telephone Line Construction - Outside	Hole Digger / Ground Person	\$27.31	<u>5A</u>	<u>2B</u>	
Kitsap	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	\$34.53	<u>5A</u>	<u>2B</u>	
Kitsap	Telephone Line Construction - Outside	Telephone Lineperson	\$39.07	<u>5A</u>	<u>2B</u>	
Kitsap	Terrazzo Workers	Journey Level	\$67.51	<u>7E</u>	<u>1N</u>	
Kitsap	Tile Setters	Journey Level	\$65.51	<u>7E</u>	<u>1N</u>	
Kitsap	Tile, Marble & Terrazzo Finishers	Finisher	\$56.34	<u>7E</u>	<u>1N</u>	
Kitsap	Traffic Control Stripers	Journey Level	\$92.44	<u>15L</u>	<u>1K</u>	
Kitsap	Truck Drivers	Asphalt Mix Over 16 Yards	\$78.65	<u>15J</u>	<u>11M</u>	<u>8L</u>
Kitsap	Truck Drivers	Asphalt Mix To 16 Yards	\$77.81	<u>15J</u>	<u>11M</u>	<u>8L</u>
Kitsap	Truck Drivers	Dump Truck	\$77.81	<u>15J</u>	<u>11M</u>	<u>8L</u>
Kitsap	Truck Drivers	Dump Truck & Trailer	\$78.65	<u>15J</u>	<u>11M</u>	<u>8L</u>
Kitsap	Truck Drivers	Other Trucks	\$78.65	<u>15J</u>	<u>11M</u>	<u>8L</u>
Kitsap	Truck Drivers - Ready Mix	Transit Mix	\$78.65	<u>15J</u>	<u>11M</u>	<u>8L</u>
Kitsap	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	\$16.28		<u>1</u>	
Kitsap	Well Drillers & Irrigation Pump Installers	Oiler	\$16.28		<u>1</u>	

Kitsap	Well Drillers & Irrigation Pump Installers	Well Driller	\$16.28		<u>1</u>	
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Benefit Code Key – Effective 8/31/2024 thru 3/4/2025

Overtime Codes

Overtime calculations are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

1. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
 - B. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - C. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - D. The first two (2) hours before or after a five-eight (8) hour workweek day or a four-ten (10) hour workweek day and the first eight (8) hours worked the next day after either workweek shall be paid at one and one-half times the hourly rate of wage. All additional hours worked and all worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
 - G. The first ten (10) hours worked on Saturdays and the first ten (10) hours worked on a fifth calendar weekday in a four-ten hour schedule, shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - H. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions or equipment breakdown) shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - I. All hours worked on Sundays and holidays shall also be paid at double the hourly rate of wage.
 - J. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage.
 - K. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
 - M. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

- 1. N. All hours worked on Saturdays (except makeup days) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- O. The first ten (10) hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays, holidays and after twelve (12) hours, Monday through Friday and after ten (10) hours on Saturday shall be paid at double the hourly rate of wage.
- P. All hours worked on Saturdays (except makeup days if circumstances warrant) and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
- Q. The first two (2) hours after eight (8) regular hours Monday through Friday and up to ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays (except Christmas day) shall be paid at double the hourly rate of wage. All hours worked on Christmas day shall be paid at two and one-half times the hourly rate of wage.
- R. All hours worked on Sundays and holidays shall be paid at two times the hourly rate of wage.
- U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays (except Labor Day) shall be paid at two times the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
- V. All hours worked on Sundays and holidays (except Thanksgiving Day and Christmas day) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Thanksgiving Day and Christmas day shall be paid at double the hourly rate of wage.
- W. All hours worked on Saturdays and Sundays (except make-up days due to conditions beyond the control of the employer) shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
- X. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage. When holiday falls on Saturday or Sunday, the day before Saturday, Friday, and the day after Sunday, Monday, shall be considered the holiday and all work performed shall be paid at double the hourly rate of wage.
- Y. All hours worked outside the hours of 5:00 am and 5:00 pm (or such other hours as may be agreed upon by any employer and the employee) and all hours worked in excess of eight (8) hours per day (10 hours per day for a 4 x 10 workweek) and on Saturdays and holidays (except labor day) shall be paid at one and one-half times the hourly rate of wage. (except for employees who are absent from work without prior approval on a scheduled workday during the workweek shall be paid at the straight-time rate until they have worked 8 hours in a day (10 in a 4 x 10 workweek) or 40 hours during that workweek.) All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and Labor Day shall be paid at double the hourly rate of wage.
- Z. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid the straight time rate of pay in addition to holiday pay.

Overtime Codes Continued

2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
- B. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.
 - F. The first eight (8) hours worked on holidays shall be paid at the straight hourly rate of wage in addition to the holiday pay. All hours worked in excess of eight (8) hours on holidays shall be paid at double the hourly rate of wage.
 - M. This code appears to be missing. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage.
 - R. All hours worked on Sundays and holidays and all hours worked over sixty (60) in one week shall be paid at double the hourly rate of wage.
 - U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked over 12 hours in a day or on Sundays and holidays shall be paid at double the hourly rate of wage.
3. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
- F. All hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.
 - H. All work performed on Sundays between March 16th and October 14th and all Holidays shall be compensated for at two (2) times the regular rate of pay. Work performed on Sundays between October 15th and March 15th shall be compensated at one and one half (1-1/2) times the regular rate of pay.
 - J. All hours worked between the hours of 10:00 pm and 5:00 am, Monday through Friday, and all hours worked on Saturdays shall be paid at a one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
 - K. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.
- After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the eight (8) hours rest period.

Overtime Codes Continued

4. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

- A. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage
- C. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay. On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay. All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.
- D. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturday, Sundays and holidays shall be paid at double the hourly rate of pay. Rates include all members of the assigned crew.

EXCEPTION:

On all multipole structures and steel transmission lines, switching stations, regulating, capacitor stations, generating plants, industrial plants, associated installations and substations, except those substations whose primary function is to feed a distribution system, will be paid overtime under the following rates:

The first two (2) hours after eight (8) regular hours Monday through Friday of overtime on a regular workday, shall be paid at one and one-half times the hourly rate of wage. All hours in excess of ten (10) hours will be at two (2) times the hourly rate of wage. The first eight (8) hours worked on Saturday will be paid at one and one-half (1-1/2) times the hourly rate of wage. All hours worked in excess of eight (8) hours on Saturday, and all hours worked on Sundays and holidays will be at the double the hourly rate of wage.

All overtime eligible hours performed on the above described work that is energized, shall be paid at the double the hourly rate of wage.

- E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one and one half (1½) times the regular shift rate for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- G. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- I. The First eight (8) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) per day on Saturdays shall be paid at double the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. J. The first eight (8) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) hours on a Saturday shall be paid at double the hourly rate of wage. All hours worked over twelve (12) in a day, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.
- K. All hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage, so long as Saturday is the sixth consecutive day worked. All hours worked over twelve (12) in a day Monday through Saturday, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.
- L. The first twelve (12) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on a Saturday in excess of twelve (12) hours shall be paid at double the hourly rate of pay. All hours worked over twelve (12) in a day Monday through Friday, and all hours worked on Sundays shall be paid at double the hourly rate of wage. All hours worked on a holiday shall be paid at one and one-half times the hourly rate of wage, except that all hours worked on Labor Day shall be paid at double the hourly rate of pay.
- S. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, work performed in excess of (10) hours shall be paid at one and one half (1-1/2) times the hourly rate of pay. On Monday through Friday, work performed outside the normal work hours of 6:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations).
- All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.
- Multiple Shift Operations: When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. Special Shifts: The Special Shift Premium is the basic hourly rate of pay plus \$2.00 an hour. When due to conditions beyond the control of the employer or when an owner (not acting as the contractor), a government agency or the contract specifications require more than four (4) hours of a special shift can only be performed outside the normal 6am to 6pm shift then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid the special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday).
- U. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. (Except on makeup days if work is lost due to inclement weather, then the first eight (8) hours on Saturday may be paid the regular rate.) All hours worked over twelve (12) hours Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. X. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. Work performed outside the normal shift of 6 am to 6pm shall be paid at one and one-half the straight time rate, (except for special shifts or three shift operations). All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. Shifts may be established when considered necessary by the Employer.

The Employer may establish shifts consisting of eight (8) or ten (10) hours of work (subject to WAC 296-127-022), that shall constitute a normal forty (40) hour work week. The Employer can change from a 5-eight to a 4-ten hour schedule or back to the other. All hours of work on these shifts shall be paid for at the straight time hourly rate. Work performed in excess of eight hours (or ten hours per day (subject to WAC 296-127-022) shall be paid at one and one-half the straight time rate.

When due to conditions beyond the control of the Employer, or when contract specifications require that work can only be performed outside the regular day shift, then by mutual agreement a special shift may be worked at the straight time rate, eight (8) hours work for eight (8) hours pay. The starting time shall be arranged to fit such conditions of work.

When an employee returns to work without at a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Overtime Codes Continued

11. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

B After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

C The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, and all hours on Sunday shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage. All non-overtime and non-holiday hours worked between 4:00 pm and 5:00 am, Monday through Friday, shall be paid at a premium rate of 15% over the hourly rate of wage.

D. All hours worked on Saturdays and holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

E. The first two (2) hours after eight (8) regular hours Monday through Friday, the first ten (10) hours on Saturday, and the first ten (10) hours worked on Holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, and Sundays shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

Overtime Codes Continued

11. F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one-half times the hourly rate of wage for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- G. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage.
- All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.
- After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of nine (9) hours or more. When an employee returns to work without at least nine (9) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the nine (9) hours rest period.
- H. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage.
- All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.
- After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of ten (10) hours or more. When an employee returns to work without at least ten (10) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the ten (10) hours rest period.
- J. All hours worked on holidays shall be paid at double the hourly rate of wage.
- K. On Monday through Friday hours worked outside 4:00 am and 5:00 pm, and the first two (2) hours after eight (8) hours worked shall be paid at one and one-half times the hourly rate. All hours worked over 10 hours per day Monday through Friday, and all hours worked on Saturdays, Sundays, and Holidays worked shall be paid at double the hourly rate of wage.
- L. An employee working outside 5:00 am and 5:00 pm shall receive an additional two dollar (\$2.00) per hour for all hours worked that shift. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

Overtime Codes Continued

11. M. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.
- Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 am to 6:00 pm, then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shift shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten shifts.
- On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay. All work performed after 6:00 pm Saturday to 5:00 am Monday, all work performed over twelve (12) hours, and all work performed on holidays shall be paid at double the straight time rate of pay.
- Shift Pay Premium: In an addition to any overtime already required, all hours worked between the hours of 6:00 pm and 5:00 am shall receive an additional two dollars (\$2.00) per hour.
- N. All work performed over twelve hours in a shift and all work performed on Sundays and Holidays shall be paid at double the straight time rate.
- Any time worked over eight (8) hours on Saturday shall be paid double the straight time rate, except employees assigned to work six 10-hour shifts per week shall be paid double the straight time rate for any time worked on Saturday over 10 hours.
- O. All work performed on Saturdays, Sundays, and Holidays shall be paid at one and one half (1-1/2) times the straight time rate of pay.

Overtime Codes Continued

11. P. Work performed in excess of ten (10) hours of straight time per day when four ten (10) hour shifts are established and all work on Saturdays, except for make-up days shall be paid at time and one-half (1 ½) the straight time rate.
- Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 a.m. to 6:00 p.m., then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shifts shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten-hour shifts.
- In the event the job is down due to weather conditions, then Saturday may, be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All work performed on Sundays and holidays and work in excess of twelve (12) hours per day shall be paid at double (2x) the straight time rate of pay.
- After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.
- When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.
- Q. All hours worked between the hours of 6:00 pm and 6:00 am, Monday through Saturday, shall be paid at a premium rate of 35% over the hourly rate of wage. Work performed on Sundays shall be paid at double time. All hours worked on holidays shall be paid at double the hourly rate of wage.
- R. On Monday through Saturday hours worked outside 6:00 am and 7:00 pm, and all hours after eight (8) hours worked shall be paid at one and one-half times the hourly rate. All hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.
- When a holiday falls on a Saturday, the Friday before shall be the observed holiday. When a holiday falls on a Sunday, the following Monday shall be the observed holiday.
- S. The first ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. In the event the job is down due to weather conditions, or other conditions beyond the control of the Employer, then Saturday may be worked at the straight time rate, for the first eight (8) hours, or the first ten (10) hours when a four day ten hour workweek has been established.
- All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Benefit Code Key – Effective 8/31/2024 thru 3/4/2025

11. T. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.
- On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay.
- All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.
- U. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.
- On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay.
- All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.
- If, due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift, then a Special Shift may be worked, Monday through Friday, at the straight-time rate. The starting time of work for the Special Shift will be arranged to fit such conditions of work. Such Special Shift shall consist of eight (8) hours of work for eight (8) hours of pay or ten (10) hours of work for ten(10) hours of pay on a four-ten workday schedule.

Holiday Codes

5. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).
- B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day (8).
- C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).
- D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8).
- H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Day after Thanksgiving Day, And Christmas (6).

Holiday Codes Continued

- 5. I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
- K. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9).
- L. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (8).
- N. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (9).
- P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday And Saturday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9). If A Holiday Falls On Sunday, The Following Monday Shall Be Considered As A Holiday.
- Q. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
- R. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, One-Half Day Before Christmas Day, And Christmas Day. (7 1/2).
- S. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, And Christmas Day (7).
- Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

Holiday Codes Continued

- 6. G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Christmas Eve Day (11).
- H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (10).
- T. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Last Working Day Before Christmas Day, And Christmas Day (9).
- Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). If a holiday falls on Saturday, the preceding Friday shall be considered as the holiday. If a holiday falls on Sunday, the following Monday shall be considered as the holiday.

Holiday Codes Continued

7. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any Holiday Which Falls On A Sunday Shall Be Observed As A Holiday On The Following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- C. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- D. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Unpaid Holidays: President's Day. Any paid holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any paid holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- E. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas day and Christmas day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Holiday Codes Continued

7. G. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
- H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Holiday Codes Continued

7. K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.
- P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
- Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, the Day after Christmas, and A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
- V. Holidays: New Year's Day, President's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, the day before or after Christmas, and the day before or after New Year's Day. If any of the above listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
- W. Holidays: New Year's Day, Day After New Year's, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day, Christmas Day, the day after Christmas, the day before New Year's Day, and a Floating Holiday.
- X. Holidays: New Year's Day, Day before or after New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day before or after Christmas day. If a holiday falls on a Saturday or on a Friday that is the normal day off, then the holiday will be taken on the last normal workday. If the holiday falls on a Monday that is the normal day off or on a Sunday, then the holiday will be taken on the next normal workday.
- Y. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day. (8) If the holiday falls on a Sunday, then the day observed by the federal government shall be considered a holiday and compensated accordingly.
- Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, Christmas Eve, and Christmas Day (9). Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday. Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Holiday Codes Continued

15. G. New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, the last scheduled workday before Christmas, and Christmas Day (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
- H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- J. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- L. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- M. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
- O. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, the day before Christmas day, and Christmas Day (10). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Benefit Code Key – Effective 8/31/2024 thru 3/4/2025

Note Codes

8. D. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.
- L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$0.75, Level B: \$0.50, And Level C: \$0.25.
- M. Workers on hazmat projects receive additional hourly premiums as follows: Levels A & B: \$1.00, Levels C & D: \$0.50.
- N. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$1.00, Level B: \$0.75, Level C: \$0.50, And Level D: \$0.25.
- S. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.
- T. Effective August 31, 2012 – A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.
- U. Workers on hazmat projects receive additional hourly premiums as follows – Class A Suit: \$2.00, Class B Suit: \$1.50, And Class C Suit: \$1.00. Workers performing underground work receive an additional \$0.40 per hour for any and all work performed underground, including operating, servicing and repairing of equipment. The premium for underground work shall be paid for the entire shift worked. Workers who work suspended by a rope or cable receive an additional \$0.50 per hour. The premium for work suspended shall be paid for the entire shift worked. Workers who do “pioneer” work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation receive an additional \$0.50 per hour.
8. V. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.
- Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - \$2.00 per foot for each foot over 50 feet. Over 101' to 150' - \$3.00 per foot for each foot over 101 feet. Over 151' to 220' - \$4.00 per foot for each foot over 220 feet. Over 221' - \$5.00 per foot for each foot over 221 feet.
- Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25' to 300' - \$1.00 per foot from entrance. 300' to 600' - \$1.50 per foot beginning at 300'. Over 600' - \$2.00 per foot beginning at 600'.
- W. Meter Installers work on single phase 120/240V self-contained residential meters. The Lineman/Groundmen rates would apply to meters not fitting this description.

Note Codes Continued

- X. Workers on hazmat projects receive additional hourly premiums as follows - Class A Suit: \$2.00, Class B Suit: \$1.50, Class C Suit: \$1.00, and Class D Suit: \$0.50. Special Shift Premium: Basic hourly rate plus \$2.00 per hour.

When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that work can only be performed outside the normal 5 am to 6pm shift, then the special shift premium will be applied to the basic hourly rate. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in OT or Double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

- Y. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.

Swinging Stage/Boatswains Chair: Employees working on a swinging state or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

- Z. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.

Special Shift Premium: Basic hourly rate plus \$2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as a contractor), a government agency or the contract specifications require that more than (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they will be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Note Codes Continued

9. A. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.

Special Shift Premium: Basic hourly rate plus \$2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications require that more than four (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Certified Crane Operator Premium: Crane operators requiring certifications shall be paid \$0.50 per hour above their classification rate.

Boom Pay Premium: All cranes including tower shall be paid as follows based on boom length:

- (A) – 130’ to 199’ – \$0.50 per hour over their classification rate.
- (B) – 200’ to 299’ – \$0.80 per hour over their classification rate.
- (C) – 300’ and over – \$1.00 per hour over their classification rate.

Note Codes Continued

9. B. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

- C. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

- D. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, bridges, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.
- E. Heavy Construction includes construction, repair, alteration or additions to the production, fabrication or manufacturing portions of industrial or manufacturing plants, hydroelectric or nuclear power plants and atomic reactor construction. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$1.00, Level B: \$0.75, Level C: \$0.50, And Level D: \$0.25.
- F. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.
- H. One (1) person crew shall consist of a Party Chief. (Total Station or similar one (1) person survey system). Two (2) person survey party shall consist of a least a Party Chief and a Chain Person. Three (3) person survey party shall consist of at least a Party Chief, an Instrument Person, and a Chain Person.

Benefit Code Key – Effective 8/31/2024 thru 3/4/2025

9. I. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.

Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - \$2.00 per foot for each foot over 50 feet. Over 101' to 150' - \$3.00 per foot for each foot over 101 feet. Over 151' to 220' - \$4.00 per foot for each foot over 220 feet. Over 221' - \$5.00 per foot for each foot over 221 feet.

Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25' to 300' - \$1.00 per foot from entrance. 300' to 600' - \$1.50 per foot beginning at 300'. Over 600' - \$2.00 per foot beginning at 600'.

Employees may be required to perform any combination of work within the Diving team/crew, (with the exception of dive Supervisor) provided they are paid at the highest rate at which he/she has worked for the shift.

- L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$0.75, Level B: \$0.50, And Level C: \$0.25.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.

Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

Washington State Department of Labor and Industries
Policy Statement
(Regarding the Production of "Standard" or "Non-standard" Items)

Below is the department's (State L&I's) list of criteria to be used in determining whether a prefabricated item is "standard" or "non-standard". For items not appearing on WSDOT's predetermined list, these criteria shall be used by the Contractor (and the Contractor's subcontractors, agents to subcontractors, suppliers, manufacturers, and fabricators) to determine coverage under RCW 39.12. The production, in the State of Washington, of non-standard items is covered by RCW 39.12, and the production of standard items is not. The production of any item outside the State of Washington is not covered by RCW 39.12.

1. Is the item fabricated for a public works project? If not, it is not subject to RCW 39.12. If it is, go to question 2.
2. Is the item fabricated on the public works jobsite? If it is, the work is covered under RCW 39.12. If not, go to question 3.
3. Is the item fabricated in an assembly/fabrication plant set up for, and dedicated primarily to, the public works project? If it is, the work is covered by RCW 39.12. If not, go to question 4.
4. Does the item require any assembly, cutting, modification or other fabrication by the supplier? If not, the work is not covered by RCW 39.12. If yes, go to question 5.
5. Is the prefabricated item intended for the public works project typically an inventory item which could reasonably be sold on the general market? If not, the work is covered by RCW 39.12. If yes, go to question 6.
6. Does the specific prefabricated item, generally defined as standard, have any unusual characteristics such as shape, type of material, strength requirements, finish, etc? If yes, the work is covered under RCW 39.12.

Any firm with questions regarding the policy, WSDOT's Predetermined List, or for determinations of covered and non-covered workers shall be directed to State L&I at (360) 902-5330.

**WSDOT's
Predetermined List for
Suppliers - Manufactures - Fabricator**

Below is a list of potentially prefabricated items, originally furnished by WSDOT to Washington State Department of Labor and Industries, that may be considered non-standard and therefore covered by the prevailing wage law, RCW 39.12. Items marked with an X in the "YES" column should be considered to be non-standard and therefore covered by RCW 39.12. Items marked with an X in the "NO" column should be considered to be standard and therefore not covered. Of course, exceptions to this general list may occur, and in that case shall be evaluated according to the criteria described in State and L&I's policy statement.

ITEM DESCRIPTION	YES	NO
1. Metal rectangular frames, solid metal covers, herringbone grates, and bi-directional vaned grates for Catch Basin Types 1, 1L, 1P, and 2 and Concrete Inlets. See Std. Plans		X
2. Metal circular frames (rings) and covers, circular grates, and prefabricated ladders for Manhole Types 1, 2, and 3, Drywell Types 1, 2, and 3 and Catch Basin Type 2. See Std. Plans		X
3. Prefabricated steel grate supports and welded grates, metal frames and dual vaned grates, and Type 1, 2, and 3 structural tubing grates for Drop Inlets. See Std. Plans.		X
4. Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes smaller than 60 inch diameter.		X
5. Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes larger than 60 inch diameter.		X
6. Corrugated Steel Pipe - Steel lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, 1 thru 5.		X
7. Corrugated Aluminum Pipe - Aluminum lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, #5.		X

ITEM DESCRIPTION	YES	NO
8. Anchor Bolts & Nuts - Anchor Bolts and Nuts, for mounting sign structures, luminaries and other items, shall be made from commercial bolt stock. See Contract Plans and Std. Plans for size and material type.		X
9. Aluminum Pedestrian Handrail - Pedestrian handrail conforming to the type and material specifications set forth in the contract plans. Welding of aluminum shall be in accordance with Section 9-28.14(3).	X	
10. Major Structural Steel Fabrication - Fabrication of major steel items such as trusses, beams, girders, etc., for bridges.	X	
11. Minor Structural Steel Fabrication - Fabrication of minor steel Items such as special hangers, brackets, access doors for structures, access ladders for irrigation boxes, bridge expansion joint systems, etc., involving welding, cutting, punching and/or boring of holes. See Contact Plans for item description and shop drawings.	X	
12. Aluminum Bridge Railing Type BP - Metal bridge railing conforming to the type and material specifications set forth in the Contract Plans. Welding of aluminum shall be in accordance with Section 9-28.14(3).		X
13. Concrete Piling--Precast-Prestressed concrete piling for use as 55 and 70 ton concrete piling. Concrete to conform to Section 9-19.1 of Std. Spec..	X	
14. Precast Manhole Types 1, 2, and 3 with cones, adjustment sections and flat top slabs. See Std. Plans.		X
15. Precast Drywell Types 1, 2, and with cones and adjustment Sections. See Std. Plans.		X
16. Precast Catch Basin - Catch Basin type 1, 1L, 1P, and 2 With adjustment sections. See Std. Plans.		X

ITEM DESCRIPTION	YES	NO
17. Precast Concrete Inlet - with adjustment sections, See Std. Plans		X
18. Precast Drop Inlet Type 1 and 2 with metal grate supports. See Std. Plans.		X
19. Precast Grate Inlet Type 2 with extension and top units. See Std. Plans		X
20. Metal frames, vaned grates, and hoods for Combination Inlets. See Std. Plans		X
21. Precast Concrete Utility Vaults - Precast Concrete utility vaults of various sizes. Used for in ground storage of utility facilities and controls. See Contract Plans for size and construction requirements. Shop drawings are to be provided for approval prior to casting		X
22. Vault Risers - For use with Valve Vaults and Utilities X Vaults.		X
23. Valve Vault - For use with underground utilities. See Contract Plans for details.		X
24. Precast Concrete Barrier - Precast Concrete Barrier for use as new barrier or may also be used as Temporary Concrete Barrier. Only new state approved barrier may be used as permanent barrier.		X
25. Reinforced Earth Wall Panels – Reinforced Earth Wall Panels in size and shape as shown in the Plans. Fabrication plant has annual approval for methods and materials to be used. See Shop Drawing. Fabrication at other locations may be approved, after facilities inspection, contact HQ. Lab.	X	
26. Precast Concrete Walls - Precast Concrete Walls - tilt-up wall panel in size and shape as shown in Plans. Fabrication plant has annual approval for methods and materials to be used	X	

ITEM DESCRIPTION	YES	NO
27. Precast Railroad Crossings - Concrete Crossing Structure Slabs.	X	
28. 12, 18 and 26 inch Standard Precast Prestressed Girder – Standard Precast Prestressed Girder for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
29. Prestressed Concrete Girder Series 4-14 - Prestressed Concrete Girders for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
30. Prestressed Tri-Beam Girder - Prestressed Tri-Beam Girders for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
31. Prestressed Precast Hollow-Core Slab – Precast Prestressed Hollow-core slab for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A.	X	
32. Prestressed-Bulb Tee Girder - Bulb Tee Prestressed Girder for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
33. Monument Case and Cover See Std. Plan.		X

ITEM DESCRIPTION	YES	NO
34. Cantilever Sign Structure - Cantilever Sign Structure fabricated from steel tubing meeting AASHTO-M-183. See Std. Plans, and Contract Plans for details. The steel structure shall be galvanized after fabrication in accordance with AASHTO-M-111.	X	
35. Mono-tube Sign Structures - Mono-tube Sign Bridge fabricated to details shown in the Plans. Shop drawings for approval are required prior to fabrication.	X	
36. Steel Sign Bridges - Steel Sign Bridges fabricated from steel tubing meeting AASHTO-M-138 for Aluminum Alloys. See Std. Plans, and Contract Plans for details. The steel structure shall be galvanized after fabrication in accordance with AASHTO-M-111.	X	
37. Steel Sign Post - Fabricated Steel Sign Posts as detailed in Std Plans. Shop drawings for approval are to be provided prior to fabrication		X
38. Light Standard-Prestressed - Spun, prestressed, hollow concrete poles.	X	
39. Light Standards - Lighting Standards for use on highway illumination systems, poles to be fabricated to conform with methods and materials as specified on Std. Plans. See Special Provisions for pre-approved drawings.	X	
40. Traffic Signal Standards - Traffic Signal Standards for use on highway and/or street signal systems. Standards to be fabricated to conform with methods and material as specified on Std. Plans. See Special Provisions for pre-approved drawings	X	
41. Precast Concrete Sloped Mountable Curb (Single and DualFaced) See Std. Plans.		X

ITEM DESCRIPTION	YES	NO
42. Traffic Signs - Prior to approval of a Fabricator of Traffic Signs, the sources of the following materials must be submitted and approved for reflective sheeting, legend material, and aluminum sheeting. NOTE: *** Fabrication inspection required. Only signs tagged "Fabrication Approved" by WSDOT Sign Fabrication Inspector to be installed	X	X
	Custom Message	Std Signing Message
43. Cutting & bending reinforcing steel		X
44. Guardrail components	X	X
	Custom End Sec	Standard Sec
45. Aggregates/Concrete mixes	Covered by WAC 296-127-018	
46. Asphalt	Covered by WAC 296-127-018	
47. Fiber fabrics		X
48. Electrical wiring/components		X
49. treated or untreated timber pile		X
50. Girder pads (elastomeric bearing)	X	
51. Standard Dimension lumber		X
52. Irrigation components		X

ITEM DESCRIPTION	YES	NO
53. Fencing materials		X
54. Guide Posts		X
55. Traffic Buttons		X
56. Epoxy		X
57. Cribbing		X
58. Water distribution materials		X
59. Steel "H" piles		X
60. Steel pipe for concrete pile casings		X
61. Steel pile tips, standard		X
62. Steel pile tips, custom	X	

Prefabricated items specifically produced for public works projects that are prefabricated in a county other than the county wherein the public works project is to be completed, the wage for the offsite prefabrication shall be the applicable prevailing wage for the county in which the actual prefabrication takes place.

It is the manufacturer of the prefabricated product to verify that the correct county wage rates are applied to work they perform.

See RCW [39.12.010](#)

(The definition of "locality" in RCW [39.12.010](#)(2) contains the phrase "wherein the physical work is being performed." The department interprets this phrase to mean the actual work site.

WSDOT's List of State Occupations not applicable to Heavy and Highway Construction Projects

This project is subject to the state hourly minimum rates for wages and fringe benefits in the contract provisions, as provided by the state Department of Labor and Industries.

The following list of occupations, is comprised of those occupations that are not normally used in the construction of heavy and highway projects.

When considering job classifications for use and / or payment when bidding on, or building heavy and highway construction projects for, or administered by WSDOT, these Occupations will be excepted from the included "Washington State Prevailing Wage Rates For Public Work Contracts" documents.

- Building Service Employees
- Electrical Fixture Maintenance Workers
- Electricians - Motor Shop
- Heating Equipment Mechanics
- Industrial Engine and Machine Mechanics
- Industrial Power Vacuum Cleaners
- Inspection, Cleaning, Sealing of Water Systems by Remote Control
- Laborers - Underground Sewer & Water
- Machinists (Hydroelectric Site Work)
- Modular Buildings
- Playground & Park Equipment Installers
- Power Equipment Operators - Underground Sewer & Water
- Residential *** ALL ASSOCIATED RATES ***
- Sign Makers and Installers (Non-Electrical)
- Sign Makers and Installers (Electrical)
- Stage Rigging Mechanics (Non Structural)

The following occupations may be used only as outlined in the preceding text concerning "WSDOT's list for Suppliers - Manufacturers - Fabricators"

- Fabricated Precast Concrete Products
- Metal Fabrication (In Shop)

Definitions for the Scope of Work for prevailing wages may be found at the Washington State Department of Labor and Industries web site and in WAC Chapter 296-127.

**Washington State Department of Labor and Industries
Policy Statements
(Regarding Production and Delivery of Gravel, Concrete, Asphalt, etc.)**

WAC 296-127-018 Agency filings affecting this section

Coverage and exemptions of workers involved in the production and delivery of gravel, concrete, asphalt, or similar materials.

(1) The materials covered under this section include but are not limited to: Sand, gravel, crushed rock, concrete, asphalt, or other similar materials.

(2) All workers, regardless of by whom employed, are subject to the provisions of chapter 39.12 RCW when they perform any or all of the following functions:

(a) They deliver or discharge any of the above-listed materials to a public works project site:

(i) At one or more point(s) directly upon the location where the material will be incorporated into the project; or

(ii) At multiple points at the project; or

(iii) Adjacent to the location and coordinated with the incorporation of those materials.

(b) They wait at or near a public works project site to perform any tasks subject to this section of the rule.

(c) They remove any materials from a public works construction site pursuant to contract requirements or specifications (e.g., excavated materials, materials from demolished structures, clean-up materials, etc.).

(d) They work in a materials production facility (e.g., batch plant, borrow pit, rock quarry, etc.) which is established for a public works project for the specific, but not necessarily exclusive, purpose of supplying materials for the project.

(e) They deliver concrete to a public works site regardless of the method of incorporation.

(f) They assist or participate in the incorporation of any materials into the public works project.

(3) All travel time that relates to the work covered under subsection (2) of this section requires the payment of prevailing wages. Travel time includes time spent waiting to load, loading, transporting, waiting to unload, and delivering materials. Travel time would include all time spent in travel in support of a public works project whether the vehicle is empty or full. For example, travel time spent returning to a supply source to obtain another load of material for use on a public works site or returning to the public works site to obtain another load of excavated material is time spent in travel that is subject to prevailing wage. Travel to a supply source, including travel from a public works site, to obtain materials for use on a private project would not be travel subject to the prevailing wage.

(4) Workers are not subject to the provisions of chapter 39.12 RCW when they deliver materials to a stockpile.

(a) A "stockpile" is defined as materials delivered to a pile located away from the site of incorporation such that the stockpiled materials must be physically moved from the stockpile and transported to another location on the project site in order to be incorporated into the project.

(b) A stockpile does not include any of the functions described in subsection (2)(a) through (f) of this section; nor does a stockpile include materials delivered or distributed to multiple locations upon the project site; nor does a stockpile include materials dumped at the place of incorporation, or adjacent to the location and coordinated with the incorporation.

(5) The applicable prevailing wage rate shall be determined by the locality in which the work is performed. Workers subject to subsection (2)(d) of this section, who produce such materials at an off-site facility shall be paid the applicable prevailing wage rates for the county in which the off-site facility is located. Workers subject to subsection (2) of this section, who deliver such materials to a public works project site shall be paid the applicable prevailing wage rates for the county in which the public works project is located.

[Statutory Authority: Chapter 39.12 RCW, RCW 43.22.051 and 43.22.270. 08-24-101, § 296-127-018, filed 12/2/08, effective 1/2/09. Statutory Authority: Chapters 39.04 and 39.12 RCW and RCW 43.22.270. 92-01-104 and 92-08-101, § 296-127-018, filed 12/18/91 and 4/1/92, effective 8/31/92.]

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ATTACHMENT B
USACE NATIONWIDE PERMIT 7



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

March 20, 2024

David Tucker
Kitsap County Public Works
614 Division Street MS-26
Port Orchard, Washington 98366

Reference: NWS-2021-735
Kitsap County Public
Works
(Suquamish Regional
Stormwater Treatment
Facility)

Dear Mr. Tucker:

We have reviewed your application to excavate and grade up to 13 cubic yards (cy) of material, discharge no more than 80 cy of concrete for construction of an outfall with up to 5 cubic yards (cy) of beach cobble (2-inch minus) and riprap (4-inch-diameter) discharged for construction of a dissipation pad, and up to 5 cy of rock boulder ballast, in Port Madison, Kitsap 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 2022.

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. In order to meet the requirements of the Endangered Species Act you may conduct the authorized activities waterward of the high tide line from July 16 through February 15 in any year this permit is valid. You shall not conduct work authorized by this permit from February 16 through July 15 in any year this permit is valid.

b. Forage fish may be spawning in the project area during the allowed work window. If work is occurring between September 1 and March 30, in order to meet the requirements of the Endangered Species Act and for the protection of Pacific herring, sand lance, and surf smelt, prior to construction, you must have an approved biologist confirm, in writing, that no forage fish are spawning in the area. For information on approved biologists for conducting forage fish surveys, contact the Washington

Department of Fish and Wildlife (WDFW). If a WDFW Habitat Biologist has volunteered to conduct a survey as part of the Hydraulic Project Approval, this survey may be submitted to the U.S. Army Corps of Engineers (Corps). The letter or memorandum from the approved biologist or the WDFW Habitat Biologist must include the date of the inspection, the forage fish spawning findings, and must be provided to the Corps, Seattle District, Regulatory Branch via email to danette.l.guy@usace.army.mil (with a copy sent to NWS.Compliance@usace.army.mil), prior to construction. Include reference number NWS-2021-735. If the approved biologist or WDFW Habitat Biologist confirms that no forage fish are spawning in the project area, you have two weeks from the date of the inspection to complete all work waterward of the High Tide Line.

c. This U.S. Army Corps of Engineers (Corps) permit does not authorize you to take a threatened or endangered species, in particular the Puget Sound Chinook and steelhead, Bocaccio and Yelloweye Rockfish, Southern Resident Killer and Humpback Whale. In order to legally take a listed species, you must have a separate authorization under the Endangered Species Act (ESA; e.g., an ESA Section 10 permit, or ESA Section 7 consultation Biological Opinion (BO) with non-discretionary “incidental take” provisions with which you must comply). The enclosed BO prepared by the National Marine Fisheries Service (NMFS) dated January 24, 2023, contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with the specified “incidental take” in the BO(s) (NMFS Reference Number WCRO-2022-01488). Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the enclosed BO. These terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Corps permit. The NMFS is the appropriate authority to determine compliance with the terms and conditions of its BO and with the ESA.

d. You must implement and abide by the Endangered Species Act (ESA) requirements and/or agreements set forth in the *Biological Evaluation* dated July 2021, in its entirety. The U.S. Fish and Wildlife Service (USFWS) provided the enclosed LOC with a finding of “may affect, not likely to adversely affect” based on this document on March 19, 2024 (USFWS Reference Number FWS/R1/2022-0054745). USFWS will be informed of this permit issuance. Failure to comply with the commitments made in this consultation constitutes non-compliance with the ESA and your U.S. Army Corps of Engineers permit. The USFWS is the appropriate authority to determine compliance with ESA.

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 "c" of your permit requires that you implement and abide by the Endangered Species Act (ESA) requirements set forth in the Biological Opinion (BO) for this project. The non-discretionary terms and conditions are listed in Section 2.8.4. In particular, you must provide reporting information, as described in the BO.

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.

You have not requested a jurisdictional determination for this proposed project. If you believe the U.S. Army Corps of Engineers does not have jurisdiction over all or portions of your project 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.

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 Mr. Josh Jensen, Anchor QEA, LLC at jjensen@anchorqea.com. If you have any questions, please contact me at danette.l.guy@usace.army.mil or (206) 348-3999.

Sincerely,

A handwritten signature in black ink, appearing to read "Danette L. Guy". The signature is fluid and cursive, with a large initial "D" and "G".

Danette L. Guy, Senior Project Manager
Regulatory Branch

Enclosures

cc:
Ecology (ecyrefedpermits@ecy.wa.gov)



US Army Corps
of Engineers ®
Seattle District

CERTIFICATE OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT



Permit Number: NWS-2021-735

Name of Permittee: Kitsap County Public Works

Date of Issuance: March 20, 2024

Upon completion of the activity authorized by this permit, please check the applicable boxes below, date and sign this certification, and return it to the following email or mailing address:

NWS.Compliance@usace.army.mil OR Department of the Army
U.S. Army Corps of Engineers Seattle
District, Regulatory Branch
4735 E. Marginal Way S, Bldg 1202
Seattle, Washington 98134-2388

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with the terms and conditions of your authorization, your permit may be subject to suspension, modification, or revocation.

<input type="checkbox"/>	<p>The work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of this permit.</p> <p>Date work complete: _____</p> <p><input type="checkbox"/> Photographs and as-built drawings of the authorized work (OPTIONAL, unless required as a Special Condition of the permit).</p>
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<input type="checkbox"/>	<p>If applicable, the mitigation required (e.g., construction and plantings) in the above-referenced permit has been completed in accordance with the terms and conditions of this permit (not including future monitoring).</p> <p>Date work complete: _____ <input type="checkbox"/> N/A</p> <p><input type="checkbox"/> Photographs and as-built drawings of the mitigation (OPTIONAL, unless required as a Special Condition of the permit).</p>
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<input type="checkbox"/>	<p>Provide phone number/email for scheduling site visits (must have legal authority to grant property access).</p> <p>Printed Name: _____</p> <p>Phone Number: _____ Email: _____</p>
--------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Printed Name: _____

Signature: _____

Date: _____

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ATTACHMENT C

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE HYDRAULIC
PROJECT APPROVAL



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: April 25, 2023
Project End Date: December 31, 2025

Permit Number: 2022-6-215+02
FPA/Public Notice Number: N/A
Application ID: 27394

PERMITTEE	AUTHORIZED AGENT OR CONTRACTOR
Kitsap County Public Works ATTENTION: David Tucker 614 Division Street MS-26 Port Orchard, WA 98366	Anchor QEA, LLC ATTENTION: Joshua Jensen 1201 3rd Avenue, Ste 2600 Seattle, WA 98101

Project Name: Kitsap County Suquamish Regional Stormwater Treatment Facility Project

Project Description: Kitsap County Public Works (County) is proposing to construct a regional stormwater treatment facility that will treat stormwater from four drainage basins covering approximately 183 acres. The Project area is located at the NE Parkway Street right-of-way parking lot and extends west along Augusta Avenue NE. The four drainage basins that will be treated by the Project currently drain through conventional stormwater conveyance systems, with minimal water quality treatment, to existing outfalls connected to the Suquamish Way Northeast Basin that drain to Puget Sound at the bluffs near the Suquamish House of Awakened Culture and the Suquamish Dock.

The Project will provide an end-of-pipe solution that will collect and enhance regional runoff and treat it to current standards. This will protect and restore water quality in Port Madison and Puget Sound by reducing stormwater impacts and provide a safe, long-term solution for stormwater runoff treatment. The Project is funded in part by a Washington State Department of Ecology Water Quality Combined Financial Assistance grant intended to treat stormwater from the Suquamish region prior to discharge to Puget Sound. The Project includes the following actions to accomplish these goals:

- Help protect and restore water quality in Puget Sound by reducing stormwater impacts from existing infrastructure and development.
- Provide a safe long-term solution for treating stormwater runoff to a County-owned and County-maintained stormwater outfall.
- Install a stormwater treatment facility consisting of two pretreatment vaults and one treatment vault.
- Construct a new outfall structure and dissipation pad to convey treated stormwater to Port Madison.
- Provide Americans with Disabilities Act (ADA)-compliant curb ramp upgrades, relocation of landmarks, removal of shoreline concrete and riprap debris, and planting and top-of-bluff restoration with native plants.

PROVISIONS

AUTHORIZED WORK TIMES

1. **TIMING LIMITATION:** To protect surf smelt spawning in this portion of Puget Sound and other fish and shellfish habitats present at the job site, work below and waterward of the ordinary high water line (OHWL) may occur between August 1 to August 31 of any year during the life of this permit. Work between September 1 through December 31 and January 1 through February 15 of any year during the life of this permit is conditionally approved if a biologist approved by the Department of Fish and Wildlife does not detect surf smelt eggs during a beach survey. Work must begin within seventy-two hours of survey and you must complete the work within two weeks of the survey. The biologist must follow



HYDRAULIC PROJECT APPROVAL

Washington Department of
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the department-approved intertidal forage fish spawning protocol and use the standard department data sheets when conducting forage fish spawning beach surveys. Further information is available on the department's web site http://wdfw.wa.gov/licensing/hpa/technical_assistance.html. The biologist must submit the completed, data sheets to the department within seventy-two hours of completing the survey to WDFW by e-mail at HPAapplications@dfw.wa.gov; mail to Post Office Box 43234, Olympia, Washington 98504-3234; or fax to (360) 902-2946. In addition, the biologist must preserve the winnowed portion of the sediment samples and retain them for a minimum of four weeks. The sediment samples must be provided to WDFW staff upon request.

2. APPROVED PLANS: Work must be accomplished per plans and specifications submitted with the application and approved by the Washington Department of Fish and Wildlife, entitled "Kitsap County Suquamish Regional Stormwater Treatment Facility Project: 2218-JARPA Kitsap Co Suquamish RSWT Facility_WDFW.pdf", dated April 2022, 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.

MITIGATION: At least 180 SQFT of derelict concrete debris must be removed from the project beach by the completion of the outfall project.

NOTIFICATION

3. 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. The notification must include the permittee's name, project location, starting date, and the hydraulic Project Approval permit number.

4. PHOTOGRAPHS: You, your agent, or contractor must take photographs of the job site before the work begins and 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 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.

STAGING, JOB SITE ACCESS AND EQUIPMENT

6. 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.

7. Limit the removal of native bankline vegetation to the minimum amount needed to construct the project.

8. 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.

9. Check equipment daily for leaks and complete any required repairs before using the equipment in or near the water.

10. Lubricants composed of biodegradable base oils such as vegetable oils, synthetic esters, and polyalkylene glycols are recommended for use in equipment operated in or near water.

CONSTRUCTION-RELATED SEDIMENT, EROSION AND POLLUTION CONTAINMENT

11. Do not conduct project activities when the work area is inundated by tidal waters.

12. Prevent contaminants from the project, such as petroleum products, hydraulic fluid, fresh concrete, sediments,



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
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Issued Date: April 25, 2023
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sediment-laden water, chemicals, or any other toxic or harmful materials, from entering or leaching into waters of the state.

OUTFALL & TIDE & FLOOD GATES

13. This authorization is for the replacement of the existing structure is a slightly larger footprint as shown in approved plans.
14. Remove any riprap 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.
15. Ensure all catch basins, culverts, energy dissipation devices, and pipeline outfalls are free of obstructions for the life of the project to ensure proper functioning of the stormwater management system.
16. Do not locate the waterward face of the energy dissipater more than 7 feet waterward of the existing bankline.
17. Rock for the splash pad must be composed of clean, rounded material of a sufficient durability and size to prevent its being broken up or washed away by high water or wave action.
18. Keep surface gravels and deeper excavated sediments in separate stockpiles and back-fill trenches in reverse order of excavation. Do not stockpile excavated materials containing silt, clay, or fine-grained soil waterward of the ordinary high water line.
19. Prior to tidal inundation, backfill all trenches, depressions, or holes created during construction waterward of the ordinary high water line.
20. Cover all exposed slopes must be covered with natural fiber mesh, hydroseed, and re-vegetate with native vegetation immediately following installation of the pipeline conveyance.

DEMOBILIZATION/CLEANUP

21. Reshape beach area depressions created during project activities to preproject beach level upon project completion.
22. 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.
23. Replace damaged or destroyed riparian vegetation during the first dormant season (late fall through late winter) after project completion. Maintain plantings for at least three years to ensure at least eighty percent of the plantings survive.

LOCATION #1:		Site Name: Kitsap Suquamish Stormwater Treatment Facility NE Parkway Street right-of-way parking lot, Suquamish, WA 98392				
WORK START:		April 25, 2023		WORK END:		December 31, 2025
<u>WRIA</u>		<u>Waterbody:</u>			<u>Tributary to:</u>	
15 - Kitsap		Other			Other	
<u>1/4 SEC:</u>	<u>Section:</u>	<u>Township:</u>	<u>Range:</u>	<u>Latitude:</u>	<u>Longitude:</u>	<u>County:</u>
E 1/2	21	26 N	02 E	47.729845	-122.552046	Kitsap
<u>Location #1 Driving Directions</u>						



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: April 25, 2023
Project End Date: December 31, 2025

Permit Number: 2022-6-215+02
FPA/Public Notice Number: N/A
Application ID: 27394

From the WA-305, head west on WA-305 N toward Suquamish Way NE, then turn right onto Suquamish Way NE. Continue for approximately 1.6 miles, then turn right onto NE Parkway Street. The Project site will be located in the cul-de-sac/parking lot.

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.

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.



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: April 25, 2023
Project End Date: December 31, 2025

Permit Number: 2022-6-215+02
FPA/Public Notice Number: N/A
Application ID: 27394

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.

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.



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: April 25, 2023
Project End Date: December 31, 2025

Permit Number: 2022-6-215+02
FPA/Public Notice Number: N/A
Application ID: 27394

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.

Habitat Biologist Alexia.Henderson@dfw.wa.gov
Alexia Henderson 360-620-3601

for Director
WDFW

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ATTACHMENT D

**KITSAP COUNTY SHORELINE DEVELOPMENT PERMIT AND
CONDITIONAL USE PERMIT**



Notice of Administrative Decision

Date: 11/18/22

To: Anchor QEA, LLC, jjensen@anchorqea.com
Kitsap County Public Works, svakarcs@co.kitsap.wa.us
Interested Parties and Parties of Record

RE: **Permit Number:** Permit #21-04080
Project Name: Kitsap County Suquamish Regional Stormwater Treatment Facility
Type of Application: SSDP

The Kitsap County Department of Community Development has **APPROVED** the land use application for **Permit #21-04080: Kitsap County Suquamish Regional Stormwater Treatment Facility– SSDP**, subject to the conditions outlined in this Notice and included Staff Report.

THE DECISION OF THE DEPARTMENT IS FINAL, UNLESS TIMELY APPEALED TO THE KITSAP COUNTY HEARING EXAMINER ON OR BEFORE 14 DAYS FROM THE DATE OF DECISION PER KITSAP COUNTY CODE 21.04.290.

The written appeal shall be made on, or attached to, an appeal form found on DCD's website: <https://www.cognitofirms.com/KitsapCounty1/RequiredPermitQuestionnaireAppealObjectionOfAnAdministrativeDecision>.

Please note affected property owners may request a change in valuation for property tax purposes, notwithstanding any program of revaluation. Please contact the Assessor's Office at 360-337-5777 to determine if a change in valuation is applicable due to the issued Decision.

The complete case file is available for review by contacting the Department of Community Development; if you wish to view the case file or have other questions, please contact help@kitsap1.com or (360) 337-5777.

CC: Interested Parties:
Alexander, Larry, LarryBAlexander@outlook.com
Kitsap County Health District, MS-30
Kitsap County Public Works Dept., MS-26
DCD Staff Planner: Steve Heacock
Parks
Navy
DSE

Permit #21-04080, Kitsap County Suquamish Regional Stormwater Treatment Facility
11/18/22

Kitsap Transit
North Kitsap Fire District
North Kitsap School District
Puget Sound Energy
Water Purveyor
Sewer Purveyor
Point No Point Treaty Council
Suquamish Tribe
Port Gamble S'Klallam Tribe
Squaxin Island Tribe
Puyallup Tribe
WA Dept of Fish & Wildlife
WA Dept of Transportation/Aviation
WA State Dept of Ecology-SEPA
WA State Dept of Ecology-Wetland Review
WA State Dept of Transportation
DCD File # 21-04080



ADMINISTRATIVE STAFF REPORT

Report Date: November 14, 2022

Application Submittal Date: July 23, 2021

Application Complete Date: August 26, 2021

Project Name: Kitsap County Suquamish Regional Stormwater Treatment Facility

Type of Application: Shoreline Substantial Development (SSDP) - Administrative (Type II)

Permit Number: 21-04080

Project Location

18118 Sealth Lane NE
Suquamish, WA

Assessor's Account

212602-3-006-2007

Applicant/Owner of Record

Kitsap County Public Works
614 Division Street, M/S-26
Port Orchard, WA 98366

Project Contact

Josh Jensen, Anchor QEA, LLC

VICINITY MAP



Recommendation Summary

Approved subject to conditions listed under Section 13 of this report.

1. Background

Kitsap County Public Works (hereafter, “the Applicant”) proposes improvements to a 183-acre area in the unincorporated area of Suquamish within four sub-basins for installation of a regional stormwater treatment facility and associated outfall conveyance system improvements. The existing outfalls will be enhanced to convey treated stormwater into Port Madison/Puget Sound.

2. Project Request

The applicant is proposing to construct a regional stormwater treatment facility to treat and discharge stormwater from four drainage basins (Suquamish, Augusta, Angeline, and Parkway). Stormwater runoff from these basins is currently collected and conveyed in conventional systems with minimal water quality treatment. The proposed stormwater treatment facility includes tying in existing stormwater conveyance infrastructure along Augusta Avenue NE and Suquamish Way NE, and connecting it to a proposed stormwater

treatment facility composed of two pretreatment vaults and a treatment vault. An outfall structure with a dissipation pad will be installed at the discharge location, located at the toe of the bluff and partially waterward of the ordinary high water mark (OHWM) on the shoreline of Port Madison.

The new stormwater treatment facility will be connected to the four stormwater basins via existing stormwater infrastructure. The existing concrete will be demolished using standard concrete breaking equipment. Trenching down to the existing stormwater pipes along Augusta Avenue NE and up to Suquamish Way NE will be completed using backhoe or trackhoe excavators. Once the old PVC pipes are removed, 18-inch diameter, high-density polyethylene stormwater pipes will be installed to replace them and connect to the stormwater treatment facility. The area where the existing stormwater infrastructure is replaced will be backfilled and repaved to existing grades and condition. All excavated material will either be reused on site or disposed of at an approved off-site landfill. The stormwater treatment facility will include two pretreatment vaults. The north vault will be approximately 16 feet long by 10 feet wide (160 square feet [sf]) and 9 feet deep. The south vault will be approximately 19 feet long and 13 feet wide (247 sf) and up to 12 feet deep. The vaults will be installed underneath the Augusta Avenue and Northeast Parkway Street intersection. The two pretreatment vaults will connect to a water quality treatment vault installed underneath the Northeast Parkway Street parking lot. The water quality treatment vault will be approximately 175 feet long by 27 feet wide (4,725 sf) and up to 12 feet deep. This facility is designed to treat low stormwater flows; high stormwater flows will be directed to the existing stormwater outfall to the south via a flow splitter. The pretreatment and treatment vaults will be largely pre-cast concrete structures, designed to filter pollutants out of stormwater and capture sediment, heavy metals, floatable litter, and other pollutants that would otherwise go directly to Port Madison without any treatment.

Once the water quality facility and conveyance pipes are installed, the area will be repaved and returned to a parking lot with ADA curb ramp upgrades and landscaping. Temporary grading and sidewalk repairs will occur over an easement on Suquamish Tribe-owned land to the south. To convey water from the stormwater treatment facility, a new outfall structure and dissipation pad will be installed by trenching the area from the stormwater treatment facility to the bluff and installing an 18-inch-diameter pipe that extends along the face of the bluff and waterward toward the shoreline. The stormwater will be discharged through the outfall to an approximately 7.3- by 5.5-foot concrete outfall structure and dissipation pad that will be installed on the shoreline. The structure will either be pre-cast, or the concrete will be poured on site but protected in place until the concrete cures. The discharged stormwater will be directed toward an approximately 6- by 8.5-foot dissipation pad consisting of a mix of beach cobble and 4-inch riprap. The outfall structure and dissipation pad will be protected by large wood pieces between 24 and 36 inches in diameter to be installed along the north and south sides. Each of the large wood pieces will be anchored and supported by approximately four large boulders. The large woody debris and boulders will be field located pending the final orientation of the outfall structure and dissipation pad and available

materials. The existing 12-inch-diameter outfall located to the north will be decommissioned. Exposed materials will be removed from the shoreline to the extent practicable.

3. SEPA (State Environmental Policy Act)

A SEPA Determination of Non-Significance was issued on November 17, 2021, under KCC 18.04 and the State Environmental Policy Act. The County used the optional DNS process in WAC 197-11-355. Opportunities for public comment were combined with the Notice of Application issued on October 13, 2021. No comments were received. The decision is considered final.

4. Physical Characteristics

The Project is located in the community of Suquamish, on Port Madison near Agate Passage. The project is within paved right-of-way, with limited vegetated areas that are primarily located along the top of the bluff. The Suquamish Tribe owns property immediately to the south of the Project area. If construction activities are required to partially extend south onto Suquamish Tribe-owned property, work will be completed under an easement in coordination with the Tribe.

Conveyance facilities associated with the four drainage basins currently include a series of catch basins, stormwater pipes, and stormwater ditches that convey stormwater to two existing outfalls, located to the north and south of the Suquamish Dock. The existing outfall located north of the Suquamish Dock (Outfall ID unknown) drains the Parkway Basin to an existing 12-inch-diameter outfall that discharges waterward of the existing bluff into an energy dissipation pad located on the beach. The existing outfall to the south of the Suquamish Dock (Outfall ID 0314) is located along the shoreline east of the Suquamish House of Awakened Culture. This outfall includes a 36-inch diameter, corrugated polyethylene pipe that discharges into an open-water, channelized concrete conveyance system that discharges stormwater to Puget Sound. The Angeline Basin currently sheet flows from Harris Avenue and Angeline Avenue NE to Northeast Parkway Street and is connected to the existing 12-inch-diameter outfall. The project area includes a paved street end that currently serves as a parking lot for approximately 20 vehicles. The right-of-way is bordered by the Suquamish House of Awakened Culture (Suquamish Community House) to the south, and commercial and residential uses to the north.

Vegetation within the project area includes a variety of native, non-native, and ornamental trees, shrub, grass, and herbaceous species associated with residential and commercial development and Angeline Park. Landscaped vegetation and mowed lawns are the dominant vegetation communities. Dominant plant species within the Project area include the tree species red alder, bigleaf maple, Douglas fir, and western red cedar. A majority of the larger (over 20 inches diameter at breast height) native trees occur within private lots or park areas. Shrub species include the native species vine maple and western azalea. Non-native invasive species are also on-site, such as Himalayan blackberry and holly and a variety of ornamental shrubs. Ground cover species include sword fern, English ivy, and a variety of common grass

and herbaceous plants.

The shoreline within the Project area includes a steep bluff protected by segments of riprap and concrete debris. The Suquamish Dock extends east from the end of the Northeast Parkway Street right-of-way over tidelands owned by the Washington Department of Natural Resources and Kitsap County. Two existing outfalls, located to the north and south of the Suquamish Dock extend past the bluff and onto the shoreline. Non-native invasive plant species are the dominant vegetation on the shoreline, including Himalayan blackberry, Scotch broom, English ivy, and orchard morning glory. Native vegetation includes red alder, Scouler willow, and Nootka rose. A variety of common native and non-native grass and herbaceous plants are also present. The Project area provides habitat for native and non-native bird, amphibian, reptile, insect, and large and small mammal species to breed, forage, and rest. Wildlife species that would potentially occupy habitat in these areas include birds, amphibians, reptiles, and mammals typically associated with residential and commercial development and parks in Kitsap County. The marine habitat in the Project area provides foraging habitat for waterfowl and other birds and aquatic species typically found in the marine environment of Puget Sound.

Port Madison is a marine waterbody connected to Puget Sound. The marine shoreline at the toe of the bluff includes boulders, cobbles, gravel, sand, shell hash, and large and small woody debris. The toe of the bluff is intermittently lined with riprap and concrete debris placed along the shoreline for protection or remaining from relict structures. The waters of Port Madison provide a productive habitat for a variety of fish, marine mammals, and other aquatic species. Eelgrass beds are located in lower intertidal areas offshore of the Port Madison shoreline, from approximately 0.2 to -13.4 feet mean lower low water (MLLW; WDNR 2021). Eelgrass beds near the project area are located approximately 40 feet waterward of the proposed project footprint.

Table 1 - Comprehensive Plan Designation and Zoning

Comprehensive Plan: LAMIRD-1 Zone: Suquamish Village Residential	Standard	Proposed
Minimum Density	N/A	N/A - Subject property is within the County ROW.
Maximum Density	2 dwelling units/ acre	
Minimum Lot Size	4,000 square feet	N/A
Maximum Lot Size	NA	N/A
Minimum Lot Width	40 feet	N/A
Minimum Lot Depth	75 feet	N/A
Maximum Height	30 feet	N/A
Maximum Impervious Surface Coverage	40%	N/A*

Maximum Lot Coverage	N/A	N/A
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Applicable footnotes: None

Staff Comment: *The site is located within the right of way of Parkway Street and as such is existing developed area. The proposal removes and adds impervious surfaces and results in an overall coverage of 65%, however, the amount of existing impervious surface that is within the buffer has been reduced and native plantings will be installed. See analysis in Section 10.

Table 2 - Setback for Zoning District

	Standard	Proposed
Front (West)	20 feet	N/A
Side (North and South)	5 feet	N/A
Rear (East)	5 feet and Shoreline High Intensity Buffer: 50 feet (standard); 50 feet (reduced)	The proposal includes existing impervious surfaces as an existing roadway; ADA accessible sidewalks will be incorporated with shoreline restoration within the shoreline buffer. See Section 10 for more details.

Staff Comment: N/A

Table 3 - Surrounding Land Use and Zoning

Surrounding Property	Land Use	Zoning
North	Commercial buildings	Suquamish Village Residential (SVR)
South	Tribal development	Tribal
East	Puget Sound	N/A
West	Convenience Store; Single-family residences	Suquamish Village Residential (SVR)

Table 4 - Public Utilities and Services

	Provider
Water	PUD 1
Power	Puget Sound Energy
Sewer	Kitsap County
Police	Kitsap County Sherriff

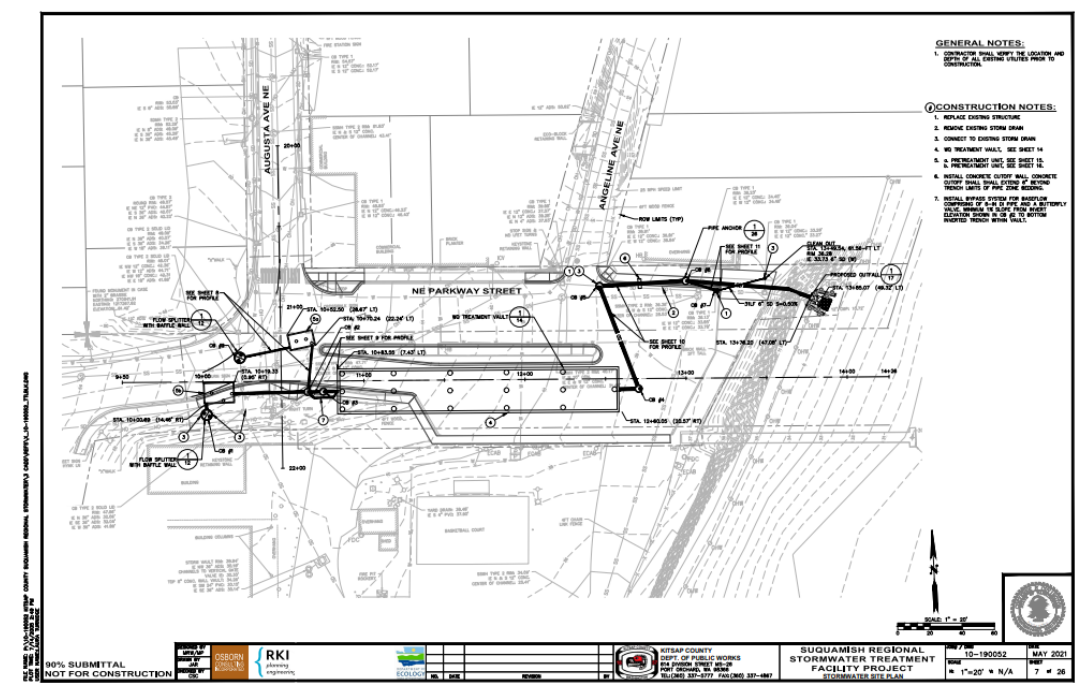
Fire	North Kitsap Fire & Rescue
School	North Kitsap School District #400

5. Access

The site is located on NE Parkway Street and has existing access from Augusta Avenue NE, Angeline Avenue NE, and Suquamish Way NE.

6. Site Design

The site has an existing pier, ramp, and floating dock. The submitted site plan shows this as well as upland improvements, landscaping, ADA-compliant walkways and access, and shoreline restoration. The site plan below is the stormwater design site plan, sheet 7 of 26 sheets.



7. Policies and Regulations Applicable to the Subject Proposal

The Growth Management Act of the State of Washington, RCW 36.70A, requires that the County adopt a Comprehensive Plan, and then implement that plan by adopting development regulations. The development regulations must be consistent with the Comprehensive Plan. The Comprehensive Plan process includes public involvement as required by law, so that those who are impacted by development regulations have an opportunity to help shape the Comprehensive Plan which is then used to prepare development regulations.

Kitsap County Comprehensive Plan, adopted June 30, 2016; amended April 27, 2020.

The following Comprehensive Plan goals and policies are most relevant to this application:

Chapter 3- Environment, incorporates by reference the goals and policies of the Kitsap County Shoreline Master Program.

Land Use Policy 51: Permit residential uses in rural areas consistent with the planned rural character of the surrounding area.

Policy SH-1. Protect and conserve shoreline areas that are ecologically intact and minimally developed or degraded. Develop incentives and regulations for privately owned shorelines that will protect and conserve these areas while allowing reasonable and appropriate development.

Policy SH-2. Recognize that nearly all shorelines, even substantially developed or degraded areas, retain important ecological functions.

Policy SH-4. Permitted uses and developments should be designed and conducted in a manner that protects the current ecological condition, and prevents or mitigates adverse impacts. Mitigation measures shall be applied in the following sequence of steps listed in order of priority:

1. Avoid the impact altogether by not taking a certain action or parts of an action.
2. Minimize impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts.
3. Rectify the impact by repairing, rehabilitating, or restoring the affected environment.
4. Reduce or eliminate the impact over time by preservation and maintenance operations.
5. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments, including utilization of the in-lieu fee process where appropriate; and
6. Monitor the impact and the mitigation projects and take appropriate corrective measures.

Policy SH-7. In assessing the potential for new uses and developments to impact ecological functions and processes, the following should be considered:

1. On-site and off-site impacts.
2. Immediate and long-term impacts.
3. Cumulative impacts, from both current and reasonably foreseeable future actions, resulting from the project; and
4. Any mitigation measures or beneficial effects of established regulatory programs to offset impacts.

Policy SH-8. Critical areas in the shoreline jurisdiction shall be protected in a manner that results in no net loss to shoreline ecological functions. Pursuant to RCW 36.70A.030(5),

critical areas include:

1. Wetlands.
2. Frequently flooded areas.
3. Fish and wildlife habitat conservation areas.
4. Geologically hazardous areas.
5. Critical aquifer recharge areas.

Policy SH-9. Preserve native plant communities on marine, river, lake, and wetland shorelines to maintain shoreline ecological functions and processes, development along the shoreline should result in minimal direct, indirect, or cumulative impacts. This includes:

1. Keeping overhanging vegetation intact along the shoreline edge to provide shading and other ecological functions.
2. Preserving established areas of native plants and minimizing clearing and grading near bluff edges and other erosion or landslide-prone areas in order to maintain slope stability and prevent excess surface erosion and stormwater runoff.
3. Designing and placing structures and associated development in areas that avoid disturbance of established native plants, especially trees and shrubs; and
4. Removal of noxious weeds in accordance with WAC 16-750-020.

Policy SH-10. Shoreline landowners are encouraged to preserve and enhance native woody vegetation and native groundcovers to stabilize soils and provide habitat. When shoreline uses or modifications require a planting plan, maintaining native plant communities, replacing noxious weeds, and avoiding installation of ornamental plants are preferred. Nonnative vegetation requiring use of fertilizers, herbicides/pesticides, or summer watering is discouraged.

Policy SH-13. Ensure mutual consistency with other regulations that address water quality and stormwater quantity, including standards as provided for in Title 12 (Storm Water Drainage) and Chapter 173-201A WAC (Water Quality Standards).

Policy SH-16. Accommodate and promote, in priority order, water-dependent, water-related and water-enjoyment economic development. Such development should occur in those areas already partially developed with similar uses consistent with this program, areas already zoned for such uses consistent with the Kitsap County Comprehensive Plan, or areas appropriate for water-oriented recreation.

Policy SH-21. Give preference to water-dependent uses and single-family residential uses that are consistent with preservation of shoreline ecological functions and processes. Secondary preference should be given to water-related and water-enjoyment uses. Non-water-oriented uses should be limited to those locations where the above-described uses are inappropriate or where non-water-oriented uses demonstrably contribute to the objectives of the Act. For use preference within shorelines of statewide significance, see Section 22.300.145(B).

Policy SH-23. Through appropriate site planning and use of the most current, accurate and complete scientific and technical information available, shoreline use and development should be located and designed to avoid the need for shoreline stabilization or actions that would result in a net loss of shoreline ecological functions.

The County’s development regulations are contained within the Kitsap County Code. The following development regulations are most relevant to this application:

Code Reference	Subject
Title 12	Storm Water Drainage
Title 13	Water and Sewers
Title 14	Buildings and Construction
Title 17	Zoning
Title 19	Critical Areas
Title 22	Shoreline Master Program
Chapter 18.04	State Environmental Policy Act (SEPA)
Chapter 20.04	Transportation Facilities Concurrency Ordinance
Chapter 21.04	Land Use and Development Procedures

8. Documents Consulted in the Analysis

A complete index of exhibits is located in the project file. To date, the index to the record consists of Exhibits listed below.

Exhibit #	Document	Dated
1	JARPA and Project Narrative	July 28 2021
2	Project Description	July 28 2021
3	Permit Questionnaire	July 28 2021
4	SEPA Checklist	July 28 2021
5	Habitat Management Plan/No Net Loss	July 28 2021
6	Biological Evaluation, Consultation	July 28 2021
7	Cultural Resources Report	July 28 2021
8	Shoreline CUP/SSDP staff letter	July 28 2021
9	Engineered Plan set 90%	November 15 2021
10	Engineered Drainage Report	November 15 2021
11	Geotechnical Report	July 28 2021
12	Stormwater Memo	November 16 2021
13	Notice of Application	November 16 2021
14	SEPA DNS	November 17 2021
15	Public Comments Received	N/A

9. Public Outreach and Comments

A Notice of Application was distributed pursuant to Title 21 Land Use and

Development Procedures, which provided recipients with project information and an opportunity for public comment. There were no public comments received by the department. If any comments are provided after the 3 day review, we will include them here.

Issue Ref. No.	Summary of Concern
	<i>No comments received</i>

Issue Ref. No.	Staff Response
	NA

10. Analysis

a. Planning/Zoning

The proposal is within the Suquamish Village Residential (SVR) zone and the High Intensity Shoreline designation. Public stormwater facilities (Utilities) are a permitted use in the High Intensity shoreline designation per KCC 22.600.185. As described in Table 1 and 2 of this report, the proposal meets zoning dimensional standards of the SVR zoning designation.

b. Lighting

Lighting was not analyzed as part of this proposal.

c. Off-Street Parking

The installation of the facility will not impact existing parking. Approximately 20 parking stalls exist on the site, including dedicated tribal elder parking and ADA parking spaces.

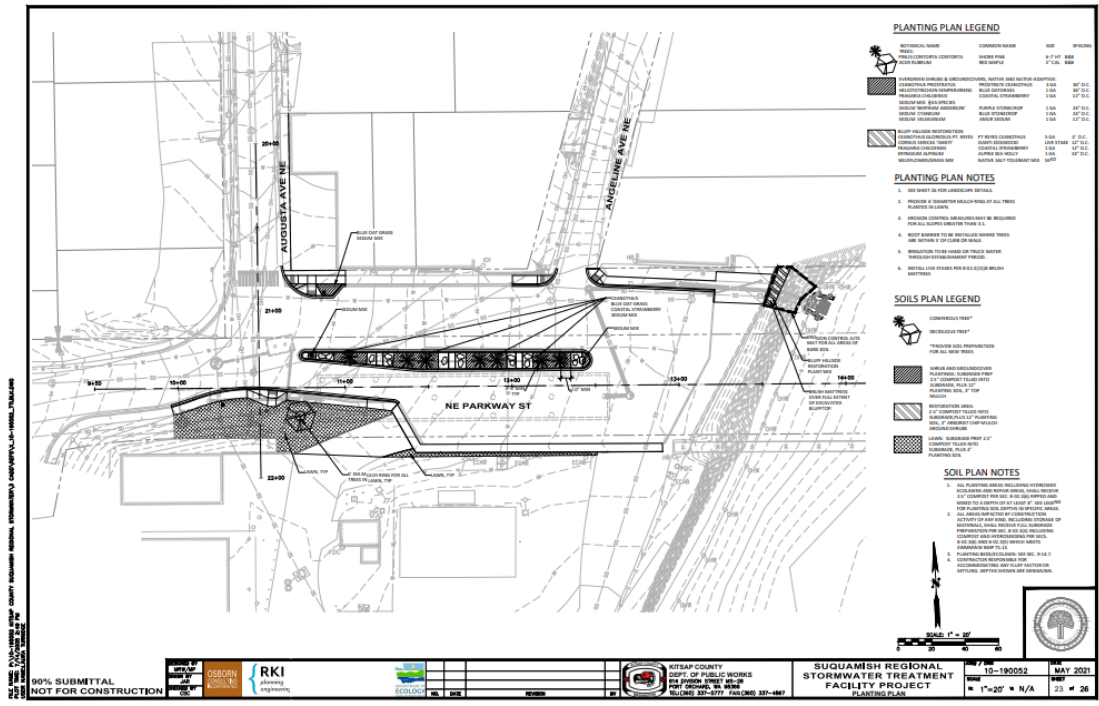
d. Signage

No signage is proposed or required. Future signage will need to be consistent with application requirements of Title 17 Zoning. An informational kiosk will likely be installed.

e. Landscaping

The project abuts residential areas, but these are commercially developed. Some landscape buffering is proposed, including shoreline enhancements.

As mitigation for minor shoreline impacts, the proposal will include installation of native landscaping. This is shown in the landscape plan below and additional analysis included in Section 10.i of this report.



f. Frontage Improvements

The site is located in the Suquamish Limited Area of More Intensive Rural Development (LAMIRD). Road improvements have been analyzed and are not required at this time as the existing road includes 12-foot travel lanes, 5-foot bike lanes and a 6-foot sidewalk. Internal sidewalks are incorporated in the design.

g. Design Districts/Requirements

The subject property is not within a design district.

h. Development Engineering/Stormwater

Development Services and Engineering has reviewed the land use proposal and finds the concept supportable in its approach to civil site development. Further review will occur with the associated site development permit (20-04521). See the Stormwater Memo (Exhibit 12).

i. Environmental

Regulations:

KCC 22.400.105 Proposed Development

A. Location.

1. New development shall be located and designed to avoid or, if that is not possible, to minimize the need for new and maintenance dredging.
2. New development shall be located and designed to avoid the need for future shoreline stabilization for the life of the structure. Likewise, any new development

which would require shoreline stabilization which causes significant impacts to adjacent or down-current properties shall not be allowed.

3. New development on lots constrained by depth, topography or critical areas shall be located to minimize, to the extent feasible, the need for shoreline stabilization.

4. New development on steep slopes or bluffs shall be set back sufficiently to ensure that shoreline stabilization is unlikely to be necessary during the life of the structure, as demonstrated by a geotechnical analysis.

5. Subdivision shall be planned to avoid the need for shoreline stabilization for newly created lots, utilizing geotechnical analysis where applicable.

6. Non-water-oriented facilities and accessory structures, except for preferred shoreline uses, such as single-family residences and single-family residential appurtenances when consistent with buffer provisions in this chapter, must be located landward of buffers and adjacent water-oriented uses, or outside shoreline jurisdiction, unless no other location is feasible.

Staff Comment: The proposal is found to be consistent with the above regulations.

KCC 22.400.115 Critical Areas

The site is located with the Urban High Intensity shoreline environment and partially within the FEMA Floodplain. A Habitat Management Plan (HMP) was submitted in accordance with requirements of the Shoreline Master Program 22.400.115.B and KCC 15.13. For impacts with the Urban High Intensity Shoreline Buffer, mitigation sequencing is addressed and analyzed in this report in the sub-section below.

The site slopes moderately from west to east toward the water, and parts of the site are mapped as 'Moderate Erosion Hazard Area' as defined in Kitsap County Code 19.400. This classification required the submittal of a Geotechnical Report.

The report has concluded that the development as proposed is feasible when the recommendations of the report are implemented during construction. Other recommendations of the report are required to be incorporated in construction as a conditional of approval.

KCC 22.400.110 Mitigation

Kitsap SMP section 22.400.110 requires that proposed uses and development implement mitigation sequencing and ensure the proposal will achieve no net loss of shoreline ecological functions. The applicant provided the following responses.

Avoidance.

Staff comment: Upland parking areas are accessory to the use of the principal water-oriented structures on site. Parking is also essential to the water oriented businesses in the immediate vicinity. ADA public access for the Suquamish Tribal pier, docks, and boat launch will be incorporated in the design. Appendix B of KCC

22.800 was used to determine mitigation requirements to result in no net loss of habitat (see Habitat Management Plan for further detail).

Minimization.

Applicant comment: The majority of all site parking is proposed outside the shoreline buffer or within existing parking areas. Only the outfall and basin collection features are proposed within the buffer. Native plantings have been maximized between the parking area and top of bluff in combination with the proposed sidewalk design. To offset the installation of new fill material, beach cobble, and riprap that will be placed for the dissipation pad, a commensurate amount of riprap and concrete debris along the beach will be removed or reused for the Project. The exact location of riprap and debris to be removed or reused will be determined in the field. Riprap or concrete debris that provides protective function to the bluff will not be removed or reused. The large woody debris and boulders that will be installed on both sides of the outfall structure and dissipation pad will also be field located pending the final orientation of the outfall structure and dissipation pad and available materials.

Mitigation

*Applicant comment: To offset areas disturbed by construction, the Project includes a planting plan to restore and enhance the Project area. The planting plan includes an approximately 2,830-sf lawn area with trees to the south of the intersection of Augusta Avenue NE and Northeast Parkway Street. To install the proposed outfall, approximately 190 sf of existing vegetated area at the top of the bluff will be temporarily cleared and subsequently replanted with native and native-adaptive species. The bluff restoration area will be planted with species including Point Reyes Ceanothus (*Ceanothus gloriosus*), Isanti dogwood (*Cornus sericea 'Isanti'*), coastal strawberry (*Fragaria chiloensis*), alpine sea holly (*Eryngium alpinum*) and a native, salt-tolerant wildflower/grass mix. The median planter and lawn areas will be planted with native or native-adaptive plants. The planted areas will provide habitat for a variety of birds, amphibians, reptiles, and mammals typically associated with residential and commercial development and parks in Kitsap County.*

KCC 22.400.120 Vegetation Conservation Buffers

The site is currently developed as a pier with associated parking within the buffer. Associated vegetation conservation buffer standards for this proposal are analyzed under the Urban High Intensity buffer criteria in 22.400.120.B.1.a requiring a 50-foot standard buffer.

The existing use of the shoreline within the buffer will remain. As analyzed earlier in this section, impervious surface within the buffer will be reduced and native plantings installed.

KCC 22.400.125 Water Quality and Quantity

A preliminary drainage plan was submitted. The project as proposed has been reviewed under KCC Title 12 and will be reviewed as a minor project, requiring a Site Development Activity Permit (see Exhibit 12, Stormwater Memo for more details). A Hydraulic Project Approval (HPA) will be required from the Washington State Department of Fish and Wildlife.

KCC 22.400.130 Historic, Archaeological, Cultural, Scientific and Educational Resources

A Cultural Resources Study has been conducted. A condition of approval has been added that Kitsap County DCD, the Washington State Office of Archaeology and Historic Preservation, and the affected tribes must be notified if archaeological resources are uncovered during excavation. The project proponent and contractor shall notify Suquamish Tribe archaeologists of the planned start date of construction at least two weeks prior to the start of ground disturbing activities.

KCC 22.400.135 View Blockage

N/A. No structures are proposed.

KCC 22.400.140 Bulk and Dimension Standards

N/A

KCC Title 22.600 Use Review**KCC 22.600.160 Mooring Structures and Activities**

The proposal will maintain existing water access facilities.

KCC 22.600.175 Utilities

As detailed in KCC 22.600.105, utilities are permitted uses in the Urban High Intensity environment. KCC 22.600.185(8) indicates all applications for utility facilities shall include, at a minimum, the following items, which include responses associated with the proposed project:

1. Reason why facility must be located in the shoreline jurisdiction.
The proposed project is a water quality and outfall system designed to convey treated stormwater from the Suquamish Area drainage basin to Puget Sound. There is no other alternative to the proposal; the current drainage system is confined by topography to this alternative.
2. Alternative locations considered and reasons for their rejection.
The proposed project is needed to provide for a regional stormwater improvement outlet for treated water from the Suquamish drainage area. There was no other practical or reasonable alternative.



Photograph 1: New outfall structure Project area beach and shoreline bluff habitat, facing south.

3. Location of other facilities near the proposed project and if the location is to include other types of facilities.
N/A. The proposed project does not include any additional facilities.
4. Proposed method of construction and plans to control erosion and turbidity during construction.
Installation of the water quality treatment system, drain pipes and outfall structure is proposed at or above the ordinary high water line (OHWL). Turbidity is not anticipated as the facility is providing treated stormwater to Puget Sound. Once the infrastructure work is completed, restoration and replanting of the disturbed areas will be restored.
5. Plans for restoration of areas disturbed during construction.
The project has been designed to avoid work below the OHWL of the marine shoreline. The proposed buffer enhancement and shoreline restoration actions include, but may not be limited to, the following recommendations:
 - a. *Enhance the onsite buffer areas.*
 - b. *Remove any trash and other debris within the shoreline, or shoreline buffer areas.*
 - c. *Pre-treat invasive plants with a Washington Department of Agriculture approved herbicide or hand remove invasive plants; any pre-treatment of the invasive plants should occur a minimum of two weeks prior to removal.*
 - d. *Apply topsoil and/or compost as needed to provide a suitable substrate in the restoration and enhancement areas.*
 - e. *Replant all restoration and enhancement areas with a suite of native plants listed within the HMP/No Net Loss Report (exhibit 5) or substitutes approved by the responsible Project Scientist, to help retain soils, filter stormwater, and increase biodiversity.*
 - f. *Replant native plants along the shoreline around the existing impervious surfaces.*
 - g. *An approved native seed mix may be used to seed the restoration and enhancement areas after planting.*
 - h. *Maintain and control invasive plants annually, at a minimum, or more frequently if necessary. Maintenance to reduce the growth and spread of invasive plants is not restricted to chemical applications and may include hand removal, if warranted.*
 - i. *Provide dry-season irrigation as necessary to ensure native plant survival.*
 - j. *Direct exterior lights away from the critical areas wherever possible.*
 - k. *Place all activities that generate excessive noise (eg, generators other temporary construction equipment) away from the onsite critical areas where feasible.*

6. Possibility of locating proposed facility within existing right-of-way. *Much of the project will be located in an existing right of way. The proposed outfall will be located on Tribal property, or in provided easement areas.*

7. Geotechnical report required when proposed in a geologically hazardous area. *A Geotechnical report (Exhibit 11) has been prepared for the project and is included with the application package. The report meets all County guidelines, per KCC 19.400.415 Designation of Geologically Hazardous Areas, and KCC 19.700, Special Reports.*

j. Access, Traffic and Roads

No comments at this time. Traffic review will occur with the associated Site Development Activity Permit, under permit 20-04521.

k. Fire Safety

No comments at this time.

l. Solid Waste

No comments at this time

m. Water/Sewer

No comments at this time.

n. Kitsap Public Health District

No comments at this time.

11. Review Authority

The Director has review authority for this Shoreline Substantial Development Permit application under KCC 21.04.100. The Director may approve, approve with conditions, or deny this application.

12. Findings

The proposal is consistent with the Comprehensive Plan and the zoning standards for the Suquamish Village Residential (SVR) zone in Title 17.

The proposal is consistent with policies, standards, and development regulations of the Shoreline Master Program, Title 22.

13. Recommendation

Based upon the analysis above and the decision criteria found in KCC 22.500.100.B and 21.04, the Department of Community Development recommends that the Shoreline Substantial Development Permit be **approved**, subject to the following conditions:

a. Planning/Zoning

1. All required permits shall be obtained prior to commencement of land clearing, construction and/or occupancy.
2. The authorization granted herein is subject to all applicable federal, state, and local laws, regulations, and ordinances. Compliance with such laws, regulations, and ordinances is a condition to the approvals granted and is a continuing requirement of such approvals. By accepting this/these approvals, the applicant represents that the development and activities allowed will comply with such laws, regulations, and ordinances. If, during the term of the approval granted, the development and activities permitted do not comply with such laws, regulations, or ordinances, the applicant agrees to promptly bring such development or activities into compliance.
3. The decision set forth herein is based upon representations made and exhibits contained in the project application. Any change(s) or deviation(s) in such plans, proposals, or conditions of approval imposed shall be subject to further review and approval of the County and potentially the Hearing Examiner.

b. Development Engineering**General**

4. Construction plans and profiles for all roads, storm drainage facilities and appurtenances prepared by the developer's engineer shall be submitted to Kitsap County for review and acceptance. No construction shall be started prior to said plan acceptance.

Stormwater

5. The information provided demonstrates this proposal is a *Major Development* as defined in Kitsap County Code Title 12, and as such will require a Site Development Activity Permit (SDAP) from Development Services and Engineering.
6. Stormwater quantity control, quality treatment, and erosion and sedimentation control shall be designed in accordance with Kitsap County Code Title 12 effective at the time the Shoreline Substantial Development Permit application was deemed complete. The submittal documents shall be prepared by a civil engineer licensed in the State of Washington. The fees and submittal requirements shall be in accordance with Kitsap County Ordinances in effect at the time of SDAP application.
7. Any project that includes offsite improvements that create additional hard surface such as lane widening, sidewalk or shoulder installation or intersection channelization shall provide stormwater mitigation in accordance with Kitsap County Code Title 12 effective at the time this permit application was deemed fully complete.
8. All publicly maintained drainage systems outside public dedicated right of way shall be located either in a tract dedicated to Kitsap County or in an easement,

granted to Kitsap County, for ingress, egress, operations, and maintenance of the stormwater facilities contained therein.

9. The owner shall be responsible for maintenance of the storm drainage facilities for this development following construction. Before issuance of Occupancy Permits for this development, the person or persons holding title to the subject property for which the storm drainage facilities were required shall record a Declaration of Covenant that guarantees the County that the system will be properly maintained. Wording must be included in the covenant that will allow the County to inspect the system and perform the necessary maintenance in the event the system is not performing properly. This would be done only after notifying the owner and giving him a reasonable time to do the necessary work. Should County forces be required to do the work, the owner will be billed the maximum amount allowed by law.
10. If the project proposal is modified from that shown on the submitted and approved site plan, Development Services and Engineering will require additional review and potentially new conditions.

Traffic and Roads

11. Any work within the County right-of-way shall require a Public Works permit and possibly a maintenance or performance bond. This application to perform work in the right-of-way shall be submitted as part of the SDAP process (or building permit if no SDAP is required). The need for and scope of bonding will be determined at that time.

Other

12. This project may include the construction of rock walls or other retaining facilities. Should those feature either exceed four feet in height or sustain a surcharge, a separate building permit with an engineered design is required for such walls. This note shall be placed on the face of the final construction drawings.

c. Environmental

13. A Hydraulic Project Approval (HPA) permit is required for work at or below the ordinary high water mark or associated with the outfall. Prior to SDAP or Building Permit approval, the applicant shall submit an approved HPA from the Washington Department of Fish and Wildlife (WDFW), or documentation from WDFW specifying that a HPA is not required. Information regarding HPA's can be found at <http://www.wdfw.wa.gov/hab/hpapage.htm> or by calling the Office of Regulatory Assistance at (360) 407-7037.
14. Construction techniques shall implement best management practices to ensure protection of the shoreline, its associated buffer, and local water quality. Such best management practices shall include protective silt fencing, protective orange construction fencing along defined work areas, working during periods

of limited rainfall and minimizing potential for adverse erosion, and seeding of exposed soils as needed to prevent adverse erosion.

15. Approval and subsequent development is subject to the conditions and recommendations of the Geotechnical Report associated with this permit and on file at the Department of Community Development.
16. As shown on the approved site plan, 190 square feet of native plantings shall be installed within the shoreline buffer. Other re-vegetation includes disturbed landscaping, for a total replanting for the project of 3,980 square feet.
17. The project shall adhere to the mitigation measures and recommendations within the approved Habitat Management Plan (HMP) prepared by Anchor QEA dated June 2021. Per the report, areas within the buffer and project perimeter shall be revegetated.
18. Vegetation planting shall occur as specified in the approved planting plan produced in support of this permit. Planting of native vegetation shall occur within the first dormant season once the permitted project has been constructed and approved. When planting is complete, the applicant must contact Development Service and Engineering Staff at (360) 337-5777 for a site inspection and as-built approval. Monitoring and maintenance of the planted area shall be conducted for three years after DCD staff approves planting. Monitoring includes live and dead vegetation counts and records of all maintenance activities. Maintenance activities can be defined as, but are not limited to, removal practices on invasive or nuisance vegetation and watering schedules. Monitoring information shall be summarized in a letter with photographs depicting conditions of the vegetation and overall site. Monitoring reports are due to Kitsap County Department of Community Development Services and Engineering Division by December 31 of each monitoring year. If more than 20 percent of the plantings do not survive within any of the monitoring years, the problem areas shall be replanted, and provided with better and higher gain maintenance practices to ensure higher plant survival.

d. Cultural Resources

19. The project shall adhere to the Cultural Resources Assessment provided by the Suquamish Tribe and Anchor QEA, dated September 2020.
20. The project proponent and contractor shall notify Suquamish Tribe archaeologists of the planned start date of construction at least two weeks prior to the start of ground disturbing activities.

e. Fire Safety

None at this time.

f. Solid Waste

None at this time.

g. Kitsap Public Health District
None at this time.


Report prepared by:



Steve Heacock / DSE Planner

November 8, 2022
Date

Report approved by:



Scott Diener, DSE Manager

November 8, 2022
Date

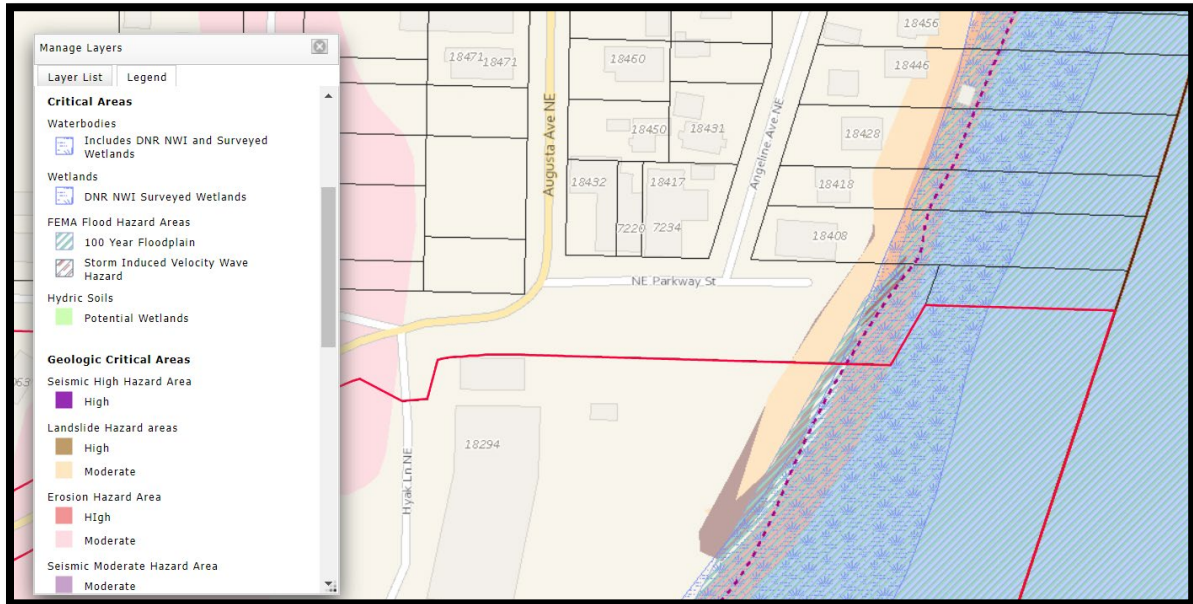
Attachments:

- Attachment A – Zoning Map
- Attachment B – Critical Areas Map

CC:

Kitsap County Public Works: Dave Tucker
Project lead: Josh Jensen, Anchor QEA jjensen@anchorqea.com
Department of Ecology, Shoreline Division
Rebekah Padgett; rp461@ecy.wa.gov
Department of Fish and Wildlife
Nam Sui; nam.sui@dfw.wa.gov
Suquamish Tribe
Kitsap County Health District, MS-30
Kitsap County Public Works Dept., MS-26
DCD Staff Planner: Steve Heacock

Attachment B – Critical Areas Map



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ATTACHMENT E

WASHINGTON DEPARTMENT OF ECOLOGY STORMWATER
FACILITY SPECIFICATIONS INSERT



**WASHINGTON STATE DEPARTMENT OF ECOLOGY
STORMWATER FACILITY
SPECIFICATIONS INSERT**

General

Partial funding of this project is being provided by the Washington State Department of Ecology's (Ecology) Stormwater Grant Program.

Compliance with State and Local Laws

The construction of the project, including all subcontracted work, shall conform to the applicable requirements of state and local laws and ordinances.

State Interest Exclusion

It is anticipated that this project will be funded in part by the Washington State Department of Ecology. Neither the State of Washington nor any of its departments or employees are, or shall be, a party to this contract or any subcontract.

Third Party Beneficiary

Partial funding of this project is being provided through the Washington State Department of Ecology Stormwater Grant Program. All parties agree that the State of Washington shall be, and is hereby, named as an express third-party beneficiary of this contract, with full rights as such.

Access to the construction site and to records

The contractor shall provide for the safe access to the construction site and to the contractor's records by Washington State Department of Ecology personnel.

The Contractor shall maintain accurate records and accounts to facilitate the Owner's audit requirements and shall ensure that all subcontractors maintain auditable records.

These Project records shall be separate and distinct from the Contractor's other records and accounts.

All such records shall be available to the Owner and to Washington State Department of Ecology personnel for examination. All records pertinent to this project shall be retained by the Contractor for a period of three (3) years after the final audit.

Protection of the Environment

No construction related activity shall contribute to the degradation of the environment, allow material to enter surface or ground waters, or allow particulate emissions to the atmosphere, which exceed state or federal standards. Any actions that potentially allow a discharge to state waters must have prior approval of the Washington State Department of Ecology.

Inadvertent Discovery of Archeological Resources

The contractor shall obtain a copy of the Inadvertent Discovery Plan from the Project Owner. The contractor shall keep a copy of the inadvertent discovery plan for the project on the work site at all times. The contractor shall immediately stop all work if human remains, cultural, or archeological resources are discovered in the course of construction. The contractor shall follow the inadvertent discovery plan in dealing with the human remains, cultural, or archeological resources.

Project Signs

The Contractor shall display Ecology's logo in a manner that informs the public that the project received financial assistance from the Washington State Stormwater Grant Program.

Utilization of Minority and Women Business Enterprises

All bidders are encouraged to utilize certified minority-owned and women-owned businesses to the extent possible in the performance of this contract. All prospective bidders or persons submitting qualifications should take the following steps, when possible.

1. Include qualified minority and women's businesses on solicitation lists.
2. Assure that qualified minority and women's businesses are solicited whenever they are potential sources of services or supplies.
3. Divide the total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by qualified minority and women's businesses.
4. Establish delivery schedules, where work requirements permit, which will encourage participation of qualified minority and women's businesses.
5. Use the services and assistance of the State Office of Minority and Women's Business Enterprises (OMWBE) and the Office of Minority Business Enterprises of the U.S. Department of Commerce, as appropriate.

All prospective bidders must provide a list of the MBE/WBE subcontractors they intend to use during the project. This list must be provided with the bid package.

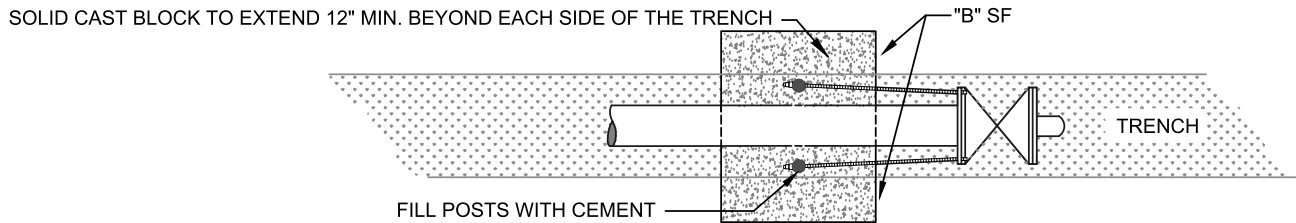
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ATTACHMENT F

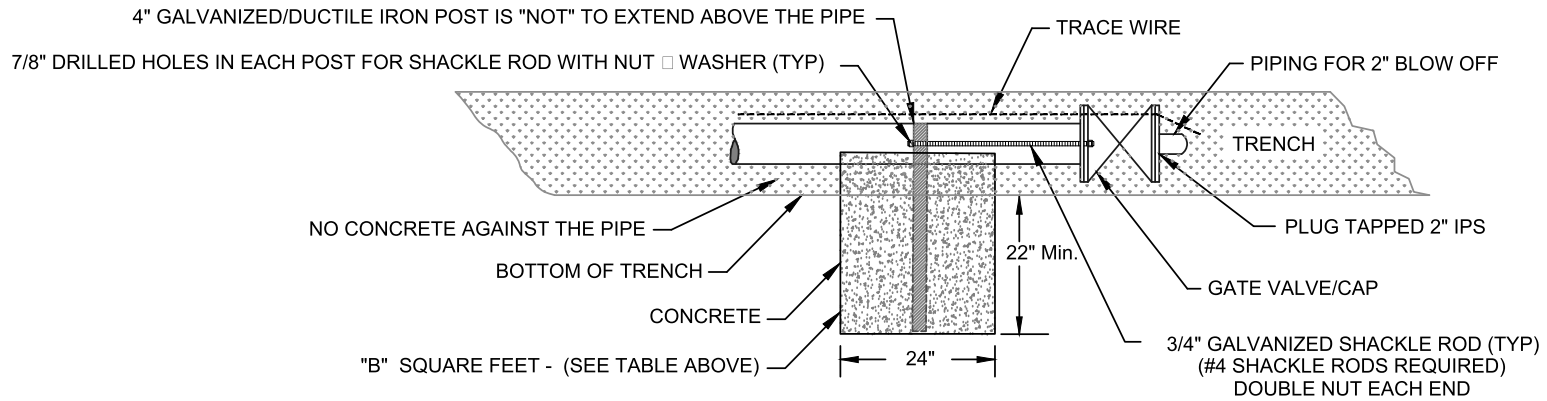
**KITSAP PUBLIC UTILITIES DISTRICT STANDARD DRAWINGS -
WATER**

NOTES:

1. 4" TO 8" PIPE SHALL HAVE ONE) 3/4" GALVANIZED SHACKLE ROD ON EACH SIDE OF PIPE.
2. 10" AND 12" PIPE SHALL HAVE TWO 3/4" GALVANIZED SHACKLE RODS ON EACH SIDE OF PIPE.
3. DISTANCE FROM FRONT EDGE OF CEMENT BLOCK TO FITTING FROM TIE-BACK WILL DEPEND ON SOIL AND TRENCH CONDITIONS.



PLAN VIEW



ELEVATION VIEW



CONTACT INFORMATION

Kitsap PUD
 PO Box 1989
 Poulsbo WA 98370

Tel: 360-779-7656
 Fax: 360-779-3284
 Web: www.kpud.org

TIE-BACK BLOCKING

FILE NAME:
 SD W-5 TBB.DWG

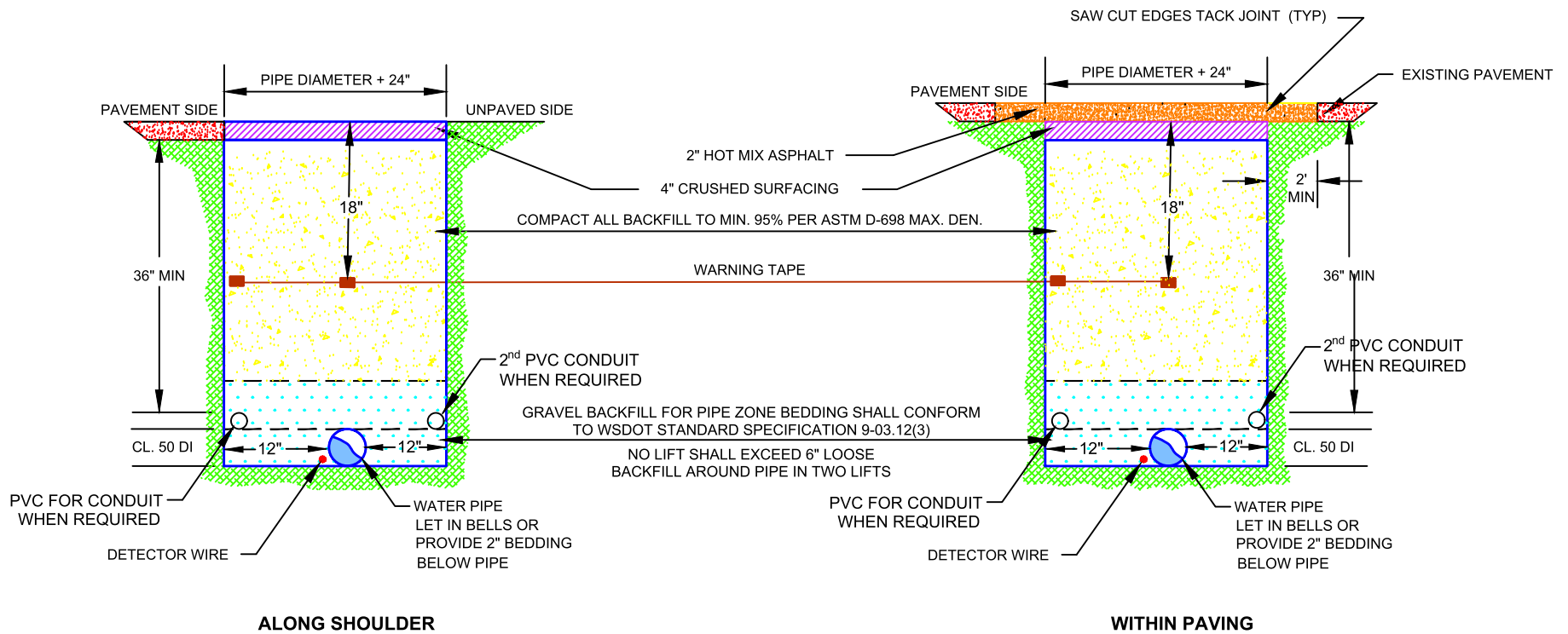
DRAWN BY: KSE REVISIONS: KSE

SCALE: NONE REVISION: 2

STANDARD DETAIL: DATE:
 W-5 04/25/2019

NOTE:

1. CONTRACTORS ARE REQUIRED TO MEET ALL WASHINGTON STATE DOT STANDARDS AND KITSAP COUNTY STANDARDS FOR TRENCH AND ASPHALT SURFACING.
2. HMA (HOT MIX ASPHALT) SHALL MEET THE REQUIREMENTS OF THE LOCAL COUNTY OR CITY .
3. ALL UTILITIES SHALL HAVE 36" MIN. COVER UNLESS, OTHERWISE APPROVED BY THE COUNTY ENGINEER.
4. IF ROAD CLOSURES OR DETOURS ARE ANTICIPATED, A TRAFFIC PLAN INCLUDING; SPECIFIC DATES AND DURATIONS OF SUCH ACTIONS SHALL BE FILED WITH THE KITSAP COUNTY DEPARTMENT OF PUBLIC WORKS.
5. THE APPLICANT IS RESPONSIBLE FOR ALL TEMPORARY AND PERMANENT PATCHING.
6. NO TRENCHES MAY BE LEFT OPEN OVERNIGHT.



CONTACT INFORMATION

Kitsap PUD
PO Box 1989
Poulsbo WA 98370

Tel: 360-779-7656
Fax: 360-779-3284
Web: www.kpud.org

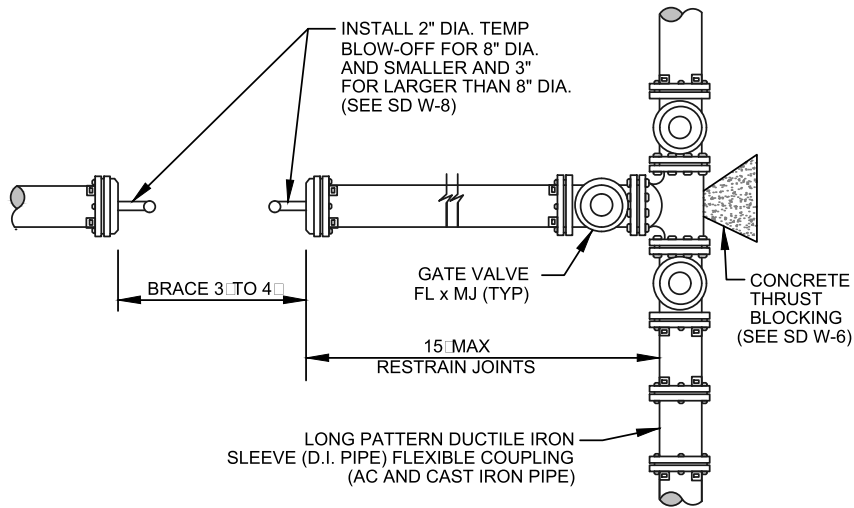
**TYPICAL STANDARD TRENCH
& PAVEMENT RESTORATION
WITH OR WITHOUT FIBER CONDUIT**

FILE NAME:
SD W-30 TST&PR.DWG

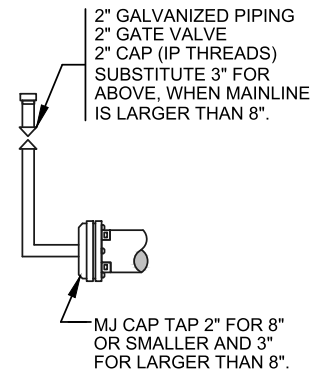
DRAWN BY: KSE REVISIONS: WHW

SCALE: NONE REVISION: 3

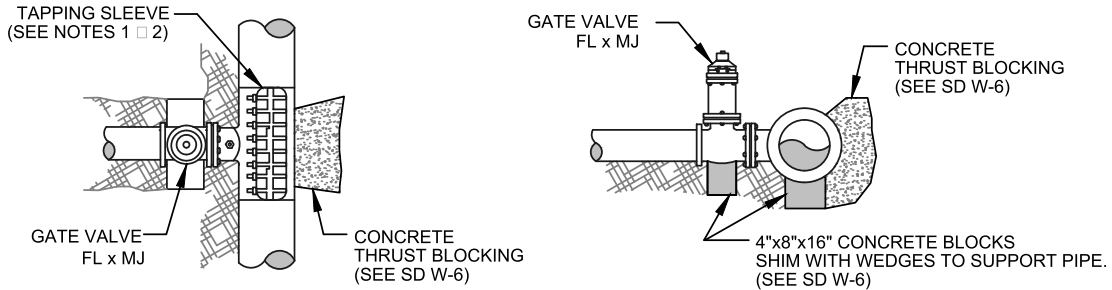
STANDARD DETAIL: DATE:
W-30 08/25/2022



CUT-IN CONNECTION



TEMP BLOW-OFF



TAPPED CONNECTION

NOTES:

1. TAPPED CONNECTIONS NOT ALLOWED WITHOUT SPECIFIC APPROVAL FROM KITSAP PUD.
2. NO CONNECTION WILL BE ALLOWED UNTIL ALL PRESSURE TESTING COMPLETED, AND SATISFACTORY BACTERIOLOGICAL TEST RECEIVED. SEE CROSS CONNECTION CONTROL IN STANDARD DETAIL W-23.
3. TAPPING SLEEVE TO BE STAINLESS STEEL FOR AC PIPE AND EPOXY COATED STEEL FOR DUCTILE OR CAST IRON PIPE. CLOSEST EDGE OF TAPPING SLEEVE MUST BE 3" (MIN.) FROM COUPLING ON AC PIPE.
4. SEE STANDARD DETAIL W-9 (VALVE BOX) AND STANDARD DETAIL W-6 (THRUST BLOCKING). PIPE AND FITTING RESTRAINTS MAY VARY.
5. BACKFILL PER JURISDICTIONAL REQUIREMENTS WHEN IN ASPHALT. ALL OTHER AREAS PER STANDARD DETAIL SPECIFICATIONS.
6. TEMP BLOW-OFF'S MUST BE PROTECTED FROM DAMAGE. PLACE IN TRAFFIC BOX IF REQUIRED.
7. ALL MJ JOINTS TO BE MEGA LUG OR EQUAL.
8. SIMILAR TEMP BLOW-OFF REQUIREMENTS FOR TAPPED CONNECTIONS. LOCATE BLOW-OFF OUT OF ASPHALT WHEN POSSIBLE.
9. ALL FITTINGS AND PIPE SHALL BE STERILE SWABBED. CONNECTION SHALL BE INSPECTED FOR VISUAL LEAKAGE UNDER FULL LINE PRESSURE PRIOR TO BACKFILL.



CONTACT INFORMATION

Kitsap PUD
PO Box 1989
Poulsbo WA 98370

Tel: 360-779-7656
Fax: 360-779-3284
Web: www.kpud.org

CONNECTION REQUIREMENT

FILE NAME:
SD W-17 CR.DWG

DRAWN BY: KSE REVISIONS: KSE

SCALE: NONE REVISION: 0

STANDARD DETAIL: W-17 DATE: 02/12/2018

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ATTACHMENT G
GEOTECHNICAL ENGINEERING INVESTIGATION REPORT,
NOVEMBER 2021

**GEOTECHNICAL ENGINEERING INVESTIGATION
KITSAP COUNTY REGIONAL
STORMWATER TREATMENT PROJECT
SUQUAMISH, WA**

CLIENT:

Cheyenne Covington, PE, ENV SP, LEED AP
Osborn Consulting Incorporated
Senior Project Manager
1800 112th Avenue NE, Suite 220-E
Bellevue, WA 98004

BY:

**N.L. OLSON AND ASSOCIATES, INC.
2453 BETHEL AVENUE. SE
PORT ORCHARD, WA 98366
(360) 876-2284**

Project Number: 10958-19



November 2021



N.L. OLSON & ASSOCIATES, INC.

ENGINEERING, PLANNING AND SURVEYING

November 2, 2021

Project Number: 10958-19

Attention: Cheyenne Covington, PE, ENV SP, LEED AP
Osborn Consulting Incorporated
Senior Project Manager
1800 112th Avenue NE, Suite 220-E
Bellevue, WA 98004

Subject: Geotechnical Engineering Investigation
Kitsap County Regional Stormwater Treatment Project
Suquamish, WA

Mr. Covington:

N.L. Olson & Associates, Inc is pleased to provide our Geotechnical Engineering Investigation that summarizes the results of our subsurface exploration, and geotechnical recommendations for Suquamish Tribe's Master Plan (Green Stormwater Solution).

If we can be of further assistance or if you have any questions regarding this project, please contact our office.

Sincerely,

Wesley R. Johnson, P.E.
Geotechnical Division Manager

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APPENDIX A – NLO’s Boring Logs and Laboratory Data

APPENDIX B – PSI and HWA’s Test Pit and Boring Logs and Laboratory Data

APPENDIX C – NLO’s Slope Stability Analysis Results

GEOTECHNICAL ENGINEERING INVESTIGATION KITSAP COUNTY REGIONAL STORMWATER TREATMENT PROJECT SUQUAMISH, WA

1.0 INTRODUCTION

1.1 OVERVIEW

N.L. Olson & Associates, Inc (NLO) has provided this report with our findings, conclusions and recommendations for the proposed storm water treatment project. Presented herein, are the results of our subsurface investigation and recommendations pertaining to the proposed installation of the storm detention vault and storm line. The scope of work has been based on November 11, 2019 request for proposal and scope of work further discussed in Section 1.3.

1.2 PROPOSED

This project's regional storm water treatment facility is proposed as part of a regional treatment solution needed for a relatively large contributing drainage area with insufficient right-of-way (ROW) space available for a distributed "green street" approach.

NLO's review of Kitsap County's Regional Stormwater treatment project submittal indicated the stormwater improvements will include installation of a new stormwater conveyance trunk initiating from NE Parkway ROW and extending about 0.82 miles northward along Angeline Avenue NE ROW and terminating roughly 200 feet north of the intersection of NE James Street and Angeline Avenue NE. For placement of the storm line, open trench construction is being considered.

A new stormwater conveyance system along Angeline Avenue North is being evaluated for connection to a stormwater treatment gallery located within NE Parkway ROW. The treatment facility will be comprised of below-ground filter media vaults that may discharge the treated stormwater into the Puget Sound via an energy dissipater located along the shoreline. A Vicinity Map is provided on Figure 1, and a Site Plan of the area is provided on Figures 2 through 4.

1.3 PURPOSE & SCOPE OF SERVICE

1.3.1 Subsurface Exploration Program

The subsurface exploration program occurred within NE Parkway ROW, the potential water quality treatment along Suquamish Way NE, the north storm water connection along the ROW of Angeline Avenue North, and west of the coastal bluff near the proposed outfall location. A total of eleven (11) borings were utilized to investigate the subject area's subsurface geologic conditions. NLO has subcontracted a track-mounted drill rig with operator for drilling operations. A scope of service summary is discussed below:

- Four (4) borings along NE Parkway for proposed Stormwater Park.
- One (1) boring drilled to about 25 feet near Long House along Suquamish Way NE.
- Two (2) borings drilled to 40 feet or refusal along the upper bluff overlooking the Port of Madison.
- One (1) boring drilled near the boat ramp.
- To address the subsurface soil conditions along the ROW of Angeline Avenue North, NLO has drilled three (3) borings that ranged in depth from about 25 feet to 40 feet or refusal.
- NLO'S scope of our work did not include studies for groundwater or soil contamination.

1.3.2 Geotechnical Engineering Report

This geotechnical engineering report is prepared to summarize our findings and provide conclusions and recommendations for the proposed project. The results of our subsurface investigation, conclusions and preliminary geotechnical recommendations are provided in the following:

- Provide setback criteria from the top portion of a steep coastal bluff area with a slope stability assessment.
- Provide vegetation and assess coastal bluff erosion buffers.
- Review available information for soil and groundwater conditions in the area of the project site.
- Determine if stormwater infiltration appears feasible on the subject property.
- Provide a summary of the encountered groundwater conditions within the project area.

1.4 SUBSURFACE EXPLORATION SUMMARY

The site's subsurface soil conditions were explored with eleven (11) borings. The boring locations are shown the Site Plan, Figures 2 to 4, and the boring logs are included in Appendix A. During drilling operations, piezometers were installed in Borings B-5, B-6, B-7, and B-10, the remaining borings were backfilled with a bentonite grout mix with the cuttings removed from the project area and disposed at Vern's Topsoil. NLO has provided a discussion of the Subsurface Exploration and Laboratory Program in Section 2.4 of this report and the piezometer readings are provided in Section 2.6.2. The boring logs and laboratory testing are provided in Appendix A.

1.5 PREVIOUS GEOTECHNICAL ENGINEERING REPORTS

NLO has reviewed two (2) reports referenced below, prepared by others, near the subject area with further discussion provided below.

1.5.1 Community Center

N.L Olson has reviewed "Geotechnical Engineering Study, Proposed Community Center, Hyak Lane east of Suquamish Way and south of the Canoe Shed, Suquamish, WA, PSI Project No. 712-75000-01, dated February 28, 2007" prepared by PSI.

PSI's subsurface exploration program conducted five (5) test pits on January 8, 2007. The test pits were extended down 11 to 12.5 feet below current site grades. At the time of their subsurface exploration program, ground water was encountered around four (4) feet below current site grades. PSI's subsurface exploration program encountered top soil that ranged roughly one (1) foot in depth. Fill soils were encountered in their subsurface exploration program. Their report also indicated that loose soils were encountered below the fill to the termination depth of the exaction. PSI's test pit locations are shown on the Site Plan, Figure 2 and PSI's test pit logs are provided in Appendix B.

NLO has reviewed PSI's report that mentioned the potential of liquefaction, as quoted in Section 5.2.2 Seismic Considerations of their report, that states the following, "Soil and groundwater conditions encountered for this study indicate that there is some risk for soil liquefaction and possible associated subsidence/settling in the sands during an earthquake. We should also point out that because of the proximity of the bluff/slope overlooking Port Madison, lateral spreading is considered possible at this site during an earthquake, should liquefaction occur". In Section 2.8.3 of this report, NLO has provided discussion of the seismic hazard for the project area.

1.5.2 Suquamish Pier Replacement Project

N.L Olson has reviewed "Geotechnical Report, Suquamish Pier Replacement Project, Suquamish, WA, HWA Project No. 2006-017, dated December 22, 2006" prepared by HWA.

HWA's subsurface exploration conducted four (4) borings on June 8, 2006. The borings ranged in depth from 20 to 70 feet below current site grades. During their drilling operations, three (3) of the borings were drilled within the Puget Sound and one (1) boring, Boring B-4, drilled along the uplands within NE Parkway ROW.

In Boring B-4, glacial till was encountered five (5) feet below current site grades and extended down to roughly 40 feet below ground surface (bgs). The till was underlain by lacustrine deposits that extended 75 feet bgs. The soil consistency of the fine-grained soils, predominantly sandy silt, was indicated to be very stiff to hard. The three (3) borings drilled waterward of the bluff encountered hard, slightly sandy silts, silt and clays. HWA's boring locations are shown on the Site Plan, Figure 2 and HWA's boring logs are provided in Appendix B.

2.0 SITE CONDITIONS

2.1 LOCATION & SURFACE CONDITIONS

2.1.1 Location

The Port Madison Indian Reservation is located on the western and northern shore of Port Madison Bay. Agate Pass bounds the reservation's western side and Bainbridge Island resides beyond Agate Passage to the east. The project area is situated within a portion of Section 21, Township 26 North Range 2 East, Willamette Meridian, Kitsap County, Washington. NLO has prepared a Vicinity Map that shows the site location on Figure 1.

2.1.2 Site's Topography

The topography of the subject property is comprised of a coastal bluff to the east and uplands to the west. Along the coastal bluff, slope gradients ranged from 30 to 100 percent with localized near vertical bluff. Bluff heights were in the range of 20 feet to 40 feet. To the west beyond the coastal bluff area, the topography of the project areas became very gradual ascending with slope gradients that ranged from 0 percent to 15 percent. Further discussion of the site's topography is provided in Slope Reconnaissance, Section 2.7. NLO has provided our Site Plan that has identified the coastal bluff and its relation to the project area as shown on Figure 2 to Figure 4.

2.1.3 Site Vegetation (Area of Geotechnical Investigation)

Along the Angeline Ave NE corridor, NLO observed a mix of douglas fir, cedar and deciduous trees. To each side of Angeline Ave NE ROW, in the residential yard areas, lawn areas with landscaping were observed.

NE Parkway Street had vegetation to the northeast, alongside walk areas to the south and a planter strip located within the central portion of its alignment. The landscape strips were vegetated with lawn and landscape trees.

The coastal bluff located near the outfall area and southward towards the boat ramp had maintained grass areas near the crest and a scattering of deciduous trees, tall grass and underbrush. The bluff face typically had soil exposures absent of vegetation.

2.2 GEOLOGIC SETTING

2.2.1 Geologic Map of Washington State

According to Eric J. Schuster's, "Geologic Map of Washington State", the site and its surrounding geologic makeup is classified as Pleistocene Continental Glacial Drift (Qgd). The geomorphology of this area shows signs of glacial scouring in generally a northeast-southwest direction. These trending ridges and valleys were carved by the retreat of glacial ice in the Pleistocene (approximately 10,000 to 12,000 years ago to the end of the Epoch). During the retreat and melting of the glacial ice, the scoured areas and closed depressions were filled with outwash material (alluvium). Alluvium consists of glacial fluvial sediments, such as sand and gravel that are deposited near the terminus of the glacier in a size-sorted manner (finer up sequence).

2.2.2 USDA Soil Conservation Service (SCS)

The USDA Soil Conservation Service (SCS) classifies the site's native soils as Dystric Xerorthents, and Poulsbo Gravelly Sandy Loam. Further discussion of the soil's description is provided in Table 1.

Kitsap County Area, Washington (WA635),		
Table 1		
Unit Symbol	Map Unit Name	Soil Description
10	Dystric Xerorthents, 45% to 70% slopes	These soils occupy slopes above streams and are described as deep and moderately to somewhat excessively well drained. The soils formed mostly in till, but some formed in outwash. Permeability is moderate to rapid and runoff is medium to very rapid. The erosion hazard is high and the use of equipment is severely limited.
39	Poulsbo gravelly sandy loam, 0% to 6%	The Poulsbo Gravelly Sandy Loam is considered moderately well drained and the available water capacity is low to moderate, runoff is slow. Permeability of the soil is rapid above the hard pan and very slow through the hard pan and erosion is Slight in areas with slope gradients of 0% to 15% and moderate for 15% to 30% slopes. During the winter, the SCS indicated subsurface water conditions in the range of 1.5 feet to 2.5 feet below current site grades.
41	Poulsbo gravelly sandy loam, 15% to 30%	

Our review of the SCS soil mapping indicated that the subject area resides east of an area designated with Dystric Xerorthents. The Dystric Xerorthents soil is located along the coastal bluff east of Angeline Ave NE between NE Geneva Street and NE Winfred Street. The project area has been classified as Poulsbo gravelly Sand 0% to 6% slope. NLO provided SCS mapping of the subject area as shown on Figure 5.

2.2.3 WDGER Geologic Mapping

The Washington Division of Geology and Earth Resource (WDGER), Geologic Map of Washington - Northwest Quadrant, dated 2002, indicates that the site is mapped as Quaternary sediments, dominantly glacial drift and includes alluvium. The geology of the Puget Sound Lowland has been modified by the advance and retreat of several glaciers in the past one million years and the subsequent deposits and erosion.

2.2.4 Geology of Seattle and the Seattle Area

Reviewing Kathy Goetz Troost & Derek B. Booth, "Geology of Seattle and the Seattle Area", 2008. The most recent glacier advanced to the Puget Sound Lowland is referred to as the Vashon Stade of the Fraser Glaciation, which occurred during the later stages of the Pleistocene Epoch and retreated from the region some 12,500 years ago. Our subsurface investigation and TIA geotechnical engineering report has further identified the soils comprising the site as; Vashon till (Q_{vt}), Lawton Clay (Q_{vic}) and Vashon recessional outwash (Q_{vro}). In the following, N.L Olson has provided a brief explanation of the geologic soil units below.

- Vashon Till (Q_{vt}), also known as lodgment till and glacial till was deposited beneath the Vashon Stade ice. Locally, this material is known as "hardpan," and consists of an unsorted, unstratified, highly compacted mixture of clay, silt, sand, gravel and boulders.

The deposits of the Vashon till soil unit (Q_{vt}) were placed by glacial ice during the most recent glacial period.

- Vashon Recessional Outwash (Q_{vro}), was formed from the melt water of retreating glaciers. The material was generally slightly silty to silty sand with trace gravel. Deposits of this material are generally found at the ground surface above the till in the upland areas of Kitsap County. Because it wasn't glacially overridden the material is relatively permeable with a relative density that ranges from loose to medium dense.
- Lawton Clay (Q_{vlc}), Laminated to massive silt, clayey silt, and silty clay with scattered drop stones deposited in the lowland's proglacial lakes. Marks the transition from non-glacial to earliest glacial time, although unequivocal evidence for glacial or non-glacial origin may be absent. Deposits or age correlative age and texture may be included in older fine grained units where evidence of age and/or depositional environment is absent.

Locally, may include fine grained sediment of unit Q_{ob} or distal deposits from Cascade Mountains where indistinguishable from Q_{vlc} . Unit thickness ranges from 0 to 90 feet. Can be stiff to very hard and display vertical fractures; fine sand partings common near top and bottom of unit.

- Vashon Advanced Outwash (Q_{va}) this material is generally comprised of clean sand and gravels deposited before the advancing glacier. It is relatively pervious and dense.

2.3 GEOLOGIC LANDSLIDE HAZARD RESEARCH

2.3.1 Coastal Zone Atlas

A review of "Coastal Zone Atlas of Kitsap County, Washington" Department of Ecology, Volume 10, 1979 (Kitsap County)" was performed in conjunction with preparing this report. The slope stability mapping along the proposed watermain has been mapped as stable, intermediate stability and unstable. Further discussion of the slope stability definitions has been provided in the following.

Stable (S) slopes are generally less than 15 percent but can include areas of steeper slopes that are stable due to low groundwater concentration or competent bedrock. The stable slope designation also includes areas underlain by weak areas such as peat, which are stable because they have no significant slope. Stable slopes are generally less than 15 percent but can include areas of steeper slopes that are stable due to low groundwater concentration or competent bedrock. The stable slope designation also includes areas underlain by weak areas such as peat, which are stable because they have no significant slope.

Unstable (U) refers to slopes that are unstable due to factors such as steepness, groundwater or erosion concerns. Areas inferred to be unstable because slopes, generally greater than 15 percent, and underlain by weak, unstable materials in which old or recently active landslides have occurred. Includes areas of sand and gravel on top of impermeable silt and clay, mostly along steep valley sides.

Unstable recent slide (Urs) Unstable recent landslide includes areas of recent or historical landslide activity located by Latitude 47.73577 longitude -122.54975.

Intermediate (I) slopes are generally steeper than 15 percent except where conditions such as weaker material and/or abundant groundwater exist. Identified areas include slopes of sand and gravel, till, or thin soils over bedrock that has no known failures.

Review of the Coastal Zone Atlas (CZA) indicated that the subject area is classified as stable to include the outfall area. However, to the east of the subject area located along Angeline Avenue there are areas classified as unstable and unstable recent slide. An Intermediate slope area is also indicated northwest of the project area east of Augusta Avenue NE. CZA Slope Stability Mapping is illustrated on Figure 6.

2.3.2 Kitsap County Landslide Hazard Mapping

NLO has reviewed the recently published "Geologic Hazard Mapping, Landslide Hazards, Kitsap County WA, Map Publish Date Feb 23, 2017" for the subject property. The hazard rating for both shallow and deep slides for the subject property have been provided in Table 2.

Kitsap County Geologic Hazard Mapping Project Area Table 2	
Geologic Hazard	Hazard Rating
Deep Landslide Hazard	Moderate

Per Kitsap County's Landslide Hazard Mapping, the coastal bluff has been classified as a moderate risk for deep landslides along the east side of the project area from James Street to the north and southward to the boat ramp.

2.3.3 Pre-Application Meeting

NLO has been informed that during a pre-application meeting on October 2, 2020, Kitsap County advised that the bluff was a high geologic hazard area for erosion and landslide hazard area with a 200 feet setback. It should be noted that Anchor QEA staff reviewed the same maps and noted "Moderate" designation in this area.

2.4 SUBSURFACE EXPLORATION PROGRAM

The site's subsurface soil conditions were explored during August 11, 2020 to August 12, 2020 with a total of eight (8) borings and three (3) additional borings completed December 22, 2020. The borings were extended down to depths of 26.5 to 41.5 feet below current site grades. The locations of NLO borings are shown on the Boring and Test Pit Plan, Figures 2 to 4. The subsurface exploration work utilized a D-50 tracked mounted drill rig subcontracted through Advanced Drill Technologies. The boring logs provide a more in-depth soil description and are provided in Appendix A of this report. NLO has provided discussion of our subsurface exploration program below.

2.5 SUBSOIL CONDITIONS

2.5.1 Angeline Ave NE

NLO observed fill in Boring B-6 that extended down to 20 feet bgs. The fill was comprised of very loose silty sand. The fill was underlain by dense to very dense glacial till.

In general, the Borings B-5 and B-7 encountered dense to very dense gray silty sand with various amounts of gravel, glacial till, that was near surface, to poorly graded sand (SP) towards the boring's termination. In Boring B-5 and B-7, poorly graded sand (SP) and poorly graded sand with silt (SP-SM) was encountered 30 to 40 feet bgs.

Glacial till is comprised of glacially consolidated sand, gravel, and cobbles with variable amounts of silt and clay that exhibits high strength and low compressive characteristics. Locally, this soil unit is referred to as "hardpan".

2.5.2 NE Parkway Street

In Boring B-9, loose fill was encountered from near surface to 7.5 feet below current site grades that was underlain by native medium dense silty sand down to 12.5 feet. At 12.5 feet, the medium dense silty sand was underlain by very dense silty sand known locally as glacial till.

Typically, dense to very dense gray silty sand (SM) with various amounts of gravel was encountered at these locations, glacial till, or poorly graded sand (SP) and poorly graded sand with silt (SP-SM), advance outwash, was encountered in Borings B-4, B-5, B-10 and B-11. The glacial till was underlain by the advanced outwash with the till encountered near surface and extended down to the termination depth of 26.5 feet. In the deeper boring, advance outwash was encountered near the termination depth of the borings of 41.5 feet bgs.

2.5.3 Coastal Bluff Area Located Between Boat Ramp and Pier

Boring B-4 encountered dense to very dense gray silty sand with various amounts of gravel, glacial till, that was near surface to 40 feet bgs underlain by poorly graded sand and poorly graded sand with silt, advanced outwash deposits, that was encountered to the termination depth of the boring

Boring B-1, fill was encountered and ranged down in depth to about 6 feet. The condition of the fill was loose and comprised of brown silty sand. The fill was underlain by brown silty sand with a weathered soil margin near the interface of the fill and became progressively denser with depth. The silty sand graded to a very dense glacial till at roughly 13 feet bgs.

Boring B-3, glacial till was encountered near surface and extended down to the termination depth of this boring.

2.5.4 Suquamish Way and Long House Area

Boring B-2 was drilled west of the Long House, with fill encountered 12.5 feet below existing grade. Recessional outwash was encountered that consisted of silty sand, poorly graded sand

(SP) and poorly graded sand with silt (SP-SM) between the fill and the glacial till. The glacial till was encountered 25 feet bgs. The relative density of the outwash material was medium dense and the moisture levels ranged from wet to water bearing between the till and the fill.

2.6 GROUNDWATER

2.6.1 Inter Flow

A shallow seasonally dependent inter flow system was observed within the weathered soil margin above the glacial till that typically ranges 2.5 to 3 feet. Inter flow arises as surface water percolates downward through weathered soil upslope and perches above less permeable conditions and discharges in the form of seeps that may occur along newly excavated trenches. NLO has observed that inter flow conditions may occur along 1) Angeline Ave NE ROW and 2) NE Parkway as discussed below.

1. Along the Angeline Ave NE ROW, subsurface water will derive inter flow from surface water conveyance upslope of this road alignment to the west.
2. NE Parkway will have inter flow conditions along the south side of the right away with a flow rate greater than what was observed along Angeline Ave NE ROW. The increased flow is derived from a recessional outwash deposit that resides between NE Parkway and the south side of the long house. The outwash deposit appears to collect subsurface water from a relic stream underground stream channel or channels.

The contractor should also be aware subsurface water is not static. There will be fluctuations in the subsurface water level and seepage rate depending on the season, amount of rainfall, surface water runoff, and other factors. Generally, the water level is higher and seepage rate is greater in the wetter winter months (typically October through May). NLO has provided further discussion and recommendations for site drainage in Section 4.5.

2.6.2 Piezometers

During drilling operations, four (4) piezometers were placed to monitor subsurface water levels with the measurements provided in Table 3.

SUBSURFACE WATER LEVEL MEASUREMENTS									
TABLE 3									
Boring #	Piezometers Readings (below ground surface)								
	8/11/20	8/12/20	9/24/20	10/12/20	11/15/20	12/24/20	1/15/21	2/17/21	3/15/21
B-5	36.5 ft	6.9 ft	6.9 ft	7.2 ft	6.9 ft	6.5 ft	3.8 ft	3.7 ft	3.8 ft
B-6	36.5 ft	27.8 ft	28.6 ft	29.0 ft	29.2 ft	28.2 ft	24.7 ft	32.8 ft	32.8 ft
B-8	26.5 ft	24.0 ft	24.3 ft	24.4 ft	24.4 ft	24.4 ft	24.4 ft	24.3 ft	24.3 ft
B-10						4.0 ft	1.6 ft	1.6 ft	1.6 ft

2.7 SLOPE RECONNAISSANCE

The slope reconnaissance occurred October 6, 2020 and NLO observed the costal bluff area located east of the proposed Stormwater Improvement between NE Winfred ST southward to the Suquamish Boat Ramp as discussed below.

2.7.1 Landslide Hazard Indicators

For our slope reconnaissance of the subject property that occurred on October 6, 2020, N.L. Olson has observed for the potential Landslide Hazard Indicators that have been bulleted in the following.

- Areas of historic failures, including areas of unstable, old and recent landslides or landslide debris within a head scarp;
- Areas within active bluff retreat that exhibit continuing sloughing or calving of bluff sediments, resulting in a vertical or steep bluff face with little or no vegetation;
- Hillsides that intersect geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock;
- Slopes that are parallel or sub-parallel to planes of weakness, such as bedding planes, joint systems, and fault planes in subsurface materials;
- Areas exhibiting geomorphological features indicative of past slope failure, such as hummocky ground, back-rotated benches on slopes, etc.;
- Areas with tension cracks or ground fractures along and/or near the edge of the top of a bluff or ravine;
- Areas with structures that exhibit structural damage such as settling and cracking of building foundations or separation of steps or porch from a main structure that is located near the edge of a bluff or ravine;
- The occurrence of toppling, leaning, bowed, or jackstrawed trees that are caused by disruptions of ground surface by active movement;
- Areas with slopes containing soft or liquefiable soils;
- Areas where gullying and surface erosion have caused dissection of the bluff edge or slope face as a result of drainage or discharge from pipes, culverts, ditches, and natural drainage courses;
- Areas where seeps, springs or vegetative indicators of a shallow groundwater table are observed on or adjacent to the face of the slope;
- Areas that include alluvial or colluvial fans located at the base of steep slopes and drainages.
- Areas within 200 feet of areas classified as U, UOS, or URS.

2.7.2 Coastal Bluff Site Observations

During our reconnaissance, NLO observed that the coastal bluff overlooking Port Madison was roughly 10 feet to 30 feet in height with near gradients ranging from 50 percent to near vertical. NLO observe minor surficial slope movement with the primary initiator being bluff retreat. Localized slide debris deposits were observed along sections of the bluff.

The bluff retreat is brought about by the seasonal variability primarily during the winter storm season when wave energies are maximized. The undercutting process is not instantaneous but takes several years for wave erosion to undermine the bluff base. For the observed bluff, we anticipate an undercut of a couple feet would be sufficient for the overlying soil column to be undermined and calve off. These smaller forms of slope instability would consist of a calved off bluff section of about five (5) feet in thickness that migrates upward the bluff height. Please refer to Section 2.12.2, that references Anchor QEA report in conjunction with Coastal and Dredging that provides a more detailed bluff retreat rate.

2.7.2.1 East Of NE Parkway (Proposed Outfall Area)

During our reconnaissance, NLO observed that the coastal bluff overlooking outfall area was roughly 25 feet in height with near gradients ranging from 100 percent to 180 percent. NLO observe minor surficial slope movement and minor bluff retreat.

2.7.2.2 James Street Slide

Our review of geologic mapping and LIDAR data indicated that this slide was roughly 500 feet by 160 feet. The long dimension trended north to south with a downward displacement of about 50 vertical feet extending eastward. The slide was rotational initiating at elevation el 70 and termination at el 25 with the slide runout extending into the Puget Sound from el 25 into the shoreline. About 60 to 65 feet of bluff was removed during this slide event with about 35,000 yd³ to 45,000 yd³ of material moved down slope. The slide's location has been shown on the Site Plan, Figure 2.

2.8 SEISMIC

2.8.1 Seismic Ground Shaking Parameters

N.L Olson has performed the seismic design per 2015 and 2018 International Building Code (IBC) for the proposed site improvement and based on the following location 47.7298° Latitude and -122.5520° Longitude. Per the 2015 and 2018 IBC, NLO has provided the design peak ground acceleration value for the proposed construction for Site Soil Classification (C) – “Very Dense Soil and Soft Rock”, and Risk Category I/II/III. The interpolated probabilistic ground motion values (PGA) for Horizontal peak acceleration and spectral acceleration is provided in Table 4.

Seismic Ground Shaking Summary, Table 4			
Probability Of exceedance	Approximate Return Period	Spectral Acceleration (g), Site Class C, Period (sec)	
		0.2 sec	1.0 sec
2% in 50 years	years 2475	2015(1.517)/2018(1.633)	2015 (0.592)/2018 (0.567)
Seismic Parameters		2015 IBC	2018 IBC
Mapped Spectral Acceleration Short Period (S_S)		1.301	1.348
Mapped Spectral Acceleration for One Second (S_1)		0.516	0.473
Short period Site Coefficient (F_a)		1.000	1.000
1-second Site Coefficient (F_v)		1.300	1.200
MCE Spectral Response Acceleration for short period ($S_{MS}=S_S \times F_a$)		1.301	1.618
MCE Spectral Response Acceleration for one second ($S_{M1}=S_1 \times F_v$)		0.671	0.71
Design Spectral Response Acceleration for Short Period ($S_{DS}=2/3 \times S_{MS}$)		0.867	1.079
Design Spectral Response Acceleration for one second ($S_{D1}=2/3 \times S_{M1}$)		0.447	0.473
Design Peak Ground Acceleration ($PGA=SDS \times 0.4$)		PGA=0 .348	PGA=0.431
Note: Site modified peak ground acceleration (PGA_M) = 0.661			

Note: For information on how the S_S and S_1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.

Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.

2.8.2 Seismic Kitsap County's Title 19 Critical Areas

The seismic acceleration is based on information provided by Kitsap County's Ordinance Regarding Growth Management, Revisions to Title 19 Critical Areas, Seismic Information, put in effect October 2, 2017. The acceptable minimal values of $a=0.17g$ for glacially consolidated soils for a near crustal one-in-100 year seismic event, with an assumed magnitude of 6.5 occurring below the site.

2.8.3 Soil Liquefaction

NLO has reviewed Washington State Department of Natural Resources, "Geological Hazardous Mapping, Seismic Hazards, Kitsap County WA" dated February 23, 2017. NLO has verified that this mapping has indicated the project area is low risk.

To generate the necessary ground acceleration to initiate liquefaction, an earthquake of magnitude 5.0 or greater is typically needed and the liquefaction process is brought about by seismic waves passing through poorly draining loose saturated granular soil. As the seismic wave propagates through the stratum, the soil particles at the individual level are packed into a tighter arrangement decreasing the initial void space. Void space is the region between soil particles where the pore water resides. As a result of the decreased void space, the volume decrease has a corresponding water pressure increase also known as pore pressure increase. If the pore pressure is substantial, and cannot be dissipated, the soil fluidizes (or liquefies) and loses load carrying ability.

As discussed earlier in this report, Section 1.5.1, per PSI's referenced report, quoted in Section 5.2.2, indicated soil and groundwater conditions encountered in their study has a risk of liquefaction and possible associated subsidence/settling in the sands during an earthquake.

NLO concurs with their findings specific to Boring B-2 and PSI's test pits TP-1 through TP-5, and we have illustrated the probable liquefaction area as shown on Figure 2, if elevated subsurface water conditions and a significant seismic event should occur.

However, Borings B-1, B-3, B-5, B-10 and B-11, revealed glacial till and glacially consolidated soil, which is very dense and liquefaction resistant. Based on the observed glacially consolidated soil at these boring locations, in our opinion, the occurrence of liquefaction appears very unlikely. In Boring B-9, both fill and medium dense native soil were encountered above the glacial till with a roughly 2.5 thick layer of water perched above the glacial till at the time of drilling operations.

The likelihood of this material liquefying with the water table at the level encountered during drilling operations appears low and future development with the detention vault as proposed will further reduce the likelihood of subsurface water buildup in this area substantially reducing the likelihood of liquefaction occurring within this area.

2.9 SEISMIC FAULT LINES REVIEW

NLO has reviewed "Kitsap County, Washington, Fault Lines", dated 2017 and USGS geological mapping. Our review of the above referenced information indicates the nearest faults to the proposed development:

- The Hood Canal fault resides roughly 10 to 15 miles west of the project area and parallels the Hood Canal in the north to south direction. At the time of this report, there is no information of prehistoric surface-rupturing or reoccurrence intervals to include anticipated magnitude for this fault.
- The Seattle Fault resides roughly ten (10) miles to the south and trends east to west from Hood Canal to the Cascades, passing below Bremerton and Bainbridge Island. This fault is capable of magnitude 7.1 seismic events with the most recent seismic event occurring roughly 1,100 years ago.
- The Southern Whidbey Island Fault is located roughly 15 to 20 miles to the north of the project area. The fault is roughly 25 to 30 miles wide and trends from the northwest to southeast along the Puget Sound above the northern tip of Kitsap County to the northern margins of Whidbey Island and trends between Duvall and Monroe. The southern Whidbey Island fault is considered capable of generating strong seismic events on par with the Seattle Fault with magnitude approaching magnitude 7.0 or greater and may have a similar return period.

In our opinion, the project area does not appear to reside on any "known faults" as described above.

2.10 SLOPE STABILITY

As part of providing a stability determination of the outfall area, NLO has performed slope stability of the existing coastal bluff conditions and post construction. The analysis was performed utilizing Geostase v4.30.31 – Copyright 2005-2019, Gregory Geotechnical Software, slope stability computer program. The slope stability method used was the Modified Bishop Method of Slices, which provides various circular failure surfaces and associated factors-of-safety (FS) for the associated failure surfaces. In the following, NLO has provided the factor of safety requirements, soil parameters and other factors utilized in our analysis.

2.10.1 Factor of Safety (FS)

The FS is defined as the ratio of shear strength (the frictional resistance and soil cohesion resisting the down slope movement) to shear stress - (gravitational forces that initiate slope movement) or $FS = \text{Shear Strength} / \text{Shear Stress}$. A FS equal to 1.0 is considered equilibrium and a FS less than 1.0 indicates failure. Per Kitsap Counties Critical Areas Ordinance, Chapter 19.400 Geologic Hazardous Areas, a “professional acceptable level” of risk static factor of safety of $FS = 1.5$ was utilized for analysis of the existing and proposed improvements. For the dynamic loading conditions, a seismic factor of safety $FS = 1.1$ for the design earthquake was utilized.

2.10.2 Seismic

Section 2.8.2 Seismic Kitsap County’s Title 19 Critical Areas indicates glacial till with a $K_h=0.17$.

2.10.4 Subsurface Water

The subsurface water within the bluff will be minimal as it is comprised of glacial till. The bluff was analyzed for the subsurface water conditions as encountered in the borings at this location (Borings B-4 and B-5) at the time of drilling operations.

2.10.5 Soil Strength Parameters

NLO has determined the soil strength values for the existing and the proposed site improvements and provided the soil parameters in Table 5.

SOIL PARAMETERS, TABLE 5				
	Soil Type	Density (pcf)	Cohesion (psf)	Friction (degrees)
1	Weathered till	125	*50	30
2	Glacial till	140	200	40
3	Fill and Weathered Soil	115	50	32

NLO has selected a cohesion value of 200 psf and a soil friction angle of 40 degrees, which is fairly representative of glacial till based on the n-value data from drilling operations.

Pounds per cubic foot (pcf)
Pounds per square feet (pcf)

2.10.6 Surcharge Loads

A surcharge loading condition results when additional pressure that can be exerted along a slope or parking areas located upslope of the bluff and can include: parking lots, truck loading areas, buildings, foundations, or transient surcharge conditions that consist of seismic and hydrostatic loads). Table 6 below presents surcharge loads that may occur above the proposed embankment retaining structure.

SURCHARGE LOADS PARAMETERS, TABLE 6		
	Surcharge	Load (psf)
1	Traffic Loads	100 psf

2.10.7 Analysis Results

For a slope height of 25 feet with setback distance of 25 feet, the factor of safety was analyzed for the professional acceptable level of factor of safety FS = 1.5 or greater (static) or a factor of safety FS = 1.1 or greater (seismic). The results of our analysis is provided in Table 7. The slope stability graphical results from our analysis is provided in Appendix C. NLO has provided the slip surface for the bluff as shown on Cross Section A-A, Figure 7. Further discussion of the slope stability results is provided below.

Slope Stability Results		
Table 7		
Location	Static FS >1.50	Seismic FS>1.10
Cross Section A-A - (Localized)	1.5 (25 ft slope setback)	1.1 (25 ft slope setback)

NLO has observed that the bluff is predominantly comprised of glacial till and underlain by glacially consolidated outwash with beach deposits at its based. Based on our slope stability analysis and soil strength parameters, NLO is recommending a 25 feet structural setback for 25 feet. NLO has determined that the Bluff, in regards to slope stability setback is 100 percent, (1H,1V) of the slope height as measured from the base of the slope. For example, If the slope height is 50 feet in height, the slope setback is 50 feet and if the slope is 20 feet in height, the setback is 20 feet. The provided setback will be additive to other factors as discussed in Section 4.8 of this report.

2.11 INTER FLOW

2.11.1 Angeline Avenue NE and NE Parkway

NLO has analyzed the Angeline Avenue NE trench line for potential inter flow that may enter the trench line from the west. Based on the topography of the area, the topographic high point resides about ¾ miles to the east at elevation 300 and descends eastward to elevation el 70 with an average gradient of about 5.6%. The length of trench line analyzed was from NE James St to the north southward to Park Way a linear distance of about 2,000 feet. Per the SCS, Poulsbo Gravelly Sandy loam pretty much resides over this area and has been indicated to have a k_{sat} value that ranges from 0 to 0.06 inches per hour and the 0.06 inches per hour was used for our analysis. Based on the indicated data, NLO has assessed Q=0.024 cfm along Angeline.

The south side of NE Parkway ROW may have a higher k_{sat} value that is moderated by various subsurface water features such as subsurface stream channels and recessional deposits that can contribute additional subsurface flow to this area especially during the winter season. During our latest subsurface exploration program, NLO has installed a piezometer in Boring B-10 that exhibited elevated groundwater readings though the winter at roughly 1.6 feet bgs. During our recent subsurface exploration program that occurred on December 22, 2020, NLO observed that Boring B-9 had wet soil conditions between 7.5 feet to 10 feet bgs.

NLO has provided mitigation measures to control the shallow inter flow conditions if they should persist during construction and post construction as discussed in the Section 3 and Section 4 of this report.

2.11.2 Suquamish Way Ne Near Long House

NLO has provided a K_{sat} value based on the D10 gradation at 12.5 feet bgs with a k_{sat} value that range from 7 in/hr to 20 in/hr. Based on the potential subsurface water within the vault area that could occur, NLO anticipates inflow rates within the excavation can be in the range of 0.5 cfm to 2.5 cfm. The flow rate variation is seasonally dependent with the lower flow rate occurring in the summer and the higher during the winter. The primary flow could occur from the southwest corner of the excavation area in the sandy material that resides above the glacial till that may also receive additional subsurface flow from underground relic stream channels.

2.12 EROSION AND VEGETATION BUFFERS

2.12.1 Vegetation Buffers

In order to assess potential structure placement near the coastal bluff, Kitsap County recommends a vegetation buffer of 40 feet. The county has a maximum width of 40 feet vegetation buffers that can be reduced based on bluff height and NLO has assessed a vegetation buffer of $1/3 \cdot H$ (H = slope height) for slope areas less than 40 feet in height.

2.12.2 Bluff Retreat Buffer

Please refer to the Anchor QEA Memorandum, Kitsap County Suquamish Regional Stormwater Treatment facility project, June 17, 2020, Site reconnaissance summary. On page 14 of the referenced report, Anchor QEA in conjunction with Coastal and Dredging have provided a retreat rate of 0.22 ft/year and for a 50-year project design life the value is approximately 0.22 ft/year (2.6 inches/year) x 50-year design life that equates to a 11 ft setback.

3.0 CONCLUSIONS

Following our review of Kitsap Counties Critical Areas Ordinance, Chapter 19.400 Geologic Hazardous Areas and based on our site analysis and review of relevant site information, the proposed outfall and other associated site improvements may be constructed.

Based on our slope stability assessment, the potential for large scale sliding or "deep-seated rotational failures" along the costal bluff area that resides east of NE Parkway ROW as a result of new construction appears negligible. In our opinion, given the proposed method of vault

placement and associated site improvements, NLO does not anticipate that these site improvements will destabilize the slope area within the subject property or impact off site properties around its perimeter. Based on the results of our study, it is our opinion the proposed development can proceed as proposed.

In our opinion, the location of Boring B-2 appears conducive to liquefaction and is located near the same locality as PSI test pits TP-1 through TP-5. However, our subsurface exploration program has further refined the potential liquefaction area, which appears more centralized towards the Community Center dissipating northward near the southwest corner of the proposed detention vault location. In our opinion, the subsurface exploration work has revealed the base of vault excavation will be entirely in glacial till and this material is not liquefiable.

At the outfall location, NLO has determined the 25 feet tall coastal bluff will have a 25 feet horizontal structural setback, with a vegetation buffer 1/3 the slope height and a bluff retreat buffer of 11 feet, which equates to 44.33 feet assessed over a 50-year service life. NLO has provided further discussion of the bluff buffer and setback determination in Section 4.8. The setback and buffers can be established west of slope crest as identified on the Site Plan, Figure 2.

In regards to subsurface water mitigation within the vault area, NLO recommended a subsurface drain system comprised of a perforated pipe encapsulated with drain rock and burrito wrapped with a filter weave product. The subsurface water collected from the perforated pipe will be tightlined into CB#4 for later out fall into the Puget Sound. In NLO's opinion, the recommended subsurface drain system should be sufficient to prevent hydrostatic water buildup from the anticipated inter flow conditions that may occur within the vault area. NLO has provided further discussion of the vaults subsurface drain system in Section 4.2.

NLO is recommending a geosynthetic-reinforced slope (Sierra Slope Retention System) for the outfall pipe along the bluff crest. The earth retention system utilizes geosynthetic-reinforced slope with wire basket facing that can be configured to the desired slope gradient. NLO has provided additional recommendations for design and placement of the Sierra Slope System in Section 4.9.

Infiltration of site soils appears unlikely given the glacial till or fill soil conditions that underlies a majority of the project area.

If the above information is incorrect or changes, NLO should be consulted to verify the changes. NLO should also be retained to perform a general review of the final design. In the following, NLO has provided recommendations for the proposed development.

4.0 RECOMMENDATIONS

4.1 SITE GRADING AND EARTHWORK

Subgrade areas shall be stripped of all sod, organic soil, uncontrolled fill and debris. In most areas, a stripping depth of about one foot should be anticipated. However, deeper excavations will be required to remove existing fill, foundations, or pockets of previously placed loose

saturated fill, and unsuitable soils. Stripped soils, contaminated with organics or debris, should be wasted off site or used in landscape areas.

Compaction of the stripped subgrade should be continued until field density tests indicate a minimum compaction of 95% of the maximum dry density, as determined by ASTM method D-1557, has been achieved in all areas underlying riprap. Pliant subgrade soil conditions disclosed during our subgrade verification shall be over excavated and replaced with compacted structural fill riprap or quarry Spalls.

Note: Although density testing of fill is frequently used as a primary criterion for acceptable fill, it should not be the only criteria. If in the judgment of the geotechnical engineer or his representative, placed fill is not suitable it should be rejected regardless of density test results. As an example, fill that is compacted wet of the optimum moisture content may exhibit "pumpy" behavior even if density test results indicate better than 95 percent compaction has been achieved. In such a situation, the fill should be removed and replaced with a more suitable material.

Structural fill is defined as compacted fill placed under buildings or pavements that consist of free draining gravelly sand having a maximum size of 1-1/2 inches and no more than 5.0% fines passing the No. 200 sieve. Soils with a fine content greater than 5 percent passing the 200 sieve will degrade if exposed to excessive moisture. All imported fill material should conform to the above recommendations regardless of the site's weather conditions. All structural fill should be placed on a firm, properly prepared subgrade in loose layers approximately 8 inches in thickness, conditioned to a moisture content suitable for compaction, and compacted to 95% of the maximum dry density as determined by ASTM D-1557 – Modified Proctor. All Structural fill material should be submitted for approval to the Geotechnical Engineer at least 48 hours prior to delivery to the site.

Native soils with a fine content greater than 5 percent passing the 200 sieve will degrade if exposed to excessive moisture, and compaction and grading of this material will be difficult or impossible if soil moisture significantly increases. If used, the on-site silt and clay soils utilized for structural fill should be moisture conditioned to within plus/minus 2 percent of the optimum moisture content, and compacted to 95 percent of the maximum dry density based on the Modified Proctor ASTM 1557. Additional fill layers shall not be placed until the previous lift meets the compaction requirements presented in this report.

4.2 WATER QUALITY VAULT

For the proposed vault's subgrade, comprised of properly compacted structural fill or dense undisturbed native granular soils, an allowable bearing pressure of 2,500 pounds per square foot (psf) can be used. We recommend that a geotechnical engineer should be on site to observe all shallow foundation subgrade areas prior to the placement of any concrete structure.

4.2.1 Vault Settlement

Based on an allowable soil bearing pressure of 2,500 psf, total settlement in the range of one inch is anticipated with differential settlement of about ½ inch over a span distance of 50 linear feet. Most of the anticipated settlement should occur during construction as dead loads are applied.

4.2.2 Vault Subsurface Drainage

Subsurface flows within NE Parkway ROW can be transmitted via interbedding sand layers and relic stream channels or from the storm trench line (existing or proposed) from Suquamish Way NE, Augusta Avenue NE, and Angeline Avenue NE. In the area of the vault can control ground water seepage after backfill operations with a subsurface drain system located around the vault's perimeter.

After the vault is placed within the excavation, NLO recommends that at least two (2) feet thick layer of clean crushed rock should be placed around the base perimeter of the vault as a means of removing subsurface water from the excavation after backfill operations have been completed. The drain rock can be burrito wrapped to prevent fines migration. The filter fabric should consist of Mirafi® FW300. The flow that is collected can be check dammed and diverted along the east side of the vault's perforated drain system with clean rock connected to a catch basin located downstream.

4.3 TEMPORARY SLOPES

NLO has provided recommendations for temporary slopes and temporary shoring in this section.

The temporary slopes between benches should be inclined at a 1H:1V angle. The slope at the back of the bench may be steeper than 1H:1V, depending on the soil conditions encountered during construction and the actual temporary slope angle should be determined by a NLO representative during construction.

The contractor should be aware that the slope height, slope inclination, and excavation depths (including utility trench excavations) should in no case exceed those specified in local, state, or federal safety regulations; e.g., OSHA Health and Safety Standards for Excavations, 29 CFR Part 1926, or successor regulations. Such regulations are strictly enforced and, if not followed, the owner, the contractor, or the earthwork or utility subcontractors could be liable for substantial penalties. The contractor should be made responsible for the stability of all excavations and slopes during construction because they are continually on site and can observe the stability of the exposed soils. In addition, the contractor should be prepared to shore any unstable slope area and provide shoring as required by local, state, or federal laws or codes. The provision of shoring design is beyond the authorized scope of this report.

4.4 SHORING

If shoring is used, NLO anticipates cuts may reach a maximum height of 20 feet or less. For these anticipated cut heights, cantilevered shoring piles or tieback wall are suitable with timber lagging to support cut areas temporary slopes cannot be implemented.

4.4.1 Cantilevered Soldier Piles

Cantilevered soldier piles should be designed for an active equivalent fluid pressure (EFP) of 42 pcf, assuming a horizontal ground surface behind the wall. NLO will provide specific information for active or at rest pressures for sloping ground or surcharge loads (such as vehicle traffic or

construction equipment) behind the wall and modification to the provided EFP at the client's request.

Hydrostatic pressure is assumed to be relieved by drainage material placed between the wall lagging and retained soil.

Passive pressures acting along the embedded portion of the soldier piles may be used to resist active earth pressures and surcharge loading. The passive pressure may be calculated using an equivalent fluid pressure of 300 pcf. The upper two feet of the embedment portion of the soldier pile should be neglected when calculating passive resistance. The equivalent fluid pressure value has included a factor of safety of 1.5. The passive pressure can be applied to two times the diameter of the soldier pile.

For excavations with grade separation requirements exceeding 15 feet, the use of tiebacks anchors will become necessary. For a cantilever soldier pile with a single tie back, the cantilevered soldier pile recommendations provided above can be utilized. Please note that tieback anchors may extend into the adjacent property making it necessary to obtain easements prior to tieback anchor installation. If a single tieback is required, the shoring should be designed to assume the soil pressures associated with a cantilevered wall and a single tieback as shown on Figure 8.

4.4.2 Timber Lagging

The effects of soil arching between soldier piles allows the lagging to be designed with reduced lateral earth pressure values. Soil arching behind the lagging is induced by lateral soil movement, which causes the lagging to flex outward and the arching process induces a soil pressure redistribution from the center of the lagging to the stiffer soldier pile support.

When designing the lagging, a soldier pile with a center to center spacing of roughly 3 pile diameters can utilize a 50 percent reduction in lateral earth pressure. The lagging should have a minimum bearing distance of 3" on each pile flange. The void space between the lagging and excavation shall be back filled with a free draining material. The backfill should not hinder the groundwater flow and minimize groundwater buildup.

When the excavation begins, lagging installation shall immediately occur to minimize sloughing between the soldier piles to support the excavation. The contractor shall be prepared to alter the lift height to reduce sloughing into the excavation. The contractor shall also be prepared to deal with ground water seepage into the excavation.

Note: If structural concrete is used, the structural concrete is placed slightly below the level of the lagging.

4.5 DRAINAGE

Only minor storm water related problems are anticipated if site grading and preparation are undertaken during the normally drier portions of the year. If site work is undertaken during wet weather, it should be expected that the near surface silty and fine-grained soils would become too wet and unworkable. If the site work is undertaken during wet weather, the contractor should be fully prepared to deal with soil and water problems normally encountered in these materials during wet weather work, including the filtering of runoff, as needed to prevent the siltation of down slope areas. To aid in minimizing potential erosion, it is recommended that the site not be stripped and left without erosion protection for an extended period of time prior to the actual start of construction and/or landscaping. Silt fencing and other erosion control devices and measures may be required to control water runoff over slope areas and sediment transport off the site.

Unsaturated zone flow also known as inter flow may develop during periods of wet weather or in excavations as shallow as one foot to two feet below the existing site grades. Methods that can be utilized to control groundwater seepage into excavations include shallow drainage ditches excavated along the base of the excavation. The ditch can either daylight or empty into a sump and be pumped out of the excavation. From a geotechnical engineering standpoint, tight lining of the collected runoff to an appropriate disposal facility such as a stormwater detention facility would be an acceptable means of disposal.

The free flow of water toward or over steep slopes is to be avoided due to potential erosion concerns. Additionally, all runoff from roofs, driveways, patios and hard surfaced areas should be intercepted, collected and disposed of away from structures and steep slopes, and discharged where the water will not affect down slope structures, walls, or properties. To minimize potential unsaturated zone flow concerns into the excavation of the proposed building area and access road alignment, we recommend that clearing, grading and earthwork activities should be performed between April 1 and October 31.

4.6 CONSTRUCTION CONSIDERATIONS

It is our experience that this risk of erosion can be mitigated through normal landscaping and the control of surface runoff. During construction and until fully surfaced and/or landscaped, the exposed site soils may be subject to some erosion. Erosion of the exposed soils would be most noticeable during periods of intense rainfall and may be controlled by the use of normal erosion control measures, i.e., silt fences, hay bales, mulching, control ditches or diversion trenching, and contour furrowing.

In a disturbed condition the site soils may be eroded by channelized water or storm runoff from sheet flow. Therefore, it is recommended that all site preparation and excavation work be completed during the normally drier portion of the year. During periods of heavy rainfall, ditching should be used to divert water away from stripped areas and visqueen should be used to cover the slopes and soil stockpiles to aid in preventing excessive surface erosion. This covering also aids in preventing infiltration of water into the unprotected soils. All disturbed soil areas and slopes should be replanted with fast-growing, deep-rooted grass, shrubs and other ground cover as soon after final grading as possible. If the vegetation is not fully established prior to the

onset of wet weather, the slopes should be covered with visqueen to aid in preventing excessive erosion and water infiltration.

4.7 STORMLINE AND VAULT PLACEMENT

The subject property's construction sequence should address the pliant or soft saturated soil conditions that may reside on the glacial till when underground utilities have been installed and have provided a means to control subsurface flows along these areas. NLO has recommended that trench backfill should consist of structural fill per WSDOT standards specification 2020, Specification 9-03.12(2), Gravel Backfill for Detention Vault Walls, and 9-03.19 Bank Run Gravel for Trench Backfill, and 9-03.12(3) for Gravel Backfill for Pipe Zone Bedding to include subsurface drain system that will perimeter the vault. The purpose of doing so is to provide a subsurface drain way that will reduce the unsaturated zone flow levels. Trench backfill outside the roadway prism shall be excavated material free of wood waste, debris, clods or rocks greater than 6 inches in any dimension per 9-03.15 Native Material for Trench Backfill - WSDOT standards specification 2020.

4.7.1 Angeline Avenue NE

Based on potential flow rates, check dams should be implemented along the ROW to help dissipate subsurface water build up within the trench line. For the most part, Angeline Avenue NE ROW appears relatively level and may function more or less as a level spreader with the implementation of the check dams allowing the water collected between the dams to continue flowing eastward rather than subsurface water collecting in the bottom trench and dealing with subsurface drainage accumulated in roughly ½ mile of trench line for later discharge into the Puget Sound.

4.7.2 NE Parkway ROW

See Section 4.2.2 for description.

4.7.3 Compaction of Utility Trenches

Compaction of utility trench shall be determined with a field density tests as determined by the maximum dry density ASTM method D-1557. Compaction requirements for the utility trench are as follows.

- Compaction of at least 95 percent for utility trench backfill placed in or adjacent to buildings and exterior slabs.
- Compaction of at least 95 percent for the upper 3 feet of utility trench backfill placed in pavement areas.
- At least 95 percent below 3 feet in utility trench backfill underlying pavement areas.
- Utility trench backfill shall consist of structural fill and the pipe bedding should be placed in accordance with pipe manufacturer's recommendations.

Note: The contractor is fully responsible for achieving the specified compaction recommendations. NLO or the soil-testing laboratory may direct the contractor to remove, correct or amend fill soils that fail to comply with the structural fill criteria presented in this report.

The contractor should use appropriate equipment and methods to avoid damage to the utilities and/or structures during fill placement and compaction.

4.8 Vegetation Buffers and Structural Setbacks

At present, minimal vegetation exists in the area of the outfall and proposed viewing area and in our opinion, the present vegetation that will reside "outside" the area of disturbance from placement of pipe line placement, can be maintained. In order to assess potential structure placement near the bluff, NLO recommended implementation of Kitsap County vegetation buffer (Vb) of 25 feet, slope stability setback (Ss), and coastal erosion buffer (Eb). For the outfall area, NLO recommends the following parameters to establish the buffer and structural setback.

- Slope Stability Setback (S_s)=25 feet
- Vegetation Buffer (Vb)= $1/3 \times 25$ feet=8.33
- Coastal Erosion Buffer (Eb)=11 feet

Summarizing our findings, NLO has determined a 25 feet tall coastal bluff at the outfall location will have a 25 feet horizontal setback, with a vegetation buffer 1/3 the slope height and a bluff retreat buffer of 11 feet. The summation of the setback and buffers ($1/3 \times 25$) + (25) + (11) equates 44.33 feet based on a 50-year service life. The setback and buffers can be established west of slope crest as identified on the Site Plan, Figure 2.

4.9 SIERRA SLOPE RETENTION SYSTEM

The Sierra Slope Retention system is comprised of a geogrid reinforced backfill section that incorporates a wire cage facing as shown on Figure 9. The wire basket measure 1.5 feet high by 1.5 deep and are utilized to provide positive connection at the interface of the wire cage and grid. The wire baskets will also help provide erosion protection, and localized stabilization along the slope face. To achieve the desired slope configuration, geosynthetic reinforcement, placed horizontally on 1.5 feet spacing will be utilized. Grid lengths will be 7.5 feet.

The wire baskets comprising the slope face will be configured to provide a stepped appearance with each basket stepped back to match the slope grades of the exposed backfill area. NLO recommends the placement of filter fabric along the back portion and bottom of each of the cages prior to Material placement within the cages. The purpose of doing so is to prevent washout of fill materials if surface runoff should cascade over the path way and onto the cages forming up the facing of the Sierra Slope Retention system.

The reinforcement should consist of geogrid specifically manufactured for reinforcing soils. For our design, UX1400MSE geogrid has been utilized for costing purposes. The geogrid will consist of High-density polyethylene (HDPE), Uniaxial Geogrid, with a Long-Term Design Load 1,873 pounds/foot (minimum) and Ultimate Strength 4,720 pounds/foot (Ultimate) in the machine direction. Machine is the direction the grid comes off the roll.

All backfill material within the reinforced zone for structural earth walls shall consist of granular material, either naturally occurring or processed, and shall be free draining, free from organic or otherwise deleterious material per 9-03.14(4) Gravel Borrow for Structural Earth Wall. The material shall be substantially free of shale or other soft, poor durability particles, and shall not contain recycled materials, such as glass, shredded tires, concrete rubble, or asphaltic concrete rubble.

5.0 REPORT LIMITATIONS

This report has been prepared for the client regarding the proposed project. Information presented in this report has been collected and interpreted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions, and in accordance with sound and generally accepted principles consistent with normal consulting practice. No other warranty, expressed or implied, including (but not limited to) any warranty or merchantability or fitness for a particular use has been made.

In the event that change in the nature, design, or location of the proposed construction is made, or any physical changes to the site occur, recommendations are not considered valid unless the changes are reviewed by NLO and conclusions of this report are modified or verified in writing.

NLO should be retained to provide geotechnical services during construction. This is to observe compliance with the design concepts, specifications or recommendations and to allow design changes in the event subsurface conditions differ from those anticipated prior to the start of construction. We do not accept responsibility for the performance of the foundation or earthwork unless we are retained to review the construction drawings and specifications, and to provide construction observation.

Any site involving sloping terrain has inherent risk of earth movement. As a result, the CLIENT agrees to accept full responsibility for all risks associated with steep slopes. The CLIENT acknowledges that this risk cannot be completely eliminated and that engineering and geologic analysis is intended to reduce the inherent risk associated with slopes. No amount of geotechnical engineering and geologic analysis can provide a guarantee of stable slopes. Geotechnical engineering and geologic analyses are based heavily on subjective interpretation, professional judgment, and opinion regarding the physical conditions at a specific site. Subsurface conditions are only documented at those points where samples were taken and interpolation and extrapolation is necessary between and around sample locations. Conditions can vary between samples and can change over time due to natural processes and/or human activity. Analyses and recommendations provided in this report are based in part upon the data obtained from the subsurface exploration.

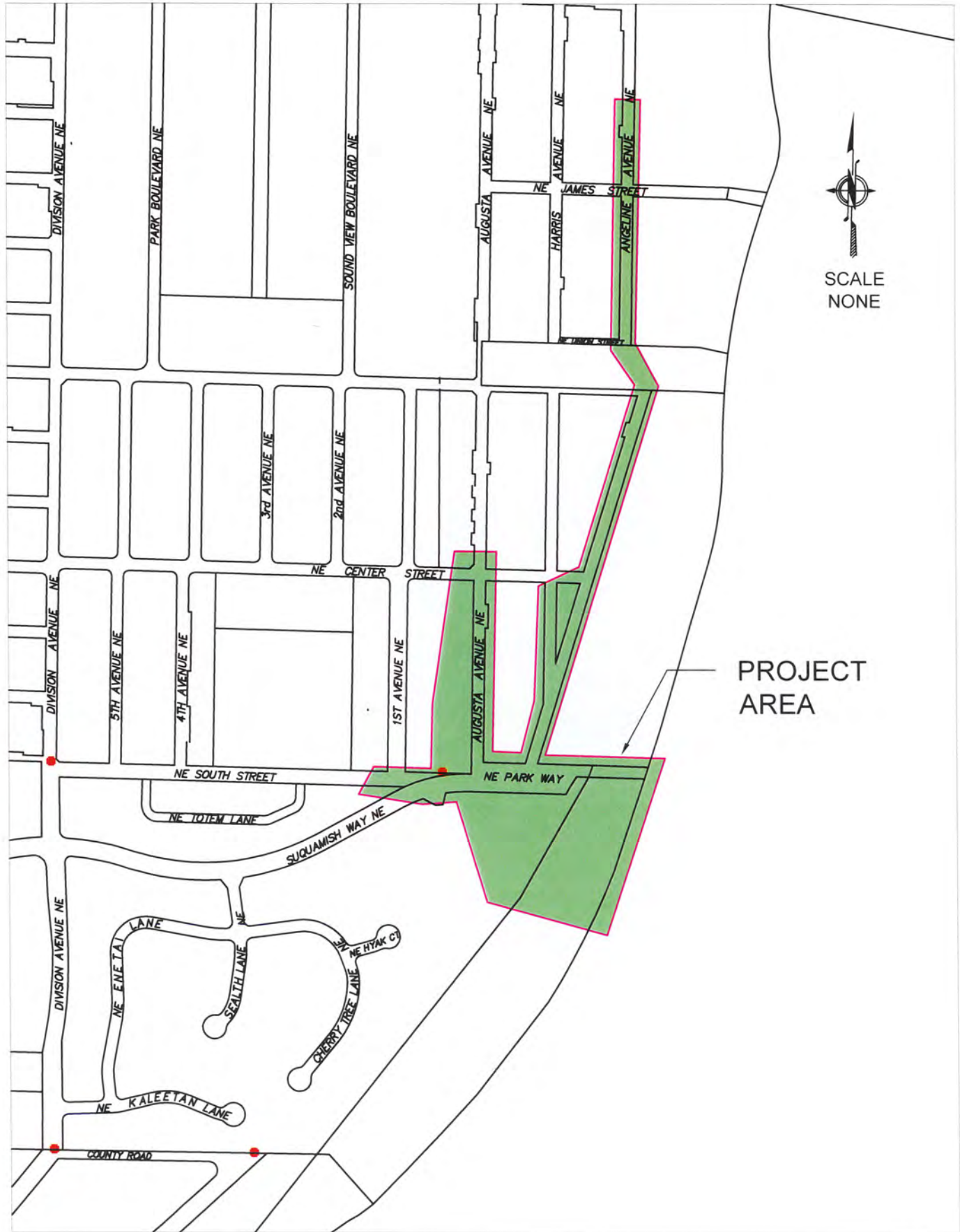
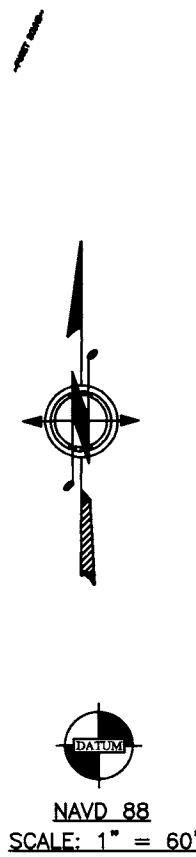
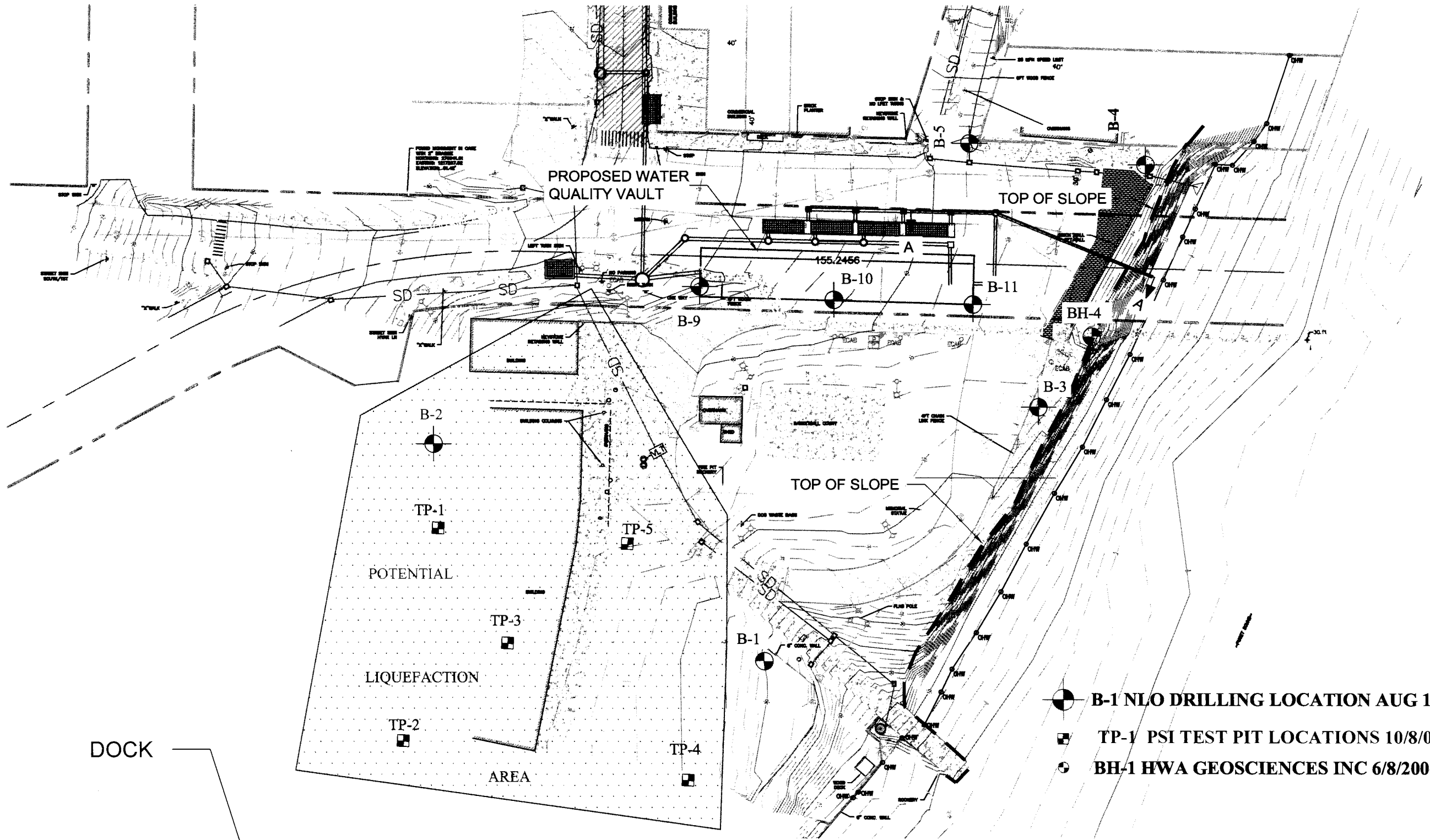


FIGURE 1

KITSAP SUQUAMISH REGIONAL STORMWATER TREATMENT FACILITY



- B-1 NLO DRILLING LOCATION AUG 12, 2020 & DEC 22, 2020
- TP-1 PSI TEST PIT LOCATIONS 10/8/07
- BH-1 HWA GEOSCIENCES INC 6/8/2006

DOCK

POTENTIAL LIQUEFACTION AREA

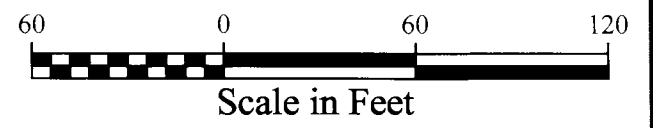
PROPOSED WATER QUALITY VAULT

TOP OF SLOPE

TOP OF SLOPE

HWA BORING LOCATIONS
 BH-3 BH-1 BH-2
 SCALE 1" = 200'

FIGURE 2



REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	BY	DATE
DRAWN	VF	6/20
CHECKED	FAK	7/20
APPROVED		
ACCEPTED		

N.L. Olson & Associates, Inc.
 Engineering, Planning and Surveying
 (360) 895-2350 or (360) 876-2284
 2453 Bebel Avenue, P.O. Box 637, Port Orchard, WA 98366



SITE PLAN
 Kitsap County Regional Stormwater Treatment Project
 Suquamish, WA

FOR: **Osborn Consulting Incorporated**
 1800 112th Avenue NE Suite 220-E
 Bellevue, WA 98004

SCALE: 1" = 60'
DATE: JAN 2021
DRAWING NUMBER: 20-10985
SHEET <u>2</u> OF <u>6</u>

KITSAP SUQUAMISH REGIONAL STORMWATER TREATMENT FACILITY

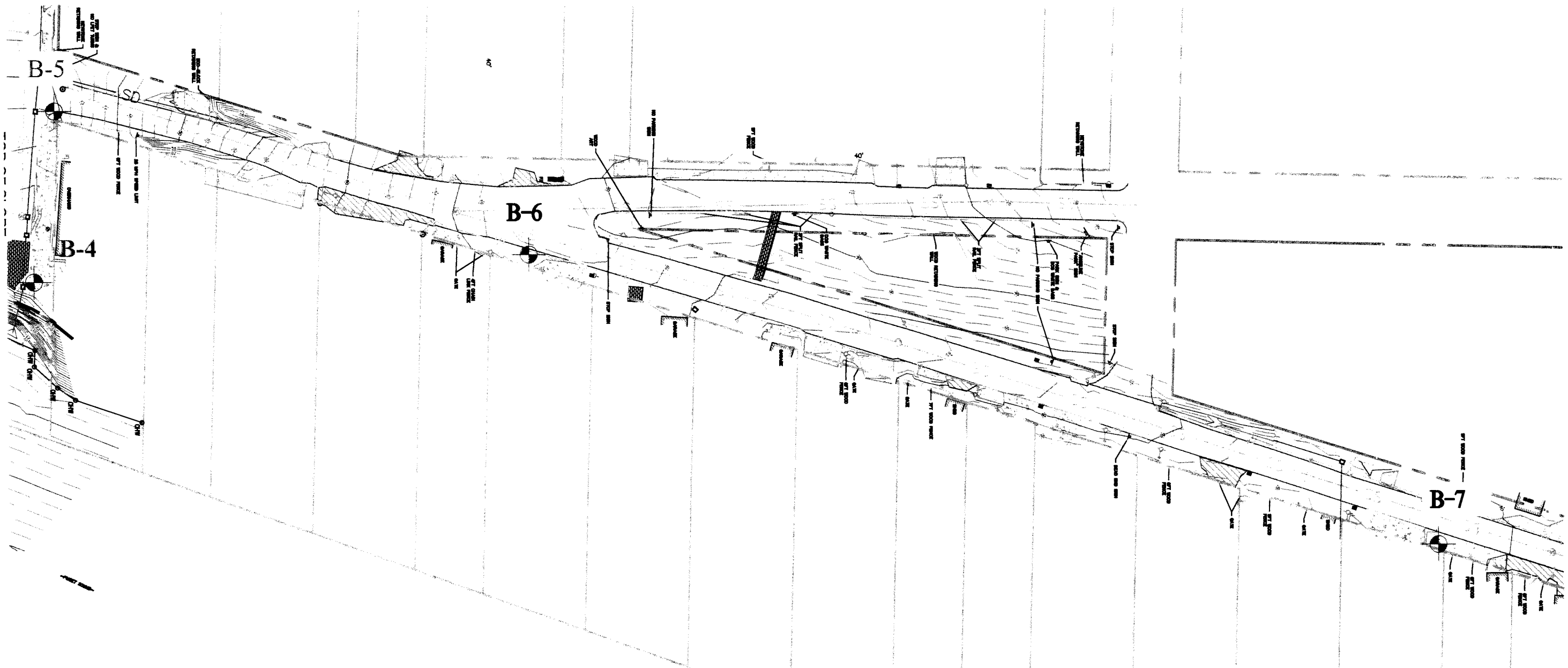
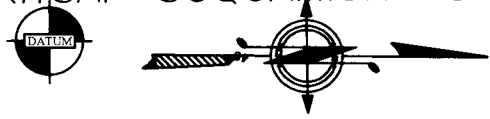


FIGURE 3

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	BY	DATE

N.L. Olson & Associates, Inc.
 Engineering, Planning and Surveying
 (360) 895-2350 or (360) 876-2284
 2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366

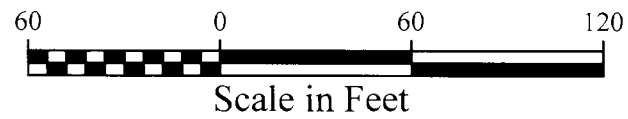
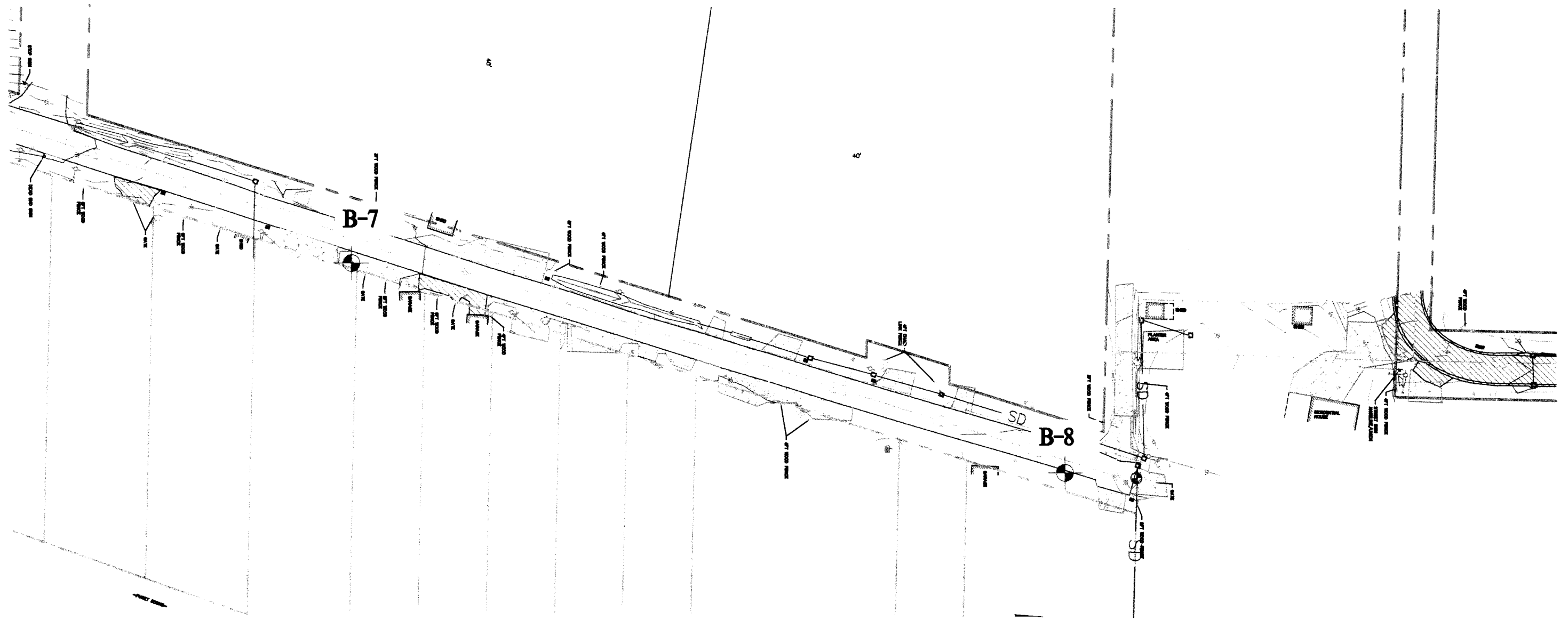
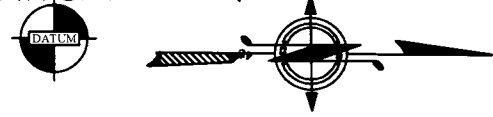


SITE PLAN
 Kitsap County Regional Stormwater
 Treatment Project
 Suquamish, WA

FOR:
Osborn Consulting Incorporated
 1800 112th Avenue NE Suite 220-E
 Bellevue, WA 98004

SCALE: 1" = 60'
DATE: JAN 2021
DRAWING NUMBER 20-10985
SHEET 2 OF 6

KITSAP SUQUAMISH REGIONAL STORMWATER TREATMENT FACILITY



B-1 NLO drilling location Aug 12, 2020 & DEC 22, 2020

FIGURE 4

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	BY	DATE
DRAWN	VP	6/20
CHECKED	FAK	7/20
APPROVED		
ACCEPTED		

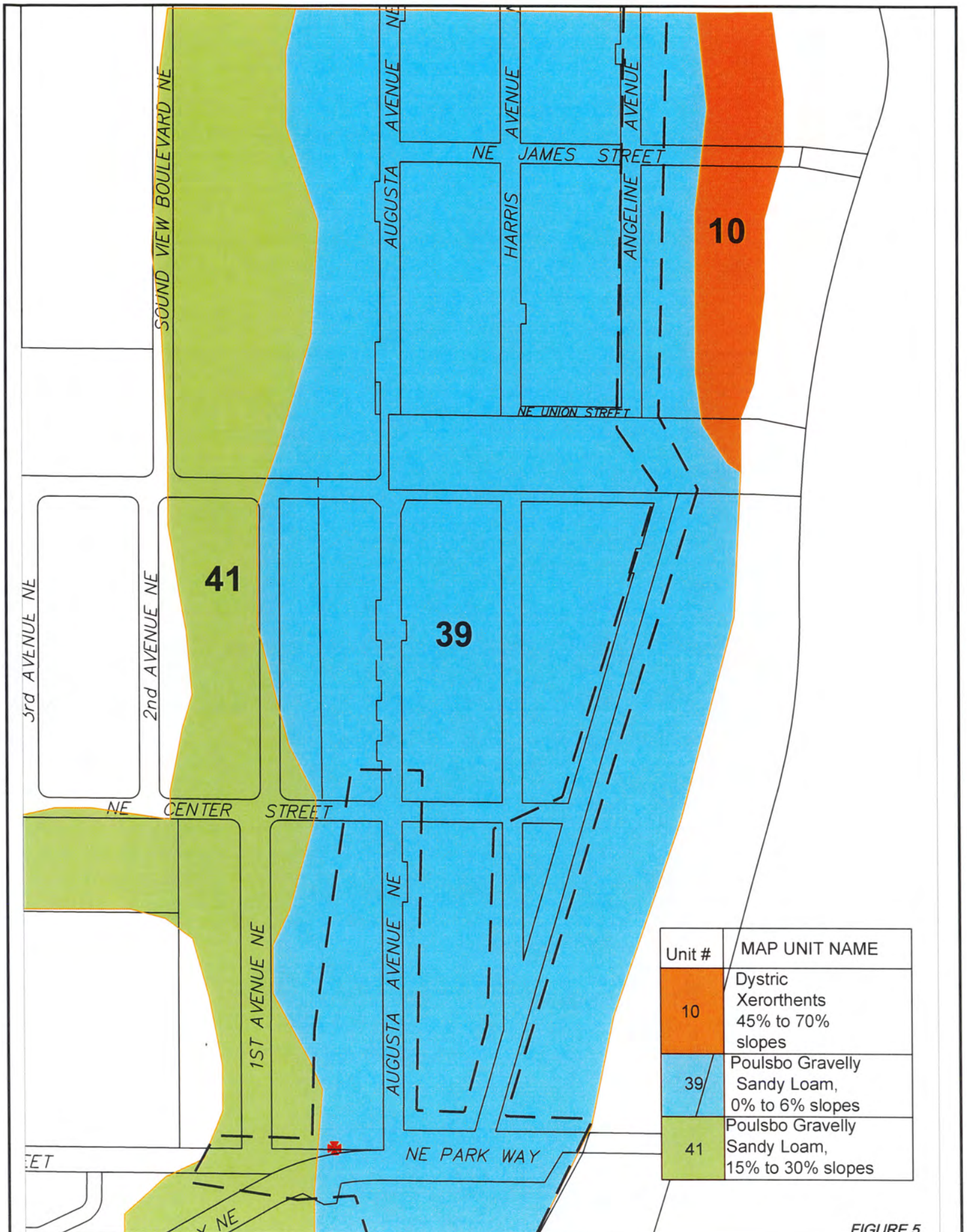
N.L. Olson & Associates, Inc.
 Engineering, Planning and Surveying
 (360) 895-2350 or (360) 876-2284
 3453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98166



SITE PLAN
 Kitsap County Regional Stormwater
 Treatment Project
 Suquamish, WA

FOR:
Osborn Consulting Incorporated
 1800 112th Avenue NE Suite 220-E
 Bellevue, WA 98004

SCALE: 1" = 60'
DATE: JAN 2021
DRAWING NUMBER
20-10985
SHEET 2 OF 6



Unit #	MAP UNIT NAME
10	Dystric Xerorthents 45% to 70% slopes
39	Poulsbo Gravelly Sandy Loam, 0% to 6% slopes
41	Poulsbo Gravelly Sandy Loam, 15% to 30% slopes

FIGURE 5

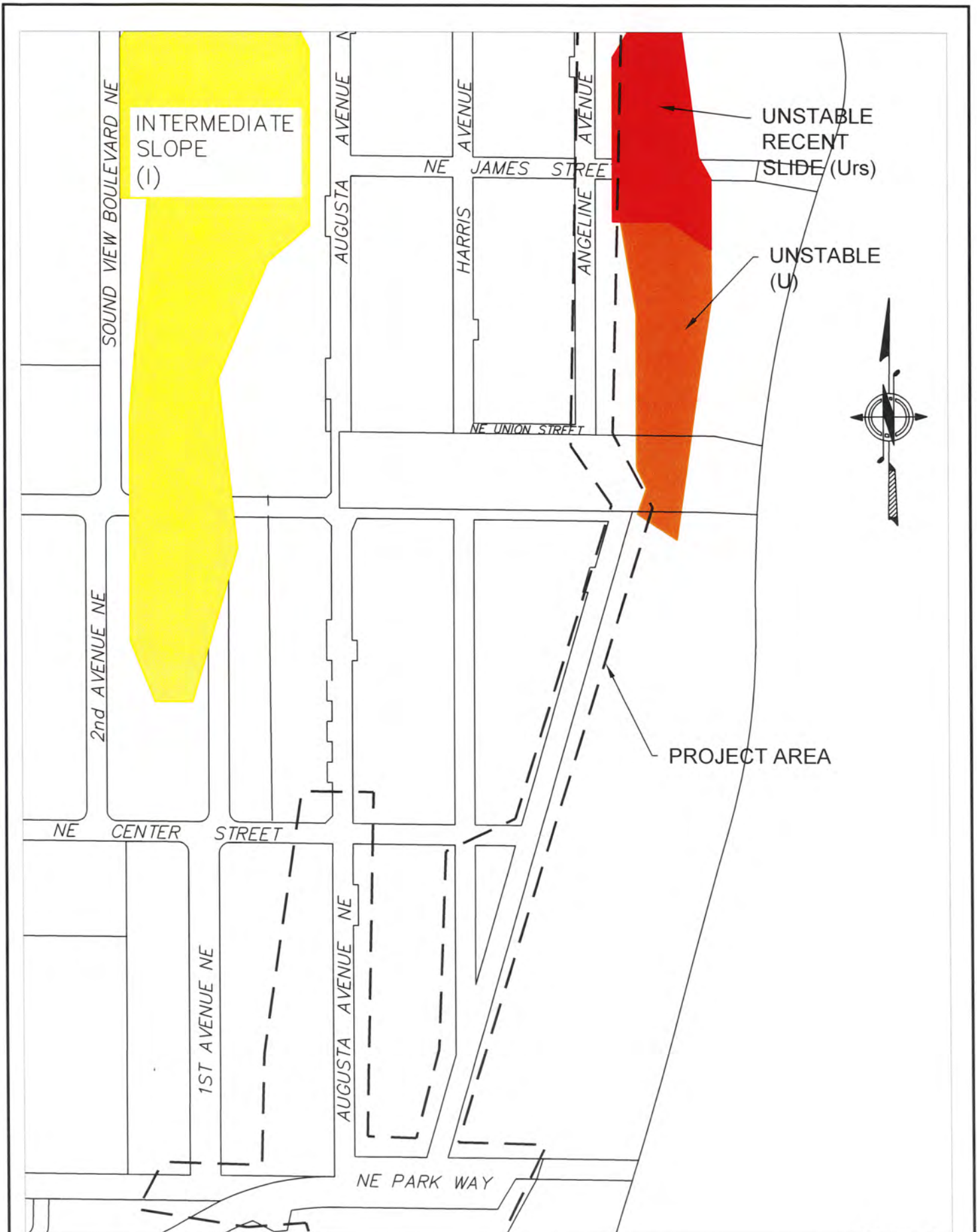


FIGURE 6

COASTAL ZONE ATLAS

Kitsap County Regional Stormwater Treatment Project
Suquamish, WA

FOR:

Osborn Consulting Incorporated
Senior Project Manager
1800 112th Avenue NE, Suite 220-E
Bellevue, WA 98004

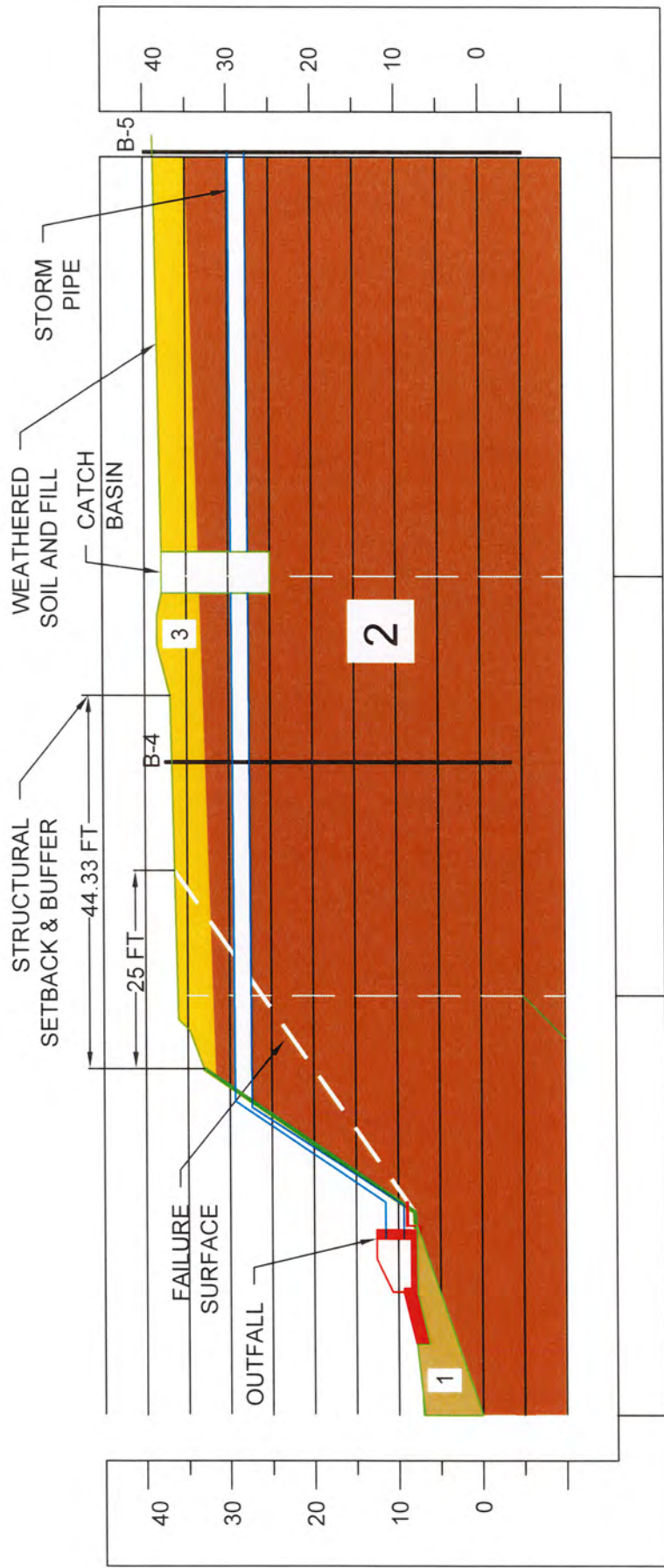
SCALE: none

DATE: 2020

DRAWING NUMBER

10958

SHEET 1 OF 1



0+00

0+50

1+00

1+50

CROSS SECTION A-A
SCALE 1"=20'
LOOKING SOUTH

GEOSTASE FS = 1.677 (STATIC)
GEOSTASE FS = 1.217 (SEISMIC)
($K_h=0.17$)
BISHOP METHOD

SOIL No.	SOIL TYPE	COLOR	UNIT WEIGHT MOIST (PCF)	UNIT WEIGHT WET (PCF)	COHESION (PSF)	FRICTION ANGLE (DEG)
1	Beach Deposit	Yellow	135	145	0	35
2	Glacial Till	Orange	140	142	200	40
3	fill/weathered soil	Red	115	132	50	32

CROSS SECTION A-A
SCALE 1"=20'
LOOKING SOUTH

FIGURE 7

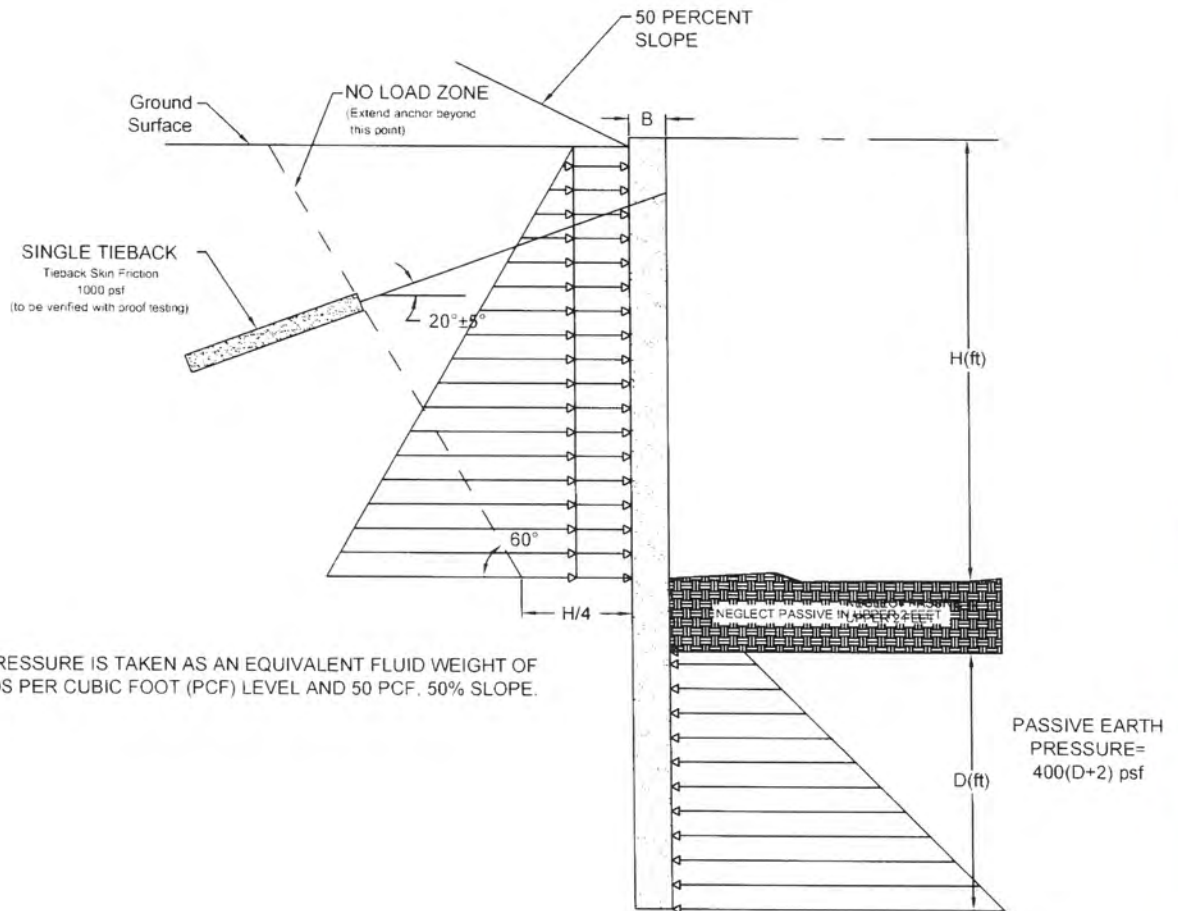
REVISIONS		BY	DATE
NO.	DATE	DESCRIPTION	
		DESIGNED	
		DRAWN	
		CHECKED	
		APPROVED	
		ACCEPTED	

N.L. Olson & Associates, Inc.
Engineering, Planning and Surveying
(800) 876-2284
2403 North Avenue, P.O. Box 837, Port Orchard, WA 98366

CROSS SECTION A-A
Kitsap County Regional Stormwater
Treatment Project
Suquamish, WA

FOR: **Cheyenne Covington**
Osborn Consulting Incorporated
1800 112th Avenue NE, Suite 220-E
Bellevue, WA 98004

SCALE: 1"=20'
DATE: Jan 21, 2001
PROJECT NUMBER: 10958
SHEET: C3.0



N.L. Olson & Associates, Inc.

Engineering, Planning and Surveying

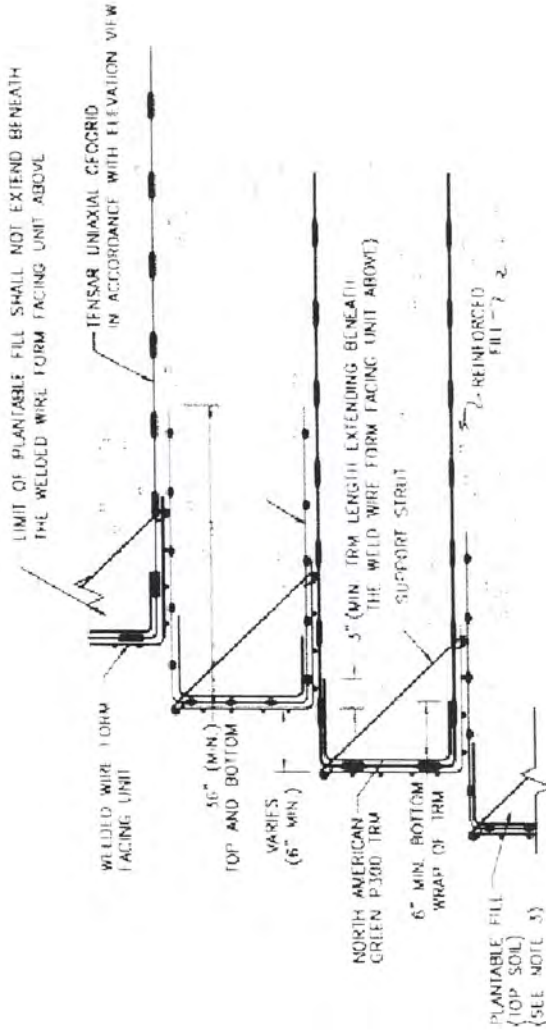
(360) 895-2350 or (360) 876-2284

2453 Bethel Avenue, P.O. Box 637, Port Orchard, WA 98366

Temporary Cantilever and Single Row Tieback Shoring
Kitsap County Regional Stormwater
Treatment Project
Suquamish, WA

Proj. No. 10958 | Drwn. WRJ | Date: May 4, 2021 | Checked: WRJ | Date: May 4, 2021

Figure 8



NOTES:

1. SEE WELDED WIRE FORM FACING UNIT DETAIL FOR FACING MATERIAL AND DIMENSIONS
2. FACING UNITS SHALL BE CONSTRUCTED FROM BLACK STEEL
3. PLANTABLE FILL OR TOP SOIL MAY BE PLACED AT THE FACE TO SUPPORT VEGETATION GROWTH
4. Place drain rock section 1/4 foot above pipe and then overlay drainrock with mirafi N140N filter fabric
5. Wall fill material is per 9.03.14(4) Gravel Borrow for Structural Earth Wall

ALTERNATE WELEDED WIRE FORM FACING DETAIL (PLANTABLE FACE FILL)
NO SCALE

FIGURE 9

SCALE	1/8" = 1'-0"
DATE	MAY 11, 2011
PROJECT NUMBER	10958
SHEET	010

FOR
Cheyenne Covington
Osborn Consulting Incorporated
1800 112th Avenue NE, Suite 220-E
Bellevue, WA 98004

Sierra Slope Detail
Kitsap County Regional Stormwater
Treatment Project
Suquamish, WA

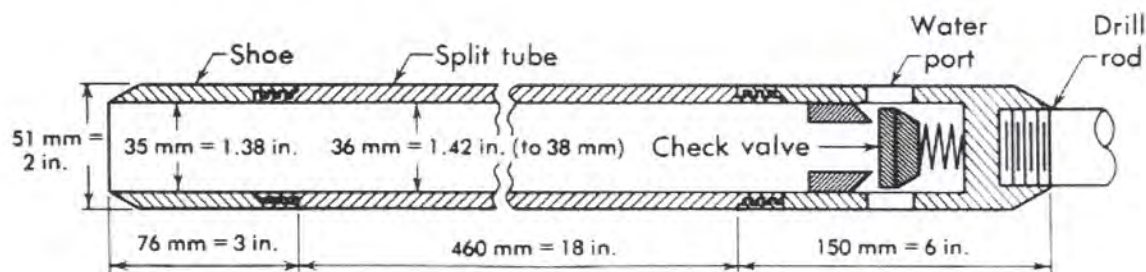
N.L. Olson & Associates, Inc.
Engineering, Planning and Surveying
(360) 875-2284
243 Miller Avenue, P.O. Box 457, Port Orford, WA 97158

NO.	DATE	BY	REVISIONS

**APPENDIX A
SUBSURFACE EXPLORATION DISCUSSION
BORING LOGS
&
LABORATORY RESULTS**

The site's subsurface soil conditions were explored during August 11, 2020 to August 12, 2020 and again on December 22, 2020 with a total of eleven (11) borings. The borings were extended down to depths of 26.5 to 41.5 feet below current site grades. The locations of NLO borings are shown on the Site Plan, Figure 2 to 4. The subsurface exploration work utilized a D-50 tracked mounted drill rig subcontracted through Advanced Drill Technologies. The boring logs provide a more in-depth soil description and are provided in this Appendix. NLO has provided discussion of our subsurface exploration program below.

Standard Penetration Test: During drilling operation the split spoon sampler was used to determine soil strength parameters and recover soil samples. The dimension of the split tube sampler is 2" outside diameter x 1 3/8" inside diameter x 18" long. The sampler is driven into the soil with a 140 pound hammer dropped a vertical distance of 30 inches. Soil strength parameters are related to the cumulative number of blows (N-Value) necessary to drive the sampler tube one foot into the soil. Prior to determining the N value, the sampler is driven 6 inches into the undisturbed soil. The samples recovered from the split spoon are suitable for atterberg, gradation, and moisture content tests.



Sampler Utilized for Standard Penetration Tests

The subsurface exploration logs and related information depicts conditions only at the specific locations and at the particular time designated on the logs. The passage of time may result in a change of subsurface conditions at these exploration locations. Subsurface conditions at other locations may differ from conditions occurring at the exploration locations. The nature and extent of variations of subsurface conditions between explorations are not known. If variations appear during additional explorations or construction, reevaluation of recommendations in this report may be necessary. NLO has provided a summary of the groundwater conditions encountered at the site in the following.



N.L. Olson & Associates, Inc.

Engineering, Planning and Surveying
2453 BETHEL AVENUE
P.O. BOX 637
PORT ORCHARD, WASHINGTON 98366-0637

Boring Log Kitsap Region Water Quality Facility Suquamish, WA

Job Number 10958	Logged By SMC	Subsurface Exploration Drilling		Ground Surface Elevation 33	Boring B - 1	Page 1 of 2
		Start Date AUG 12, 2020	End Date AUG 12, 2020			

General Notes	Graphic Symbol	USCS SYMBOL	Recovery (in) Depth (ft)	Blow per (ft) (N-Value)	Surface Conditions	Moisture Content (%)
B1, 2.5 ft		SM	1	5	Fill: Brown Silty SAND, Loose, Moist - Trace to No Gravel - Fine Grained Sand	
			2			
			3			
			4			
			5			
B1, 5.0 ft			6			
B1, 7.5 ft			7	5	Native: Brown Silty SAND, loose Moist - Fine to Medium Grained Sand Primarily - Trace Iron Oxide Staining at 7.5', Becomes Medium Dense	
			8	18		
B1, 10.0 ft			9	18	At 10', Grades to Gray, Becomes Wet	WET 10 ft bgs EL = 23.0
			10	14		
B1, 12.5 ft			11	14	Becomes fine grained and Very Dense, Moist (glacial till) - Trace Gravel particle size 1 inch or less semi rounded to rounded	
			12			
			13	53		
			14	53		
B1, 15.0 ft		SM	15	100		
			16	100		
B1, 20.0 ft			17			
			18			
			19			
			20			

Continued on Page 2

Start Time 0830	End Time 0945	Hammer Type 140 lb Manual with cats head	Drawn By: SMC	Date AUG 17, 2020	Hole Completion <input type="checkbox"/> Monitoring Well <input type="checkbox"/> Piezometer <input checked="" type="checkbox"/> Abandoned and backfilled <input type="checkbox"/> Inclinator
Drilling Contractor Geologic Drill	Operators Name Wade	Drilling and sampling Method Standard Split Spoon	Checked By: WRJ	Date	
Equipment d50 tracked drill rig	Groundwater Elevation No Ground Water Detected		Revision By:	Date	
Job Location					
Remarks					Sampling Method Standard Split Spoon I California Sampler II



Job Number
10958

Job Name
Osborn

Logged By
SMC

Boring:
B - 1

Page
2 of 2

Moisture
Content
(%)

General Notes	Graphic Symbol	USCS SYMBOL	Recovery (ft)	Depth (ft)	Blow per (ft) (N-Value)	N.L. Olson & Associates, Inc.				Moisture Content (%)
						Job Number	Job Name	Logged By	Boring	
B1, 20.0 ft			FR	20 22		22-50-50/5"	Gray Silty Sand, Very Dense, Moist - Fine Grained Sand - Trace Gravel			
			FR	1 50						
			FR	50/5"						
B1, 25.0 ft			FR	25 50		+100	- Trace Gravels 1/4 inch or less in particle size semi angular			
			FR	6 50						
B1, 30.0 ft		SM	FR	30 18		44	becomes dense, Very Dense, Moist to wet - Fine to Medium Grained Sand			
			FR	1 20						
			FR	2 24						
			FR	3						
B1, 35.0 ft			FR	35 7		19	Gray sandy SILT, medium dense, Water bearing - Very fine to fine grained sand			
			FR	6 10						
			FR	9						
B1, 40.0 ft		ML	FR	40 13		54	-Becomes very dense and moist to wet			
			FR	1 18						
			FR	36			End of boring at 41.5 ft bgs			
				2						
				3						
				4						
				45						
				6						
				7						
				8						
				9						
				50						

WET 35.0 ft bgs
EL = -2.0





N.L. Olson & Associates, Inc.

Engineering, Planning and Surveying
2453 BETHEL AVENUE
P.O. BOX 637
PORT ORCHARD, WASHINGTON 98366-0637

Boring Log

Kitsap Region Water Quality Facility
Suquamish, WA

Job Number	Logged By	Subsurface Exploration Drilling		Ground Surface Elevation	Boring	Page			
		Start Date	End Date				1	2	
10958	SMC	AUG 11, 2020	AUG 11, 2020	45	B - 2	1 of 2			
General Notes	Graphic Symbol	USCS SYMBOL	Recovery (in)	Depth (ft)	Blow per (ft) (N-Value)	Surface Conditions	Moisture Content (%)		
B2, 2.5 ft		SM	10"	1	13	Fill: Brown Silty SAND, Loose to Medium Dense, Moist - Trace to No Gravel - Fine to Medium Grained Sand - Till fill mixed with dark brown organics - Becomes loose at 10 feet At 10' Grades to Brownish Gray, Becomes Medium Dense - Increase in Moisture Content - Trace Iron Oxide Staining WET 12.5 ft bgs ∇ EL = 32.5			
B2, 5.0 ft			12"	2			5		
B2, 7.5 ft			12"	3			6		
B2, 10.0 ft			10"	4			7		
B2, 12.5 ft			FR	5	8		19		
B2, 15.0 ft			SM	FR	13		25	Gray Silty Silt, Medium Dense, Moist to Water Bearing - Fine to Medium Grained Sand primarily - Sand content increases becomes dense - moisture ranges between moist to wet - contains interbedding poorly graded sand layers WET 15.0 ft bgs ∇ EL = 30	
B2, 20.0 ft				FR	14				13
				FR	15		18		
				FR	16		21		
				FR	17				
				FR	18				
			FR	19					
		FR	20						
Start Time	End Time	Hammer Type	Drawn By	Date	Hole Completion				
1030	1150	140 lb Manual with cats head	SMC	AUG 17, 2020	<input type="checkbox"/> Monitoring Well				
Drilling Contractor	Operators Name	Drilling and sampling Method	Checked By	Date	<input type="checkbox"/> Piezometer				
Geologic Drill	Wade	Standard Split Spoon	WRJ		<input checked="" type="checkbox"/> Abandoned and backfilled				
Equipment	Groundwater Elevation	Revision By	Date		<input type="checkbox"/> Inclinator				
d50 tracked drill rig	No Ground Water Detected								
Job Location							Remarks		
							Sampling Method Standard Split Spoon I California Sampler II		

Continued on Page 2

General Notes	Graphic Symbol	USCS SYMBOL	Recovery (ft)	Depth (ft)	Blow per (ft) (N-Value)	N.L. Olson & Associates, Inc.				Page 2 of 2	Moisture Content (%)
						Job Number	Job Name	Logged By	Boring		
B2, 20.0 ft				20	13	39	Gray Silty Silt, Dense, Moist to Water Bearing - Fine to Medium Grained Sand				
			FR	1	18						
					21						
		SM		2							
				3							
				4							
B2, 25.0 ft				25	30	100	Becomes very dense and moist at 25 feet (Glacial till) - Contains interbeds of sandy silt				
			FR	6	50						
					50						
				7		End of boring at 26.5 ft bgs					
				8							
				9							
				30							
				1							
				2							
				3							
				4							
				35							
				6							
				7							
				8							
				9							
				40							
				1							
				2							
				3							
				4							
				45							
				6							
				7							
				8							
				9							
				50							



N.L. Olson & Associates, Inc.

Engineering, Planning and Surveying
2453 BETHEL AVENUE
P.O. BOX 637
PORT ORCHARD, WASHINGTON 98366-0637

Boring Log

Kitsap Region Water Quality Facility
Suquamish, WA

Job Number 10958	Logged By SMC	Subsurface Exploration Drilling		Ground Surface Elevation 35	Boring B - 3	Page 1 of 2
		Start Date AUG 12, 2020	End Date AUG 12, 2020			

General Notes	Graphic Symbol	USCS SYMBOL	Recovery (in)	Depth (ft)	Blow per (ft) (N-Value)	Surface Conditions	Moisture Content (%)	
B3, 2.5 ft		ML	FR	1 2 3 4	15 30 35	65	Brownish Gray Sandy Silt, Very Dense, Moist to Water Bearing - Fine Grained Sand	
B3, 5.0 ft		SM	FR	5	20	100	Gray Silty SAND, Very Dense, Moist - Fine to Medium Grained Sand	
B3, 7.5 ft				6	50			
				7	50			
B3, 10.0 ft				8	30			
				9	50			20-50-50/5"
				10	45			At 10', Increase in Silt Content (Silt Lens)
				11	50			45-50-50/5"
B3, 12.5 ft				12				
				13	41			
				14	50			41-50-50/5"
B3, 15.0 ft		15	50					
		16	50	50-50/1"				
B3, 20.0 ft		17						
		18						
		19						
		20						

Continued on Page 2

Start Time 1000	End Time 1120	Hammer Type 140 lb Manual with cats head	Drawn By SMC	Date AUG 17, 2020	Hole Completion <input type="checkbox"/> Montonng Well <input type="checkbox"/> Piezometer <input checked="" type="checkbox"/> Abanonded and backfilled <input type="checkbox"/> Inclinatorer
Drilling Contractor Geologic Drill	Operators Name Wade	Drilling and sampling Method Standard Split Spoon	Checked By WRJ	Date	
Equipment d50 tracked drill ng	Groundwater Elevation No Ground Water Detected		Revision By	Date	
Job Location					
Remarks					Sampling Method Standard Split Spoon California Sampler

I
II



Job Number
10958

Job Name
Osborn

Logged By
SMC

Boring:
B - 3

Page
2 of 2

Moisture
Content
(%)

General Notes	Graphic Symbol	USCS SYMBOL	Recovery (ft)	Depth (ft)	Blow per (ft) (N-Value)	Soil Description	Moisture Content (%)
B3, 20.0 ft			2"	20	50 50/2"	Gray Silty SAND, Very Dense, Moist - Contains interbedding silt layer	
B3, 25.0 ft			FR	25	50 50/4"	Gray Sandy SILT very dense moist - Contains Trace Gravel 1/2" or less in particle size	
B3, 30.0 ft		SM	FR	30	50 50/5"	At 30', Increase in Silt Content	
B3, 35.0 ft			FR	35	50 50 50/4"	Gray silty sand with gravel very dense moist	
B3, 40.0 ft			FR	40	42 50 50/4"	Gray silty sand with gravel very dense moist	
				2		End of boring at 41.0 ft bgs	



N.L. Olson & Associates, Inc.

Engineering, Planning and Surveying
 2453 BETHEL AVENUE
 P.O. BOX 637
 PORT ORCHARD, WASHINGTON 98366-0637

Boring Log

Kitsap Region Water Quality Facility
 Suquamish, WA

Job Number 10958	Logged By SMC	Subsurface Exploration Drilling		Ground Surface Elevation 35	Boring: B - 4	Page 1 of 2
		Start Date AUG 11, 2020	End Date AUG 11, 2020			

General Notes	Graphic Symbol	USCS SYMBOL	Recovery (in)	Depth (ft)	Blow per (ft) (N-Value)	Surface Conditions	Moisture Content (%)		
B4, 2.5 ft			8"	1 2 3 4	8	Gray Silty Sand, Loose, Moist (Fill) - Trace Gravel - Fine to Medium Grained Sand Primarily			
B4, 5.0 ft		SM	8"	5	58	Gray Sand Silt/Silty SAND, Very Dense, Moist (Glacial Till) - Fine Grained Sand			
B4, 7.5 ft				6				19	
								37	
				7					
B4, 10.0 ft				8				23	
								50	
				9				50 1/2	23-50-50/5"
B4, 12.5 ft				10				24	
								50	
								50	
B4, 15.0 ft	12								
	13	21							
		50							
	14	50 1/2	21-50-50/5"						
	15	25							
		50							
		50 1/2	25-50-50/5"						
B4, 20.0 ft	16								
	17								
	18								
	19								
	20								

Continued on Page 2

Start Time 0830	End Time 0940	Hammer Type 140 lb Manual with cats head	Drawn By: SMC	Date AUG 17, 2020	Hole Completion <input type="checkbox"/> Monitoring Well <input type="checkbox"/> Piezometer <input checked="" type="checkbox"/> Abandoned and backfilled <input type="checkbox"/> Inclinator
Drilling Contractor Geologic Drill	Operator's Name Wade	Drilling and sampling Method Standard Split Spoon	Checked By: WRJ	Date	
Equipment d50 tracked drilling	Groundwater Elevation No Ground Water Detected		Revision By:	Date	
Job Location					
Remarks					Sampling Method Standard Split Spoon I California Sampler II



General Notes	Graphic Symbol	USCS SYMBOL	Recovery (ft)	Depth (ft)	Blow per (ft) (N-Value)	N.L. Olson & Associates, Inc.				Page 2 of 2	Moisture Content (%)
						Job Number	Job Name	Logged By	Boring		
B4, 20.0 ft			FR	20	35	35-50-50/5"	Gray Sand Silt/Silty SAND, Very Dense. Moist - Fine Grained Sand				
			FR	1	50						
			FR	2	50/5"						
			FR	3							
B4, 25.0 ft			FR	25	31	31-50-50/5"	At 25', Trace to No Gravel				
			FR	6	50						
			FR	7	50/5"						
			FR	8							
B4, 30.0 ft			FR	30	18	18-40-50/4"					
			FR	1	40						
			FR	2	50/4"						
			FR	3							
B4, 35.0 ft		SP-SM	FR	35	28	71	Gray Poorly Graded SAND with gravel, Very Dense, Water Bearing - Medium to Coarse Grained Sand				
			FR	6	23						
			FR	7	48						
			FR	8							
B4, 40.0 ft		SP	FR	40	13	70	Gray Poorly Graded SAND with gravel, Very Dense, Wet - Medium to Coarse Grained Sand (Advaced Outwah)				WET 40 ft bgs ▽ EL = -5.0
			FR	1	28						
			FR	2	42						
			FR	3							
				45		End of boring at 41.5 ft bgs					
				6							
				7							
				8							
				9							
				50							



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Boring Log Kitsap Region Water Quality Facility Suquamish, WA

Job Number	Logged By	Subsurface Exploration Drilling		Ground Surface Elevation	Boring	Page	
		Start Date	End Date				1
10958	SMC	AUG 11, 2020	AUG 11, 2020	40	B - 5	1 of 2	
General Notes	Graphic Symbol	USCS SYMBOL	Recovery (in)	Depth (ft)	Blow per (ft) (N-Value)	Surface Conditions	Moisture Content (%)
B5, 2.5 ft				1		Gray Silty SAND, Very Dense, Moist - Fine to Medium Grained Sand (glacial till) At 5', Increase in Silt Content GWT 6.9 ft bgs EL = 33.1 Monitoring Well installed At 12.5', Increase in Silt Content Continued on Page 2	
				2			
			FR	3	19		
				4	46		
		SM		5	50		
B5, 5.0 ft				6	31		
			8"	7	46		
				8	50		
B5, 7.5 ft				9	26		
			12"	10	50		
		SM		11	21		
B5, 10.0 ft				12	26		
			FR	13	30		
				14	22		
B5, 12.5 ft				15	26		
			FR	16	31		
				17	23		
B5, 15.0 ft				18	36		
			FR	19	40		
				20			
B5, 20.0 ft							
Start Time	End Time	Hammer Type	Drawn By	Date	Hole Completion		
1000	1120	140 lb Manual with cats head	SMC	AUG 17, 2020	<input type="checkbox"/> Monitoring Well <input checked="" type="checkbox"/> Piezometer <input type="checkbox"/> Abandoned and backfilled <input type="checkbox"/> Inclinator		
Drilling Contractor	Operators Name	Drilling and sampling Method	Checked By	Date			
Geologic Drill	Wade	Standard Split Spoon	WRJ				
Equipment		Groundwater Elevation	Revision By	Date			
d50 tracked drilling		No Ground Water Detected					
Job Location						Sampling Method	
Remarks	BMM 223 24hr check: 6.9'					<input type="checkbox"/> Standard Split Spoon <input type="checkbox"/> California Sampler I II	



General Notes	Graphic Symbol	JSCS SYMBOL	Recovery (ft)	Depth (ft)	Blow per (ft) (N-Value)	N.L. Olson & Associates, Inc.				Page <u>2</u> of <u>2</u>	Moisture Content (%)
						Job Number	Job Name	Logged By	Boring		
B5, 20.0 ft			12"	20	32	36-50/3"	Gray Silty SAND, Very Dense, Moist - Fine to Medium Grained Sand				
			1	50/3"							
			2								
			3								
B5, 25.0 ft		SM	1"	25	50/4"	50/4"					
			6								
			7								
			8								
B5, 30.0 ft		SM		30	24	24-40-50/5"		Monitoring Well installed			
			FR	40	50/5"						
			1								
			2								
B5, 35.0 ft			8"	35	50/6"	50/6"	At 35', Increase in Silt Content, Water Bearing				
			6								
			7								
			8								
B5, 40.0 ft		SP	6"	40	50/5"	50/5"	Gray Poorly Graded SAND, Very Dense, Wet (Advanced Outwash) - Medium to Coarse Grained Sand				
			1								
				2		End of boring at 36.5 ft bgs					
				3							
				4							
				5							
				6							
				7							
				8							
				9							
				50							



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Boring Log

Kitsap Region Water Quality Facility
Suquamish, WA

Job Number 10958	Logged By SMC	Subsurface Exploration Drilling		Ground Surface Elevation 68	Boring B - 6	Page 1 of 2
		Start Date AUG 11, 2020	End Date AUG 11, 2020			

General Notes	Graphic Symbol	USCS SYMBOL	Recovery (in)	Depth (ft)	Blow per (ft) (N-Value)	Surface Conditions:	Moisture Content (%)
B6, 2.5 ft		SM	8"	1	13	Fill: Brownish Gray, Silty SAND, Medium Dense, Moist - Trace to No Gravel - Fine to Medium Grained Sand - Contains Asphalt fragments	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
B6, 5.0 ft			7"	5	10	At 12.5', Increase in Silt Content - Contains charcoal fragments	
B6, 7.5 ft			5"	8	12	At 7.5', Iron Oxide Staining	
B6, 10.0 ft			3"	10	6	At 10', Becomes mottled and loose	
B6, 12.5 ft			3"	13	7	At 12.5', Increase in Silt Content - Contains asphalt fragments	
B6, 15.0 ft			4"	15	5		
B6, 20.0 ft			1"	16			

Monitoring Well installed

Continued on Page 2

Start Time 1200	End Time 1330	Hammer Type 140 lb Manual with cats head	Drawn By: SMC	Date AUG 17, 2020	<input type="checkbox"/> Hole Completion <input type="checkbox"/> Monitoring Well <input checked="" type="checkbox"/> Piezometer <input type="checkbox"/> Abandoned and backfilled <input type="checkbox"/> Inclinator
Drilling Contractor Geologic Drill	Operator's Name Wade	Drilling and sampling Method Standard Split Spoon	Checked By: WRJ	Date	
Equipment 50 tracked drilling	Groundwater Elevation No Ground Water Detected		Revision By:	Date	
Job Location					

Remarks: BMM 222 24hr check: 27.8'	Sampling Method Standard Split Spoon I California Sampler II
---------------------------------------	----------------------------------------------------------------------------------



Job Number
10958

Job Name
Osborn

Logged By
SMC

Boring
B - 6

Page
2 of 2

Moisture
Content
(%)

General Notes	Graphic Symbol	USCS SYMBOL	Recovery (ft)	Depth (ft)	Blow per (ft) (N-Value)			
B6, 20.0 ft			FR	20 1 2 1	3	Native: Brownish Gray Silty SAND, Very Loose, Moist - Fine to Medium Grained Sand - Weathered soil horizon - Driller noted at 23', realtive soil density increased and becomes Dense to Very Dense (Glacial Till)		
B6, 25.0 ft		SM	FR	25 50 6 7 8 9	50-6"		GWT 27.8 ft bgs EL = 40.2	
B6, 30.0 ft		SM	FR	30 44 50 1 2 3 4	50-5"		Monitoring Well installed	
B6, 35.0 ft			FR	35 50 6 7 8 9	50-4"			
B6, 40.0 ft			FR	40 50 1	50-5"			
				2 3 4 45 6 7 8 9 50		End of boring at 36.5 ft bgs		



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Boring Log Kitsap Region Water Quality Facility Suquamish, WA

Job Number 10958	Logged By SMC	Subsurface Exploration Drilling		Ground Surface Elevation 60	Boring B - 7	Page 1 of 2
		Start Date AUG 11, 2020	End Date AUG 11, 2020			

General Notes	Graphic Symbol	JCS SYMBOL	Recovery (in)	Depth (ft)	Blow per (ft) (N-Value)	Surface Conditions:	Moisture Content (%)
B7, 2.5 ft				1		Brown Silty SAND, Medium Dense to Dense, Moist - Fine to Medium Grained Sand	
				2			
			8"	3	2	- weathered soil horizon zone some mottelling	
				4	15		
				5	17		
B7, 5.0 ft		SM		6	32	At 5', Grade to Brownish Gray, Becomes Dense - Trace to No Cobbles - Increase in Silt Content	
			18"	7	39		
				8	22		
B7, 7.5 ft				9	91	At 7.5', contains trace cobbles and becomes Very Dense (Glacial Till)	
			6"	10	14		
				11	44		
B7, 10.0 ft		SM		12	62		
			FR	13	27		
				14	35		
B7, 12.5 ft				15	100		
			FR	16	24		
				17	50		
B7, 15.0 ft				18	78		
			FR	19	24		
				20	34		
B7, 20.0 ft							

Continued on Page 2

Start Time 1030	End Time 1150	Hammer Type 140 lb Manual with cats head	Drawn By: SMC	Date AUG 17, 2020	Hole Completion <input type="checkbox"/> Monitoring Well <input type="checkbox"/> Piezometer <input checked="" type="checkbox"/> Abandoned and backfilled <input type="checkbox"/> Inclinator
Drilling Contractor Geologic Drill	Operators Name Wade	Drilling and sampling Method Standard Split Spoon	Checked By: WRJ	Date	
Equipment d50 tracked drill rig	Groundwater Elevation No Ground Water Detected	Revision By:	Date		
Job Location					
Remarks					Sampling Method Standard Split Spoon I California Sampler II



General Notes

Graphic Symbol

USCS SYMBOL

Recovery (ft)

Depth (ft)

Blow per (ft) (N-Value)

Job Number 10958

Job Name Osborn

Logged By SMC

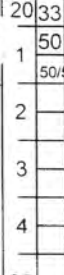
Boring: B - 7

Page 2 of 2

Moisture Content (%)

B7, 20.0 ft

SM



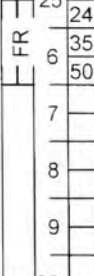
33-40-50/5"

Brownish Gray Silty SAND, Very Dense, Moist

- Trace to No Gravel
- Fine to Medium Grained Sand
- At 20', Thin lens of Sand
- fragments from spoon sampler indicates cobbles

B7, 25.0 ft

SP



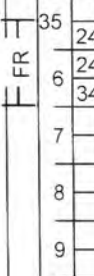
23-40-50/5"

Brownish Gray Poorly Graded SAND with Silt, Dense, Wet

- Medium to Coarse Grained Sand (Advanced Outwash)
- Contains trace Gravel Partice size 1" or less

B7, 35.0 ft

SM



58

At 35', Silt interbed and Water Bearing

B7, 40.0 ft



26-40-50/5"

Brownish Gray Silt SAND, Very Dense, Wet

- Fine Grained Sand

End of boring at 41.5 ft bgs

Wet 30 ft bgs
EL = 30.0



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Boring Log

Kitsap Region Water Quality Facility
Suquamish, WA

Job Number	Logged By	Subsurface Exploration Drilling		Ground Surface Elevation	Boring	Page	
		Start Date	End Date				1
10958	SMC	AUG 11, 2020	AUG 11, 2020	65	B - 8	1 of 2	
General Notes	Graphic Symbol	USCS SYMBOL	Recovery (ft)	Depth (ft)	Blow per (ft) (N-Value)	Surface Conditions	Moisture Content (%)
		SM		1		Fill: Brownish Gray Sandy Silt, Medium Dense, Moist - Fine to Medium Grained Sand - Iron Oxide Staining	
				2			
B8, 2.5 ft		SM	8"	3	2	Native: At 5', Decrease in Silt Content, Becomes Dense - Contains trace gravel particle size 1" or less	
				4	5		
B8, 5.0 ft				5	11		
				6	19		
B8, 7.5 ft				7	15		
				8	25		
				9	24		
				10	22		
B8, 10.0 ft				11	7		
				12	9		
				13	14		
B8, 12.5 ft					ML		
	14	13					
	15	21					
B8, 15.0 ft		SC	FR	16	7	Brownish Gray Clayey SAND, Dense, Moist - Medium Grained Sand - Poorly Graded Sand interbed	
				17	13		
				18	21		
				19			
				20			
B8, 20.0 ft							
Start Time 0850	End Time 0930	Hammer Type 140 lb Manual with cats head	Drawn By: SMC	Date AUG 17, 2020	Hole Completion		
Drilling Contractor Geologic Drill	Operators Name Wade	Drilling and sampling Method Standard Split Spoon	Checked By: WRJ	Date	<input type="checkbox"/> Monitoring Well	<input checked="" type="checkbox"/> Piezometer	
Equipment d50 tracked drilling	Groundwater Elevation No Ground Water Detected	Revision By:	Date	<input type="checkbox"/> Abandoned and backfilled	<input type="checkbox"/> Incinometer		
Job Location	Remarks: BMM 221 24hr check: 24.0'					Sampling Method Standard Split Spoon I California Sampler II	



General Notes

Graphic Symbol

USCS SYMBOL

Recovery (ft)

Depth (ft)

Blow per (ft) (N-Value)

Job Number 10958

Job Name Osborn

Logged By SMC

Boring: B - 8

Page 2 of 2

Moisture Content (%)

B8, 20.0 ft



USCS SYMBOL SM, SM

Recovery (ft) FR

Depth (ft) 20, 16, 19, 25, 1, 2, 3, 4

44

Brownish Gray Silty SAND, Dense, Moist
- Medium Grained Sand
- Lens of Sand

Monitoring Well installed

GWT 41.0 ft bgs

B8, 25.0 ft



USCS SYMBOL SP

Recovery (ft) FR

Depth (ft) 25, 10, 14, 18, 6

32

Brownish Gray Poorly Graded SAND with Silt, Dense, Wet-
- Medium to Coarse Grained Sand

End of boring at 26.5 ft bgs

7, 8, 9, 30, 1, 2, 3, 4, 35, 6, 7, 8, 9, 40, 1, 2, 3, 4, 45, 6, 7, 8, 9, 50



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Boring Log Kitsap Region Water Quality Facility Suquamish, WA

Job Number 10958	Logged By SMC	Subsurface Exploration Drilling		Ground Surface Elevation 44	Boring: B - 9	Page 1 of 2
		Start Date Dec 22, 2020	End Date Dec 22, 2020			

General Notes	Graphic Symbol	USCS SYMBOL	Recovery (in) Depth (ft)	Blow per (ft) (N-Value)	Surface Conditions:	Moisture Content (%)
B3, 2.5 ft		SM	1		Fill : Dark Brown Silty SAND, Very Loose, Wet - Fine Grained Sand - Trace to No Organics	
			2			
			3	2		
			4	2		
			5	1		
			6	3		
			7			
B3, 5.0 ft		SM	8		Native: Grayish Brown Silty SAND, medium dense, Wet - Fine to Medium Grained Sand	
			9			
			10	2		
			11	2		
			12	5		
			13	7		
			14			
B3, 7.5 ft		SM	15	4	Native: Grayish Brown Silty SAND, medium dense, Wet - Fine to Medium Grained Sand	
			16	10		
			17	14		
			18	24		
			19			
			20			
			21			
B3, 10.0 ft		SM	22	15	- At 10', Becomes Dense, Water Bearing	
			23	19		
			24	21		
			25	40		
			26			
			27			
			28			
B3, 12.5 ft		SM	29	20	At 12.5', Grades to Gray, Becomes Very Dense and moist - Trace to No Gravel	
			30	34		
			31	44		
			32	78		
			33			
			34			
			35			
B3, 15.0 ft		SM	36	45	At 15', Becomes Moist	
			37	44		
			38	50		
			39	50-4"		
			40			
			41			
			42			
B3, 20.0 ft		SM	43		Continued on Page 2	
			44			
			45			
			46			
			47			
			48			
			49			

Start Time 1220	End Time 1320	Hammer Type 140 lb Manual with cats head	Drawn By SMC	Date Feb 6, 2017	<input type="checkbox"/> Hole Completion <input type="checkbox"/> Monitoring Well <input checked="" type="checkbox"/> Piezometer <input type="checkbox"/> Abandoned and backfilled <input type="checkbox"/> Inclinator
Drilling Contractor Advance Drill	Operators Name Omn	Drilling and sampling Method Standard Split Spoon	Checked By WRJ	Date	
Equipment d50 tracked drilling	Groundwater Elevation No Ground Water Detected		Revision By:	Date	
Job Location					
Remarks XXX					Sampling Method Standard Split Spoon I California Sampler II



General Notes

Graphic Symbol

USCS SYMBOL

Recovery (ft)

Depth (ft)

Blow per (ft) (N-Value)

Job Number 10958

Job Name Kitsap Water Facility

Logged By SMC

Boring B - 9

Page 2 of 2

Moisture Content (%)

B3, 20.0 ft

18"

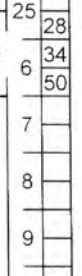


50-5"

Gray Silty SAND, Very Dense, Moist
- Trace to No Gravel
- Fine to Medium Grained Sand

B3, 25.0 ft

18"

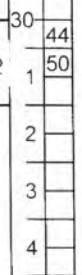


50-3"

At 25', Increase in Coarse Grained Sand, Becomes Water Bearing

B3, 30.0 ft

18"



50-6"

At 30', Lens of Silt/Clay, Decrease in Coarse Sand Content
- Increase in Gravel Content

B3, 35.0 ft

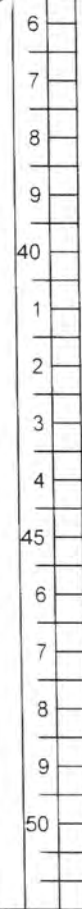
6"



At 35', Increase in Coarse Sand Content

50-6"

End of boring at 35.5 ft bgs





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Boring Log

Kitsap Region Water Quality Facility
 Suquamish, WA

Job Number 10958	Logged By SMC	Subsurface Exploration Drilling		Ground Surface Elevation 41.24	Boring B - 10	Page 1 of 2
		Start Date Dec 22, 2020	End Date Dec 22, 2020			

General Notes	Graphic Symbol	USCS SYMBOL	Recovery (in) Depth (ft)	Blow per (ft) (N-Value)	Surface Conditions	Moisture Content (%)
B1, 2.5 ft			1 2 3 4	8 14 24 38	Brownish Gray Silty SAND, Medium Dense to Dense, Moist - Fine to Medium Grained Sand	
B1, 5.0 ft			5 6	13 38	- 24 hr check of Piezo subsurface Water at 4.0' At 5', Becomes Dense to Very Dense	
B1, 7.5 ft			7 8	33 50	At 7.5', Grades to Gray, Becomes Very Dense - Trace to No Gravel	
B1, 10.0 ft		SM	9 10 11	50-5" 34 50		
B1, 12.5 ft			12 13 14	50-6" 33 50	Monitoring Well installed	
B1, 15.0 ft			15 16	50-4" 33 50		
B1, 20.0 ft			17 18 19 20	50-6"	betonite backfilled 15 feet to bottom of boring	

Continued on Page 2

Start Time 0900	End Time 1000	Hammer Type 140 lb Manual with cats head	Drawn By: SMC	Date DEC 29, 2020
Drilling Contractor Advance Drill	Operators Name Orin	Drilling and sampling Method Standard Split Spoon	Checked By: WRJ	Date
Equipment d50 tracked drilling	Groundwater Elevation No Ground Water Detected		Revision By:	Date

Hole Completion	
<input type="checkbox"/>	Monitoring Well
<input checked="" type="checkbox"/>	Piezometer
<input type="checkbox"/>	Abandoned and backfilled
<input type="checkbox"/>	Inclinometer

Job Location

Remarks:
 24 hr check of Piezo (BMM 248): Water at 4.0'

Sampling Method	
Standard Split Spoon	I
California Sampler	II



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Job Number 10958	Job Name Kitsap Water Facility	Logged By SMC	Boring: B - 10
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Page 2 of 2

Moisture Content (%)

General Notes	Graphic Symbol	USCS SYMBOL	Recovery (ft)	Depth (ft)	Blow per (ft) (N-Value)	Soil Description		Moisture Content (%)
						Soil Type	Notes	
B1, 20.0 ft		SM	18"	20	38	50-4"	Gray Silty SAND, Very Dense, Moist - Trace to No Gravel - Fine to Medium Grained Sand	
				1	50			
				2				
				3				
				4				
B1, 25.0 ft			12"	25	38	50-6"	At 25', Increase in Silt Content	
				6	50			
				7			End of boring at 26.0 ft bgs	
				8				
				9				
				30				
				1				
				2				
				3				
				4				
				35				
				6				
				7				
				8				
				9				
				40				
				1				
				2				
				3				
				4				
				45				
				6				
				7				
				8				
				9				
				50				



Job Number
10958

Job Name
Kitsap Water Facility

Logged By
SMC

Boring:
B - 10

Page
2 of 2

Moisture
Content
(%)

General Notes	Graphic Symbol	USCS SYMBOL	Recovery (ft)	Depth (ft)	Blow per (ft) (N-Value)	Soil Description	Moisture Content (%)
B1, 20.0 ft		SM	18"	20 1 2 3 4	50-4"	Gray Silty SAND, Very Dense, Moist - Trace to No Gravel - Fine to Medium Grained Sand betonite backfilled 15 feet to bottom of boring	
B1, 25.0 ft			12"	25 6	50-6"	At 25', Increase in Silt Content	
						End of boring at 26.0 ft bgs	



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Boring Log Kitsap Region Water Quality Facility Suquamish, WA

Job Number 10958	Logged By SMC	Subsurface Exploration Drilling		Ground Surface Elevation 38.3	Boring B-11	Page 1 of 2
		Start Date Dec 22, 2020	End Date Dec 22, 2020			

General Notes	Graphic Symbol	USCS SYMBOL	Recovery (in)	Depth (ft)	Blow per (ft) (N-Value)	Surface Conditions	Moisture Content (%)
B2, 2.5 ft				1		Brownish Gray Silty SAND, Very Dense, Moist - Fine to Medium Grained Sand	
				2			
			8"	3	17		
				4	38	50-5"	
				5	50		
B2, 5.0 ft				6	24	At 5', Grades to Gray, Trace to No Gravel	
			4"	7	35		
				8	50	50-4"	
B2, 7.5 ft				9			
			18"	10	37		
		SM		11	50	50-4"	
B2, 10.0 ft				12	48	Description change at 10'	
			10"	13	50	50-6"	
B2, 12.5 ft				14			
			10"	15	40	At 12.5', Increase in Silt Content	
				16	50	50-5"	
B2, 15.0 ft				17			
			12"	18	38	At 15', Decrease in Silt Content	
				19	50	50-5"	
B2, 20.0 ft				20		Continued on Page 2	

Start Time 1040	End Time 1140	Hammer Type 140 lb Manual with cats head	Drawn By SMC	Date Feb 6, 2017	Hole Completion <input type="checkbox"/> Monitoring Well <input checked="" type="checkbox"/> Piezometer <input type="checkbox"/> Abandoned and backfilled <input type="checkbox"/> inclinometer
Drilling Contractor Advance Drill	Operators Name Ornn	Drilling and sampling Method Standard Spit Spoon	Checked By WRJ	Date	
Equipment d50 tracked drilling	Groundwater Elevation No Ground Water Detected		Revision By	Date	
Job Location					Sampling Method Standard Spit Spoon I California Sampler II
Remarks					



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General Notes

Graphic Symbol

USCS SYMBOL

Recovery (ft)
Depth (ft)

Blow per (ft)
(N-Value)

Job Number
10958

Job Name
Kitsap Water Facility

Logged By
SMC

Boring
B - 11

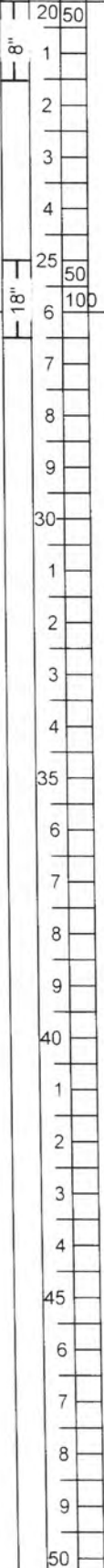
Page
2 of 2

Moisture Content (%)

B2, 20.0 ft



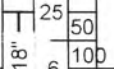
SM



50-6"

Gray Silty SAND, Very Dense, Moist
- Trace Gravel
- Fine to Medium Grained Sand

B2, 25.0 ft

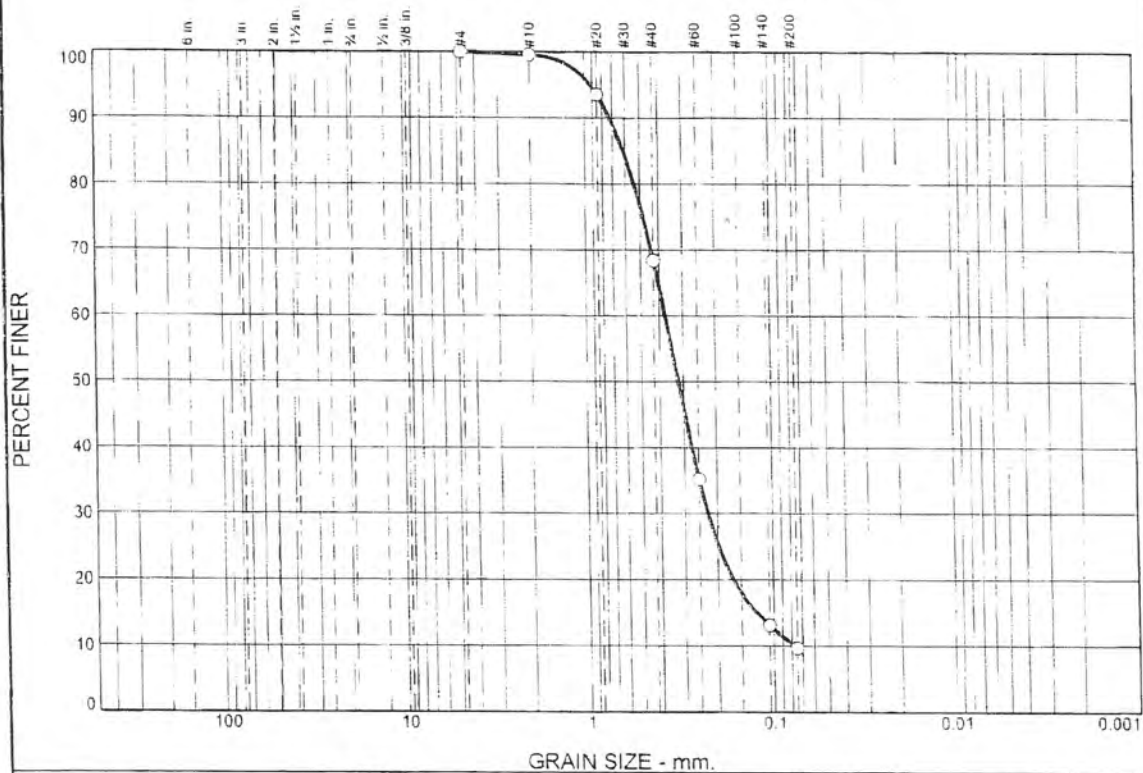


100-2"

At 25', Increase in Gravel Content
- Decrease in Medium Grained Sand

End of boring at 26.0 ft bgs

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines
	Coarse	Fine	Coarse	Medium	Fine	
0.0	0.0	0.0	0.5	31.1	58.7	9.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.5		
#20	93.6		
#40	68.4		
#60	35.2		
#140	13.1		
#200	9.7		

Material Description

poorly graded sand with silt

Atterberg Limits
 PL= NP LL= NV PI=

Coefficients
 D₉₀= 0.7229 D₈₅= 0.6115 D₆₀= 0.3709
 D₅₀= 0.3189 D₃₀= 0.2246 D₁₅= 0.1246
 D₁₀= 0.0775 C_u= 4.78 C_c= 1.75

Classification
 USCS= SP-SM AASHTO= A-3

Remarks

(no specification provided)

Sample Number: B-2 Depth: 12.5

Date:

Phoenix Soil Research

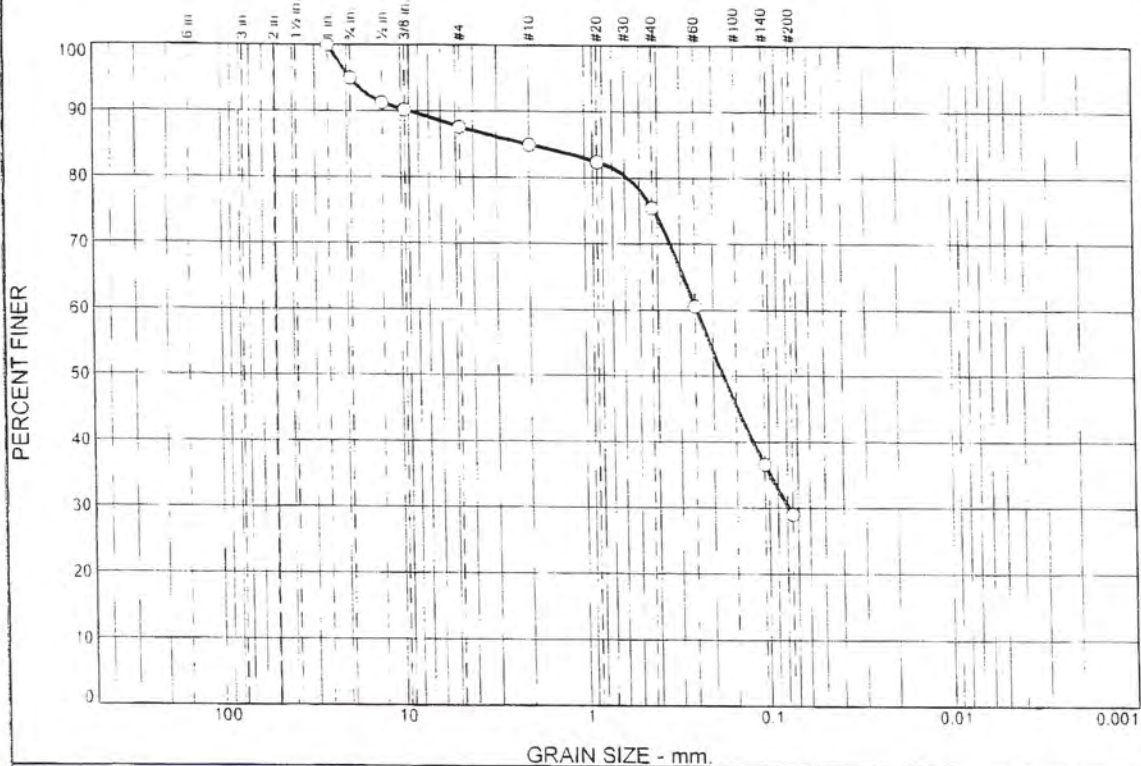
Kingston, WA

Client: N.L. Olson & Associates
 Project: Suquamish Stormwater Facility 10958

Project No: PSR20-15-0902

Figure 1

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines
	Coarse	Fine	Coarse	Medium	Fine	
		7.3	2.6	9.5	46.5	29.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
0.75	94.9		
0.5	91.2		
0.375	90.2		
#4	87.6		
#10	85.0		
#20	82.4		
#40	75.5		
#60	60.5		
#140	36.6		
#200	29.0		

Material Description
silty sand

Atterberg Limits
 PL= NP LL= NV PI=

Coefficients
 D₉₀= 9.0550 D₈₅= 2.0367 D₆₀= 0.2457
 D₅₀= 0.1763 D₃₀= 0.0785 D₁₅=
 D₁₀= C_u= C_c=

Classification
 USCS= SM AASHTO= A-2-4(0)

Remarks

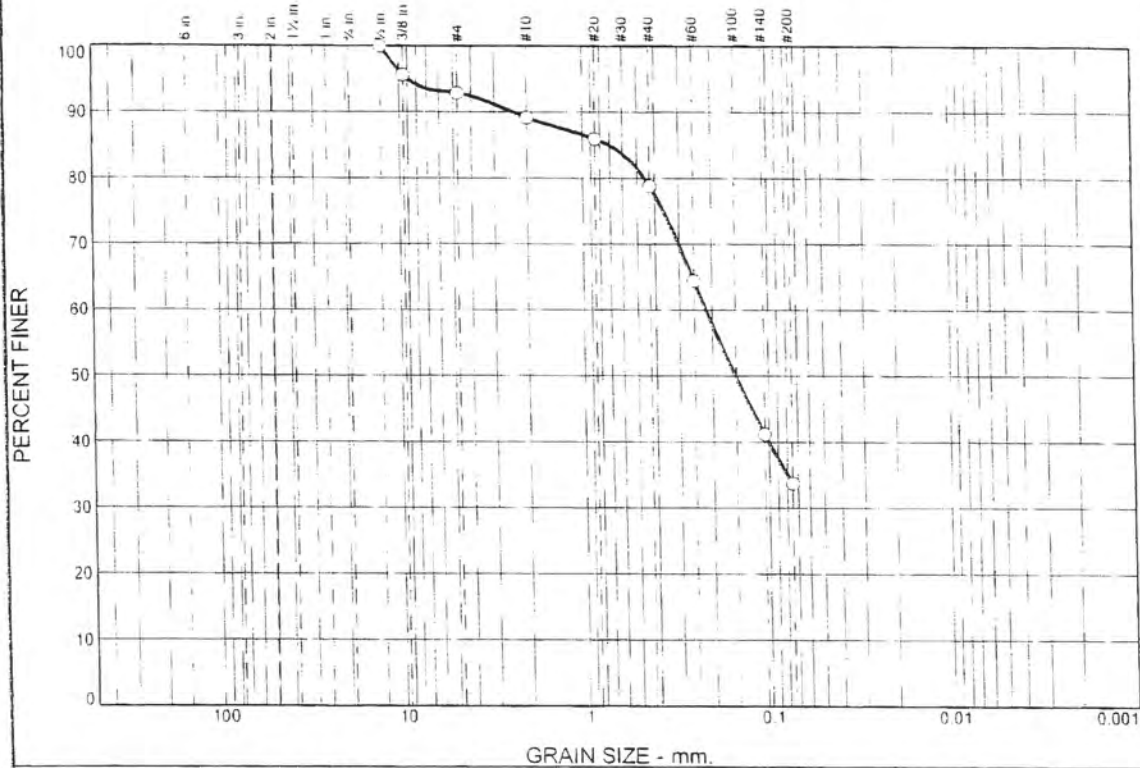
(no specification provided)

Sample Number: B-2 Depth: 15.0

Date:

Phoenix Soil Research Kingston, WA	Client: N.L. Olson & Associates Project: Suquamish Stormwater Facility 10958 Project No: PSR20-15-0902
Figure 2	

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines
	Coarse	Fine	Coarse	Medium	Fine	
0.0	0.0	7.1	3.8	10.3	45.1	33.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.5	100.0		
0.375	95.6		
#4	92.9		
#10	89.1		
#20	85.9		
#40	78.8		
#60	64.4		
#140	41.2		
#200	33.7		

Material Description

silty sand

PL= NP **Atterberg Limits** LL= NV PI=

Coefficients

D₉₀= 2.3954 D₈₅= 0.7111 D₆₀= 0.2154
D₅₀= 0.1510 D₃₀= D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SM AASHTO= A-2-4(0)

Remarks

(no specification provided)

Sample Number: B-6 Depth: 15.0

Date:

Phoenix Soil Research

Client: N.L. Olson & Associates

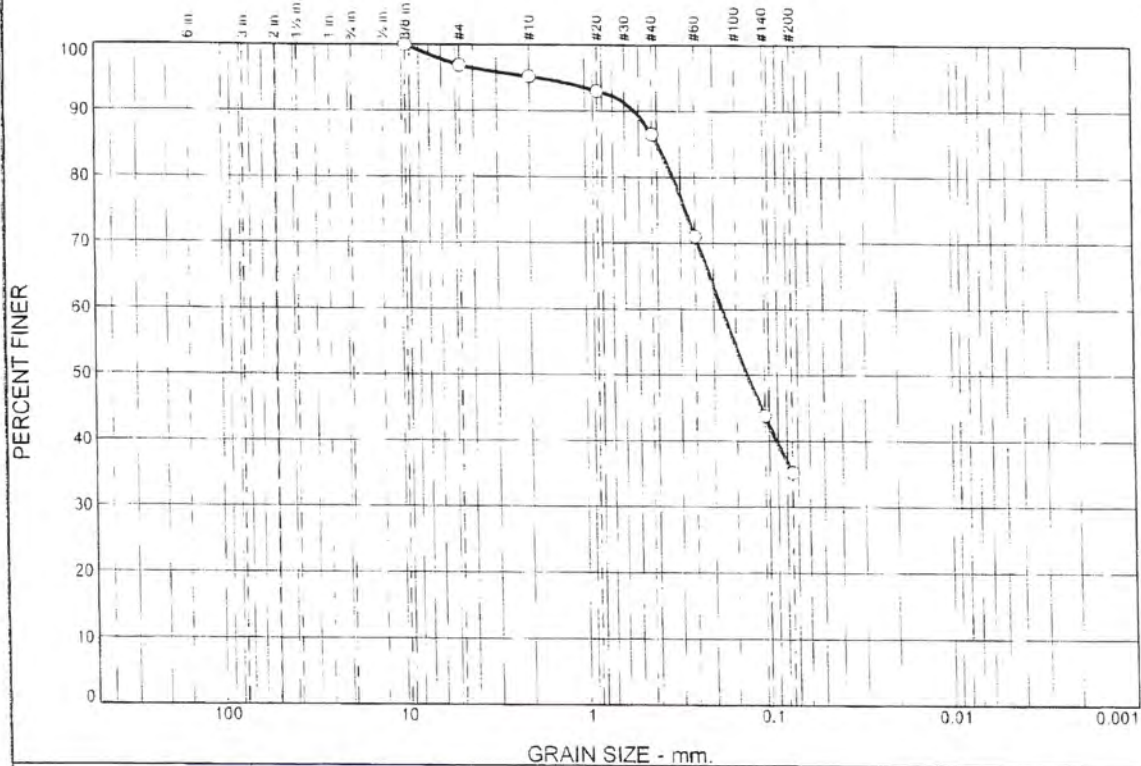
Project: Suquamish Stormwater Facility 10958

Kingston, WA

Project No: PSR20-15-0902

Figure 3

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines
	Coarse	Fine	Coarse	Medium	Fine	
0.0	0.0	3.1	1.7	8.7	51.3	35.2

SIEVE SIZE	PERCENT FINER	SPEC. PERCENT	PASS? (X=NO)
0.375	100.0		
#4	96.9		
#10	95.2		
#20	93.0		
#40	86.5		
#60	71.0		
#140	43.8		
#200	35.2		

Material Description
silty sand

Atterberg Limits
 PL= NP LL= NV PI=

Coefficients
 D₉₀= 0.5282 D₈₅= 0.3966 D₆₀= 0.1800
 D₅₀= 0.1314 D₃₀= D₁₅=
 D₁₀= C_u= C_c=

Classification
 USCS= SM AASHTO= A-2-4(0)

Remarks

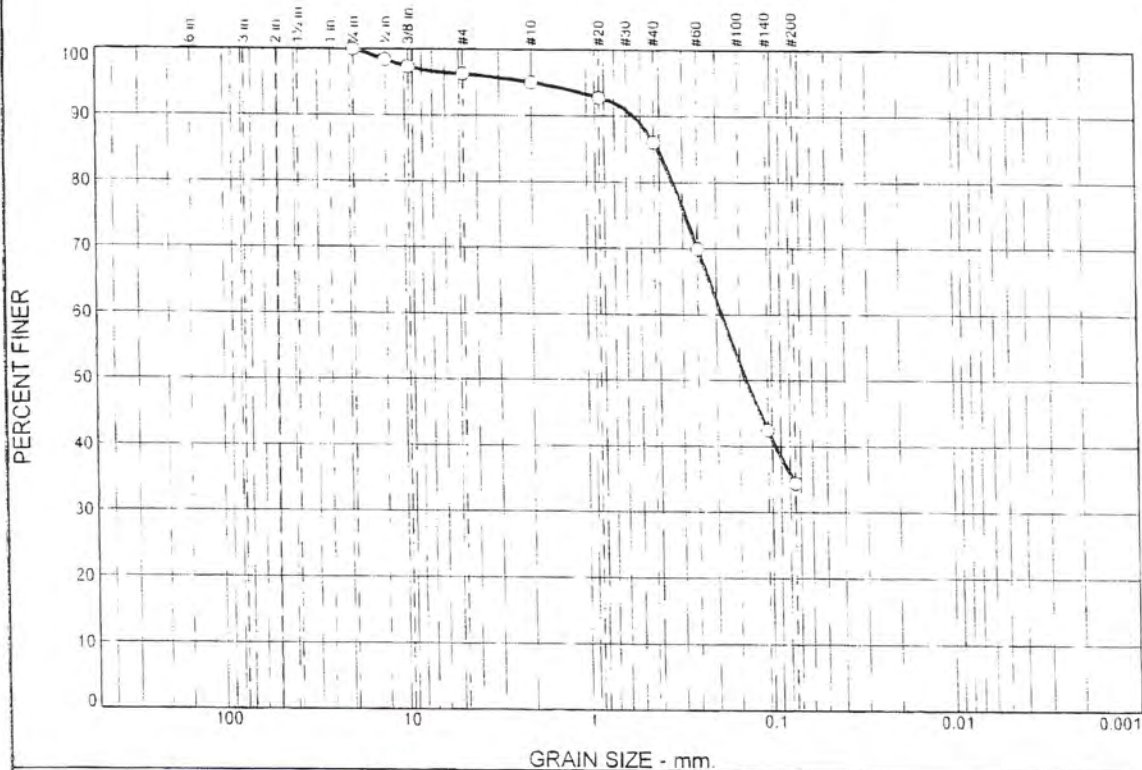
(no specification provided)

Sample Number: B-7 Depth: 2.5

Date:

Phoenix Soil Research Kingston, WA	Client: N.L. Olson & Associates Project: Suquamish Stormwater Facility 10958 Project No: PSR20-15-0902
Figure 4	

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines
	Coarse	Fine	Coarse	Medium	Fine	
0.0	0.0	3.7	1.3	9.0	51.6	34.4

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.75	100.0		
0.5	98.4		
0.375	97.3		
#4	96.3		
#10	95.0		
#20	92.7		
#40	86.0		
#60	70.0		
#140	42.4		
#200	34.4		

Material Description

silty sand

Atterberg Limits
 PL= NP LL= NV PI=

Coefficients
 D₉₀= 0.5466 D₈₅= 0.4063 D₆₀= 0.1877
 D₅₀= 0.1383 D₃₀= D₁₅=
 D₁₀= C_u= C_c=

Classification
 USCS= SM AASHTO= A-2-4(0)

Remarks

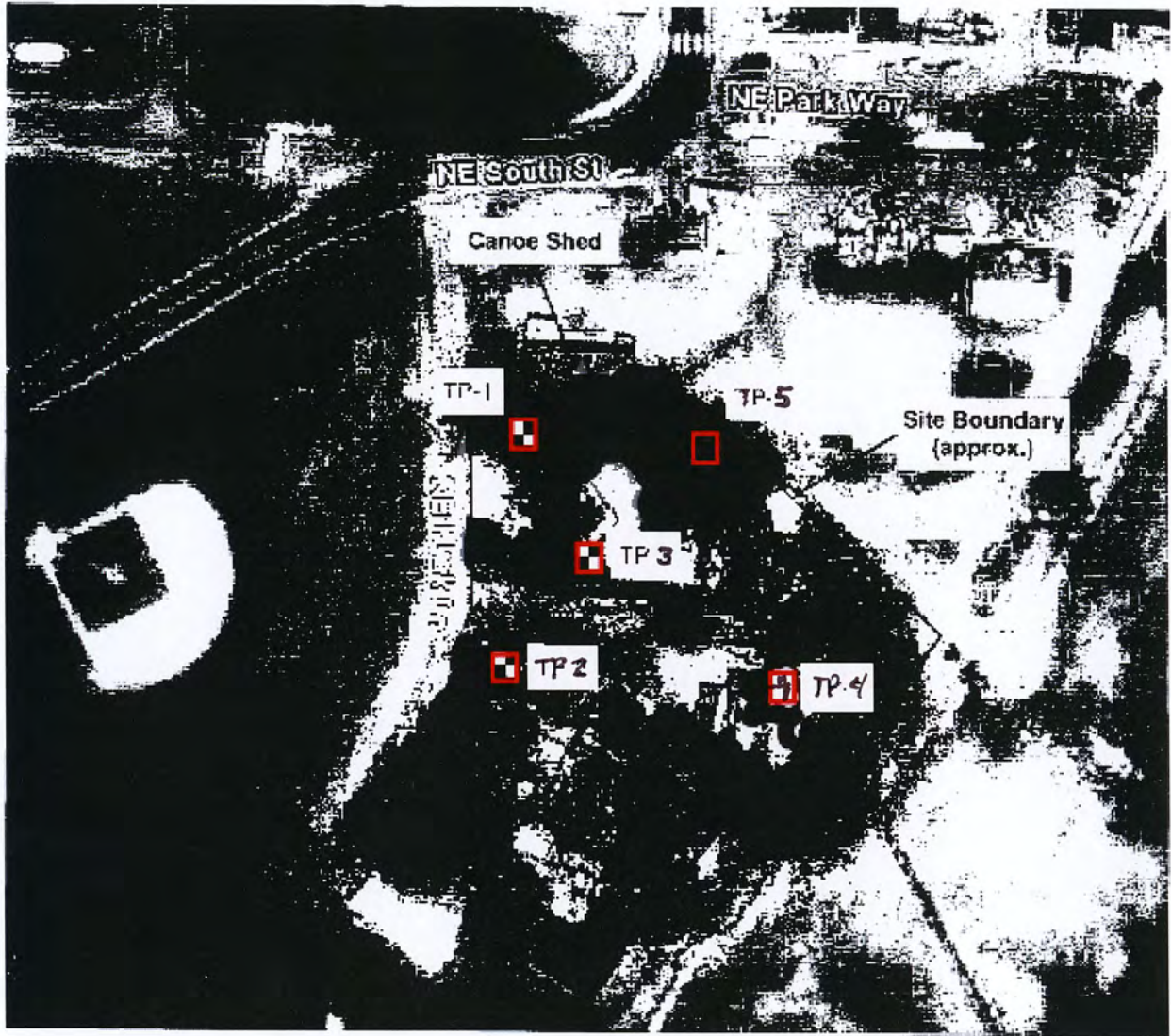
* (no specification provided)

Sample Number: B-8 Depth: 10.0

Date:

APPENDIX B

PSI AND HWA'S TEST PIT AND BORING LOGS AND LABORATORY DATA



LEGEND

Approximate Test Pit Location

TEST PIT LOCATION SKETCH

Base Source: Google Earth, 2007

Scale: Not to Scale

Report No.: 678-75001-01

Date: February 2007

Drawn by: TDH

Checked by: Trl

Squamish Community Center
Hyak Lane, Downtown Squamish
Squamish, Washington

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Figure 2

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Test Pit TP-1

Depth (feet)	USES	Description	Sample Depth (feet)	Moisture Content (%)
0-1.0	OL	Detritus and Debris. Very dark brown, organic silt, damp, loose.	N/A	
1.0-2.0	SP	Light brown, damp, loose, well-sorted fine sand	2.0	20.0
2.0-5.5	SP	Brown, damp, v. loose, well-sorted fine sand. GW at about 4.0 ft.	4.0	23.1
5.5-7.5	SP	Gray, very damp (some saturated), well-sorted sand.	7.0	21.8
7.5-9.0	SP	Grayish, damp, very loose well sorted sand, becoming siltier downhole towards 9 ft bgs.	9.0	24.8
9.0-10.0	SP-SM	Brown-gray, very damp, very loose, gravelly silty sand	10.2	17.8
10.0-12.3	SP-SM	Light brown to grayish brown, very damp to saturated in places, very loose sand with some silt and gravel. Lots of caving.	12.3	18.8

NOTES: NW corner of proposed building.
 Test pit completed to 12.3 ft on 01.08.07.
 Groundwater seepage observed at 4 ft bgs.
 Caving occurred.

Report No.: 578-75001-01

Date: February 2007

Drawn by: RN

Checked by: TDH

Log of Test Pits
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 Suquamish, Washington

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Figure A-1 (Page 1 of 5)

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Test Pit TP-2

Depth (feet)	uses	Description	Sample Depth (feet)	Moisture Content (%)
0-1.0	OL	Detritus and Debris. Very dark brown, organic silt, damp, loose.	N/A	
1.0-2.0	SP-SM	Brown, damp, medium dense, loose silty sand with some topsoil/fill nearer surface.	1.5	13.4
2.0-5.5	SP	Brown, damp, medium dense silty sand w/some gravel and organic material. GW at 4.0 feet	2.2	24.5
5.5-7.5	SM to SP	Brown to dark brown, very damp to saturated w/ depth silty sand w/minor gravel. Heavy organic component at 4.5-5.2 feet.	5.0	29.0
7.5-9.0	SM	Gray, very damp, very loose sand and silty sand. Thin gravel lense at 6.0 ft. Heavy caving at this depth.	6.0	23.9
9.0-10.0	SM	Gray, damp to very damp, medium dense silty sand, very fine grained, very minor clay component (no thread).	7.5	24.0
10.0-11.5	MUSM to SP w/ depth	Gray, damp to very damp, medium dense silt and silty sand. Well-sorted sands @ bottom of hole.	11.5	19.8

NOTES SW corner of proposed building.
 Test pit completed to 11.5 ft on 01/08/07.
 Groundwater seepage observed at 4.0 ft bgs
 Heavy caving occurred.

CJ

Report No.: 578-75001-01

Date: February 2007

Drawn by: RN

Checked by: TDH

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Figure A-1 (Page 2 of 5)

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Test Pit TP-3

Depth (feet)	USES	Description	Sample Depth (feet)	Moisture Content (%)
0-1.0	OL	Detritus and Debris. Very dark brown, organic silt, damp, loose.	N/A	
1.0-2.5	SM to SP	Light brown, damp, very loose, silty sand and sand w/minor gravel component.	2.5	17.5
2.0-6.5	SP	Very light brown to gray, damp, very loose, well-sorted fine sands. GW at about 5.0 ft.	6.5	22.8
6.5-8.5	SM	Light brown, damp to very damp, loose, silty sand with minor gravel/cobble component.	8.2	22.5
8.5-10.5	SP	Gray, very damp to saturated, loose, well sorted sand with minor silt component. Heavy caving.	9.0	21.4
10.5-11.5	SP	Gray, very damp to saturated, loose, well-sorted sand w/minor silt. Caving becomes too heavy to continue.	11.5	20.6

NOTES: Near center of proposed building.
 Test pit completed to 11.5 ft on 01/08/07
 Groundwater seepage at 5.0 ft bgs
 Heavy caving occurred.

Report No.: 578-75001-01

Date: February 2007

Log of Test Pits
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Figure A-1 (Page 3 of 5)

Test Pit TP-4

Depth (feet)	uses	Description	Sample Depth (feet)	Moisture Content (%)
0-1.0	OL	Detritus and Debris. Very dark brown, organic silt, damp, loose.	N/A	
1.0- 2.5	SP-SM	Brown, very damp, loose, well sorted sand w/silt component, very minor gravel near surface, likely fill materials.	2.0	18.9
2.0-6.5	SP-SM	Grayish brown, damp medium dense, well sorted sand w/minor gravel and silt component. GW at 3.5 feet bgs. but seepage is slower than other pits.	4.8	24.0
6.5-9.0	SM to SP	Brown, turning to gray downhole, damp to very damp, loose to very loose, well sorted sand with siltier component nearer surface.	7.5 to 9.0 (caving and sloughing)	19.9
9.0-10.5	SP	Gray, damp, loose, well sorted sand with minor cobble and gravel component. Heavy caving.	9.2	22.9
10.5-11.5	SP	Gray, very damp to saturated, medium dense, well-sorted sand w/minor gravel and cobbles. Caving becomes too heavy to continue.	11.5	9.8

NOTES: In parking area beyond the SE corner of proposed building.
 Test pit completed to 11.5 ft on 01/08/07.
 Groundwater seepage at 3.5 ft bgs.
 Heavy caving occurred.

Report No.: 578-75001-01	<p align="center"> Log of Test Pits Suquamish Community Center Hyak Lane, Downtown Suquamish Suquamish, Washington </p>	<p align="center"> <i>Information</i> <i>To Build On</i> <i>Engineering • Consulting • Testing</i> </p>
Date: February 2007		
Drawn by: RN		
Checked by: TDH		
		Figure A-1 (Page 4 of 5)

Test Pit TP-5

Depth (feet)	uses	Description	Sample Depth (feet)	Moisture Content (%)
0-1.0	OL	Detritus and Debris. V. dark brown, organic silt, damp, loose.	N/A	
1.0-2.0	SM to SP	Brown, damp, loose, silty sand, grading to well-sorted sand downward.	2.0	16.1
2.0-5.5	SP-SM	Light brown, damp, well sorted sand with minor silt component and v. minor cobbles and gravel. Some GW at about 3 feet bgs.	4.5	18.2
5.5- 7.5	SP	Light brown, damp, loose, well sorted sand, common to other pits.	7.5	21.2
7.5-9.0	SP	Same as previous - No sample taken.		
9.0-10.0	SP	Gray, damp to v. damp, v. loose well sorted sand with minor gravelly/silty lense- some cobbles.	9.5	13.2
10.0-12.5	SP-SM	Gray, damp, loose, well sorted sand w/silt component and v. minor clay component. More silty than other samples above.	12.5	20.8

NOTES: Near NE corner of proposed building.
 Test pit completed to 12.5 ft on 01/08/07.
 Groundwater seepage at 3.0 ft bgs.
 Heavy caving occurred.

Report No.: 578-75001-01

Date: February 2007

Drawn by: RN

Checked by: TDH

**Log of Test Pits
 Suquamish Community Center**

Hyak Lane, Downtown Suquamish
 Suquamish, Washington

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Figure A-1 (Page 5 of 5)

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APPENDIX B

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APPENDIX A

FIELD INVESTIGATION

All boreholes were drilled by Holt Drilling Inc. using a truck mounted Mobile B-61 rig. For the over-water borings the drill rig operated from a barge operated by Caricos Construction of Port Gamble, Washington.

Over-Water Explorations

On June 7 and 8, 2006, HWA undertook barge-mounted, over-water, exploration borings, designated BH-1 through BH-3, at two locations in the approximate vicinity of the proposed pier alignment. Borings BH-1 and BH-3 were located within about 20 feet of one another at a more seaward location along the approximate pier alignment. BH-1 was terminated only 20 feet below the mudline because the barge had drifted excessively. Boring BH-2 was drilled shoreward along the approximate alignment of the new pier. BH-2 and BH-3 were both advanced to a depth of 75 feet below the mudline.

Upland Exploration

On June 28, 2006, HWA observed drilling of a fourth boring, BH-4, with a truck-mounted rig in the vicinity of the upland end of the pier at the end of NE Parkway. BH-4 was drilled to a depth of 75 feet below ground surface.

For all samples, Standard Penetration Test (SPT) sampling was performed using a 2-inch outside diameter split-spoon sampler and a 140-pound automatic hammer. During the test, a sample was obtained by driving the sampler 18 inches into the soil with the hammer free-falling 30 inches. The number of blows required for each 6-inches of penetration was recorded. This resistance, or N-value, provides an indication of the relative density of granular soils and the relative consistency of cohesive soils.

Each of the explorations was completed under the full-time observation of an HWA geologist. HWA personnel recorded pertinent information including soil/rock sample depths, stratigraphy, and soil/rock engineering characteristics as the explorations were excavated. Soil was classified in general accordance with the classification system described in Figure A-1, which also provides a key to the exploration log symbols. The summary logs are presented on Figures A-2 through A-5.

The stratigraphic contacts shown on the individual logs represent the approximate boundaries between soil types. The actual transitions may be more gradual.

RELATIVE DENSITY OR CONSISTENCY VERSUS SPT N-VALUE

COHESIONLESS SOILS			COHESIVE SOILS		
Density	N (blows/ft)	Approximate Relative Density (%)	Consistency	N (blows/ft)	Approximate Undrained Shear Strength (psf)
Very Loose	0 to 4	0 - 15	Very Soft	0 to 2	<250
Loose	4 to 10	15 - 35	Soft	2 to 4	250 - 500
Medium Dense	10 to 30	35 - 65	Medium Stiff	4 to 8	500 - 1000
Dense	30 to 50	65 - 85	Stiff	8 to 15	1000 - 3000
Very Dense	over 50	85 - 100	Very Stiff	15 to 30	2000 - 4000
			Hard	over 30	>4000

TEST SYMBOLS

- %F Percent Fines
- AL Atterberg Limits: PL = Plastic Limit
LL = Liquid Limit
- CBR California Bearing Ratio
- CN Consolidation
- DD Dry Density (pcf)
- DS Direct Shear
- GS Grain Size Distribution
- K Permeability
- MD Moisture/Density Relationship (Proctor)
- MR Resilient Modulus
- PID Photoionization Device Reading
- PP Pocket Penetrometer
Approx. Compressive Strength (tsf)
- SG Specific Gravity
- TC Triaxial Compression
- TV Torvane
Approx. Shear Strength (tsf)
- UC Unconfined Compression

USCS SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		GROUP DESCRIPTIONS	
Coarse Grained Soils	Gravel and Gravelly Soils	Clean Gravel (little or no fines)	GW Well-graded GRAVEL
		Gravel with Fines (appreciable amount of fines)	GP Poorly-graded GRAVEL
	More than 50% of Coarse Fraction Retained on No. 4 Sieve	Clean Sand (little or no fines)	GM Silty GRAVEL
		Sand with Fines (appreciable amount of fines)	GC Clayey GRAVEL
More than 50% Retained on No. 200 Sieve Size	Sand and Sandy Soils	Clean Sand (little or no fines)	SW Well-graded SAND
		Sand with Fines (appreciable amount of fines)	SP Poorly-graded SAND
	50% or More of Coarse Fraction Passing No. 4 Sieve	Silt and Clay	SM Silty SAND
		Silt and Clay	SC Clayey SAND
Fine Grained Soils	Silt and Clay	Liquid Limit Less than 50%	ML SILT
		Liquid Limit 50% or More	CL Lean CLAY
	50% or More Passing No. 200 Sieve Size	Liquid Limit Less than 50%	OL Organic SILT/Organic CLAY
		Liquid Limit 50% or More	MH Elastic SILT
Highly Organic Soils	Silt and Clay		CH Fat CLAY
			OH Organic SILT/Organic CLAY
			PT PEAT

SAMPLE TYPE SYMBOLS

- 2.0" OD Split Spoon (SPT) (140 lb. hammer with 30 in. drop)
- Shelby Tube
- 3-1/4" OD Split Spoon with Brass Rings
- Small Bag Sample
- Large Bag (Bulk) Sample
- Core Run
- Non-standard Penetration Test (3.0" OD split spoon)

GROUNDWATER SYMBOLS

- Groundwater Level (measured at time of drilling)
- Groundwater Level (measured in well or open hole after water level stabilized)

COMPONENT DEFINITIONS

COMPONENT	SIZE RANGE
Boulders	Larger than 12 in
Cobbles	3 in to 12 in
Gravel	3 in to No. 4 (4.75mm)
Coarse gravel	3 in to 3/4 in
Fine gravel	3/4 in to No. 4 (4.75mm)
Sand	No. 4 (4.75 mm) to No. 200 (0.074 mm)
Coarse sand	No. 4 (4.75 mm) to No. 10 (2.0 mm)
Medium sand	No. 10 (2.0 mm) to No. 40 (0.42 mm)
Fine sand	No. 40 (0.42 mm) to No. 200 (0.074 mm)
Silt and Clay	Smaller than No. 200 (0.074mm)

COMPONENT PROPORTIONS

PROPORTION RANGE	DESCRIPTIVE TERMS
< 5%	Clean
5 - 12%	Slightly (Clayey, Silty, Sandy)
12 - 30%	Clayey, Silty, Sandy, Gravelly
30 - 50%	Very (Clayey, Silty, Sandy, Gravelly)

Components are arranged in order of increasing quantities.

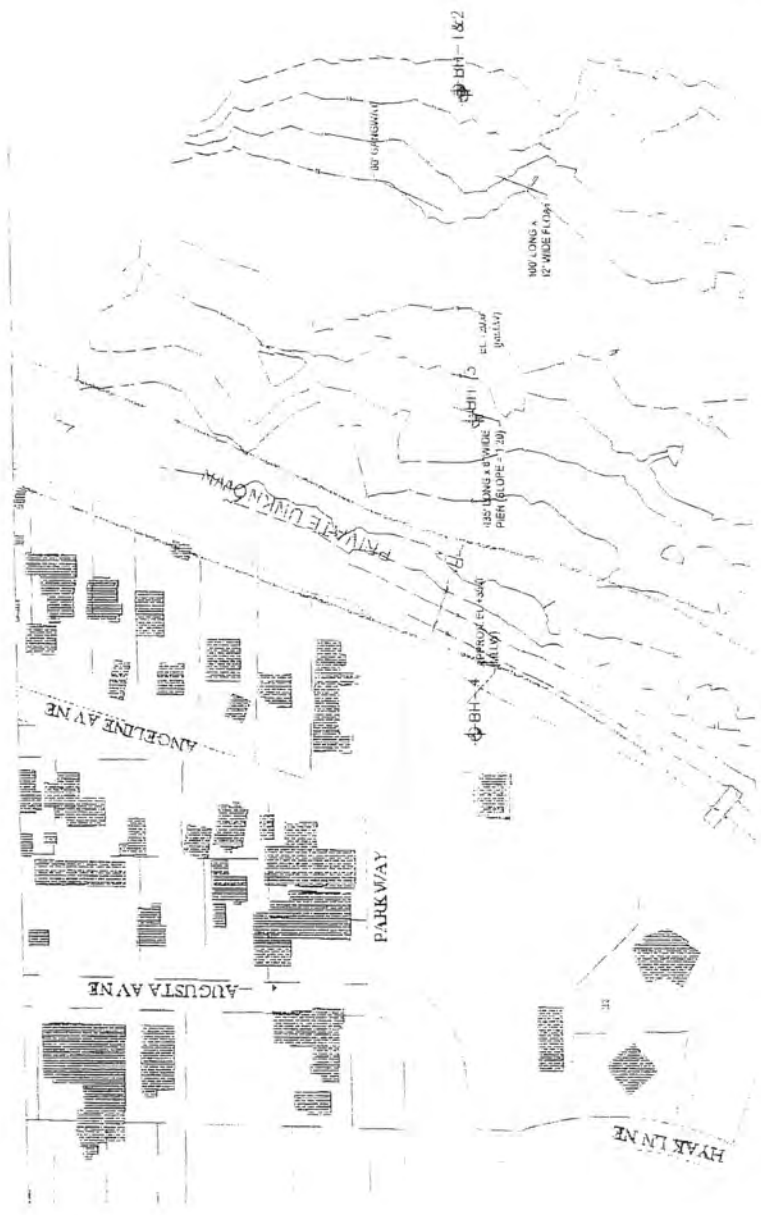
NOTES: Soil classifications presented on exploration logs are based on visual and laboratory observation. Soil descriptions are presented in the following general order:

Density/consistency, color, modifier (if any) GROUP NAME, additions to group name (if any), moisture content, Proportion, gradation, and angularity of constituents, additional comments. (GEOLOGIC INTERPRETATION)

Please refer to the discussion in the report text as well as the exploration logs for a more complete description of subsurface conditions.

MOISTURE CONTENT

DRY	Absence of moisture, dusty, dry to the touch.
MOIST	Damp but no visible water
WET	Visible free water, usually soil is below water table.



SCALE NO	2
PROJECT NO	2006 017 21
DATE	09.06.06

SITE AND EXPLORATION PLAN

**Suquamish Pier & Dock Replacement
Suquamish, Washington**



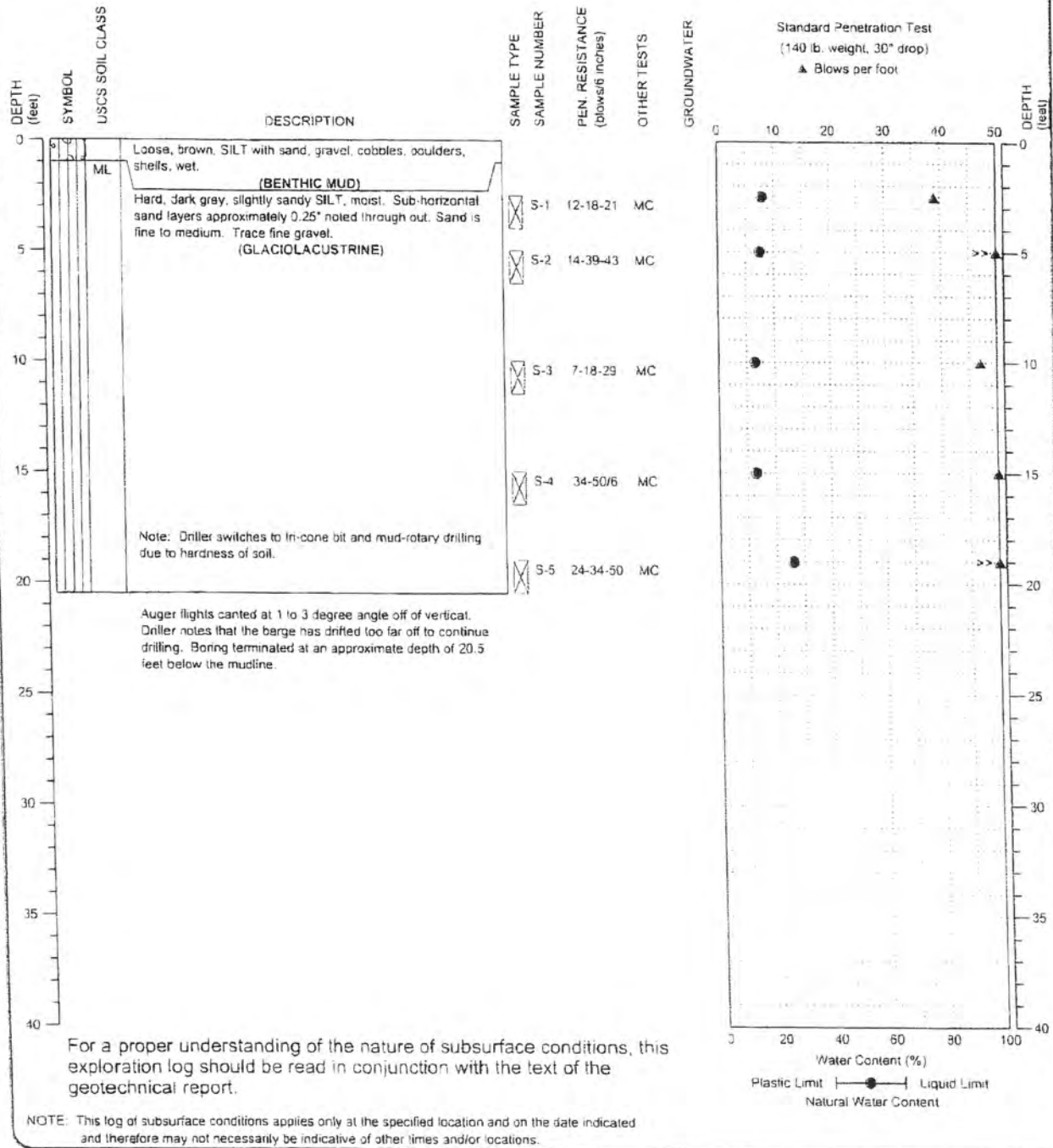
HWA GEOSCIENCES INC

LEGEND
 BH-1 BOREHOLE DESIGNATION AND APPROXIMATE LOCATION

SCALE: 1" = 100' (VERTICAL SCALE)
 HWA GEOSCIENCES INC 7500 1st Ave SW, Everett, WA 98203

DRILLING COMPANY: Hoyt Drilling, Inc.
 DRILLING METHOD: Hollow Stem Auger and Mud Rotary
 SAMPLING METHOD: SPT with automated trip hammer
 SURFACE ELEVATION: -17 ± feet

LOCATION: N270852 E1218198
 DATE STARTED: 6/7/2006
 DATE COMPLETED: 6/7/2006
 LOGGED BY: J. Speck



HWA GEOSCIENCES INC.

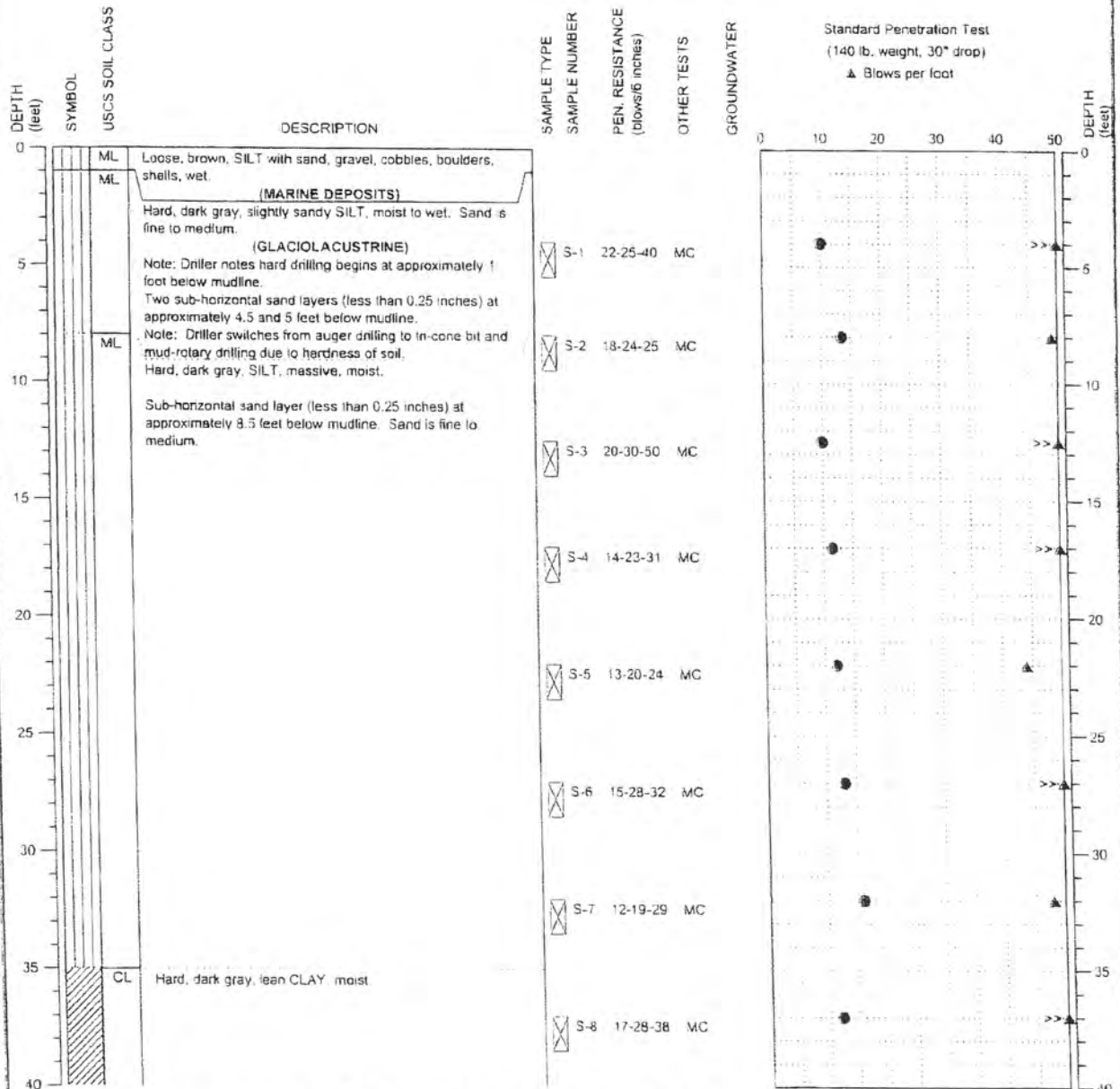
Squamish Pier and Dock Replacement
 Squamish, Washington

BORING:
 BH-1

PAGE 1 of 1

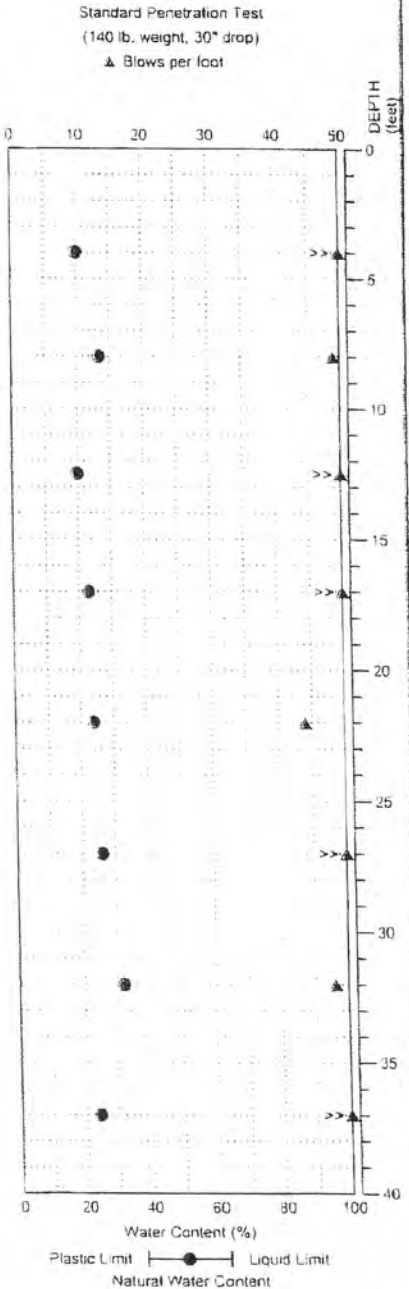
DRILLING COMPANY: Holt Drilling, Inc.
 DRILLING METHOD: Hollow Stem Auger and Mud Rotary
 SAMPLING METHOD: SPT with automated trip hammer
 SURFACE ELEVATION: -17 ± feet

LOCATION: N270862 E1217888
 DATE STARTED: 6/7/2006
 DATE COMPLETED: 6/7/2006
 LOGGED BY: J. Speck



For a proper understanding of the nature of subsurface conditions, this exploration log should be read in conjunction with the text of the geotechnical report.

NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.



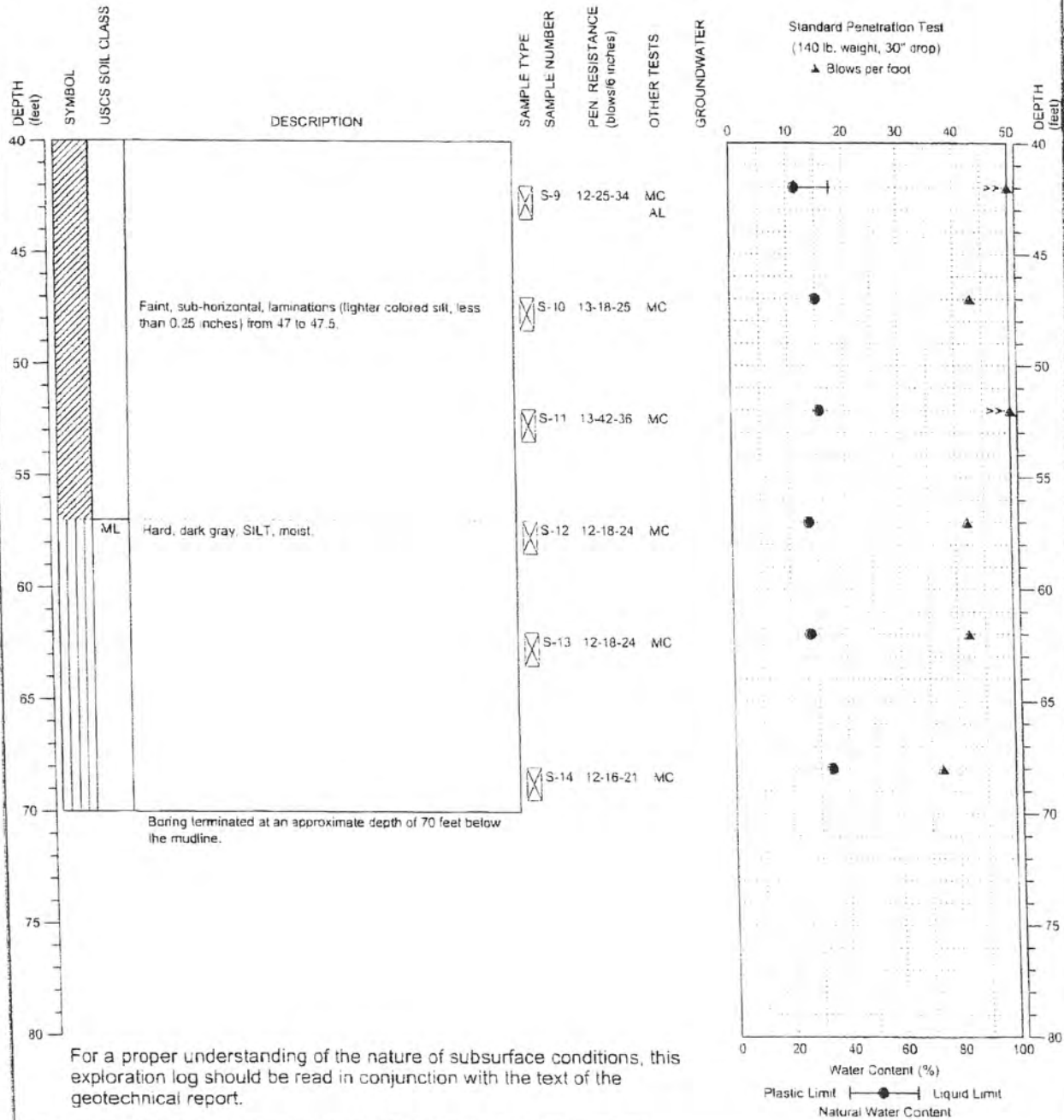
Squamish Pier and Dock Replacement
 Squamish, Washington

BORING:
 BH-2

PAGE: 1 of 2

DRILLING COMPANY: Holt Drilling, Inc
 DRILLING METHOD: Hollow Stem Auger and Mud Rotary
 SAMPLING METHOD: SPT with automated trip hammer
 SURFACE ELEVATION: -17 ± feet

LOCATION: N270862 E1217888
 DATE STARTED: 6/7/2006
 DATE COMPLETED: 6/7/2006
 LOGGED BY: J. Speck

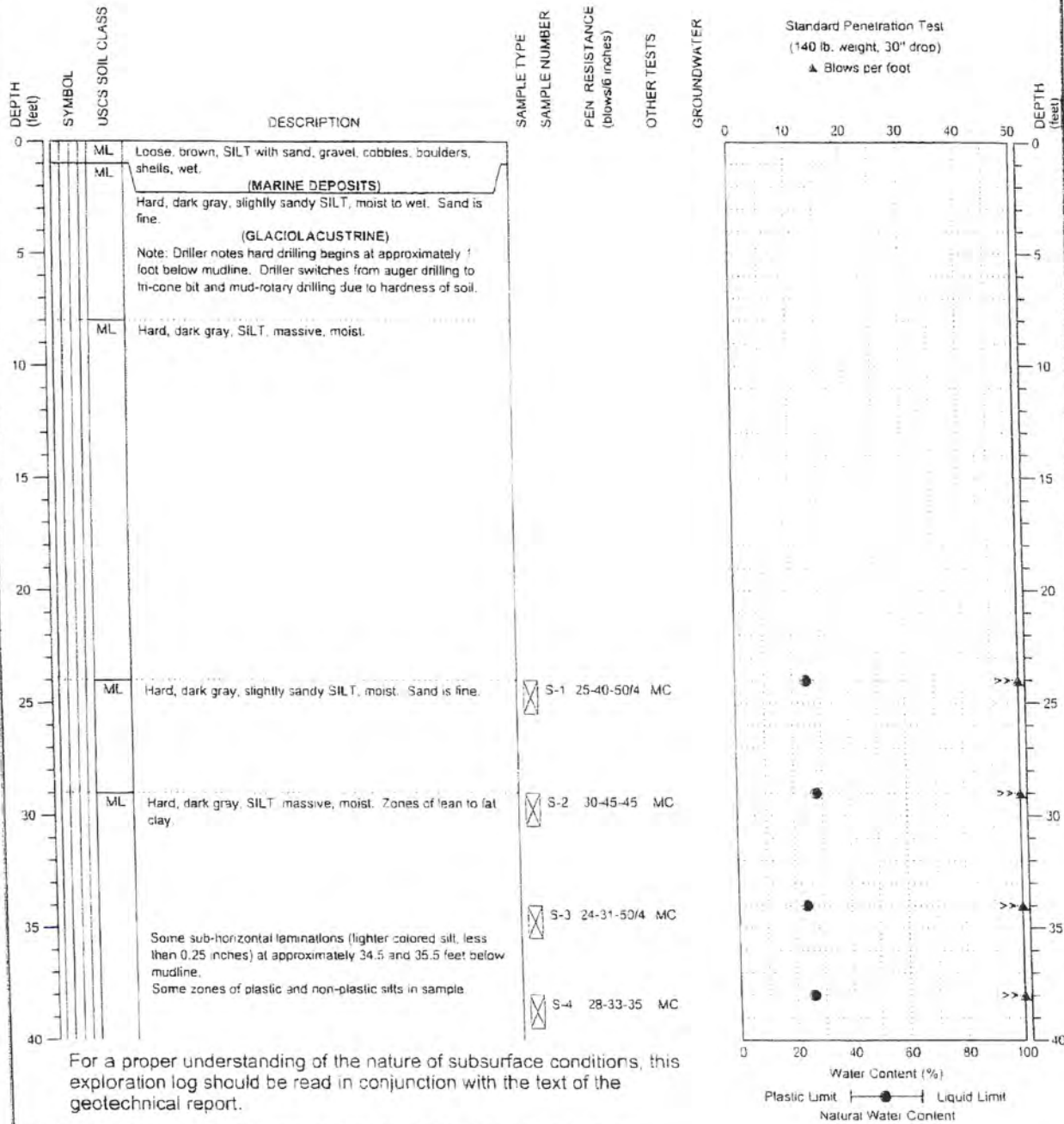


For a proper understanding of the nature of subsurface conditions, this exploration log should be read in conjunction with the text of the geotechnical report.

NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

DRILLING COMPANY: Holt Drilling, Inc.
 DRILLING METHOD: Hollow Stem Auger and Mud Rotary
 SAMPLING METHOD: SPT with automated trip hammer
 SURFACE ELEVATION: 5 ± feet

LOCATION: N270855 E1218194
 DATE STARTED: 6/8/2006
 DATE COMPLETED: 6/8/2006
 LOGGED BY: J. Speck



For a proper understanding of the nature of subsurface conditions, this exploration log should be read in conjunction with the text of the geotechnical report.

NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.



Squamish Pier and Dock Replacement
 Squamish, Washington

BORING:
 BH-3

PAGE: 1 of 2

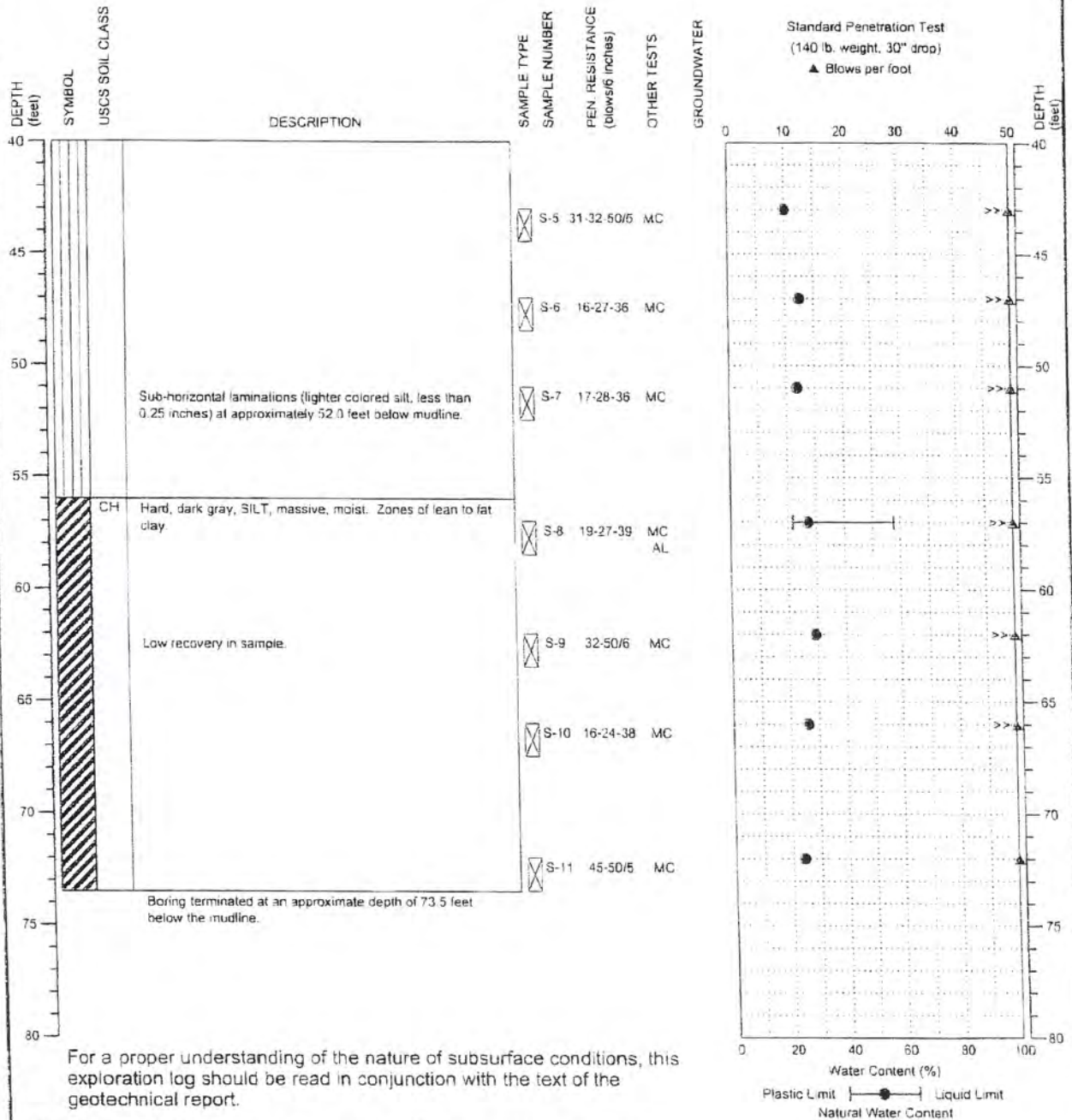
PROJECT NO: 2006-017

FIGURE

A-4

DRILLING COMPANY: Holt Drilling, Inc.
 DRILLING METHOD: Hollow Stem Auger and Mud Rotary
 SAMPLING METHOD: SPT with automated trip hammer
 SURFACE ELEVATION: 5 ± feet

LOCATION: N270855 E1218194
 DATE STARTED: 6/8/2006
 DATE COMPLETED: 6/8/2006
 LOGGED BY: J. Speck

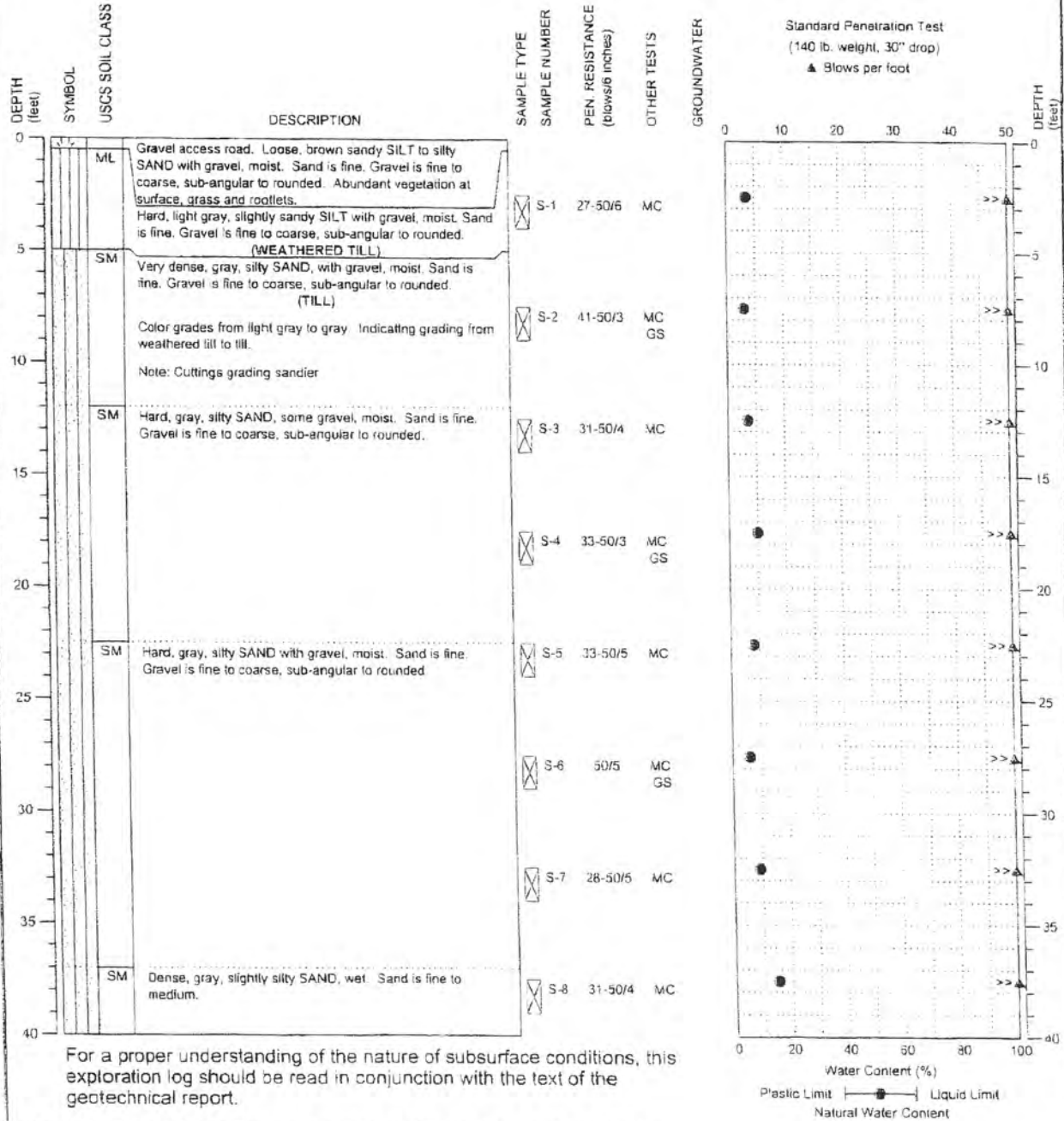


For a proper understanding of the nature of subsurface conditions, this exploration log should be read in conjunction with the text of the geotechnical report.

NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.

DRILLING COMPANY: Holt Drilling, Inc.
 DRILLING METHOD: Hollow Stem Auger
 SAMPLING METHOD: SPT with automated trip hammer
 SURFACE ELEVATION: 35 ± feet

LOCATION: N270859 E1217595
 DATE STARTED: 6/28/2006
 DATE COMPLETED: 6/28/2006
 LOGGED BY: J. Soack



For a proper understanding of the nature of subsurface conditions, this exploration log should be read in conjunction with the text of the geotechnical report.

NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.



Squamish Pier and Dock Replacement
 Squamish, Washington

BORING:
 BH-4

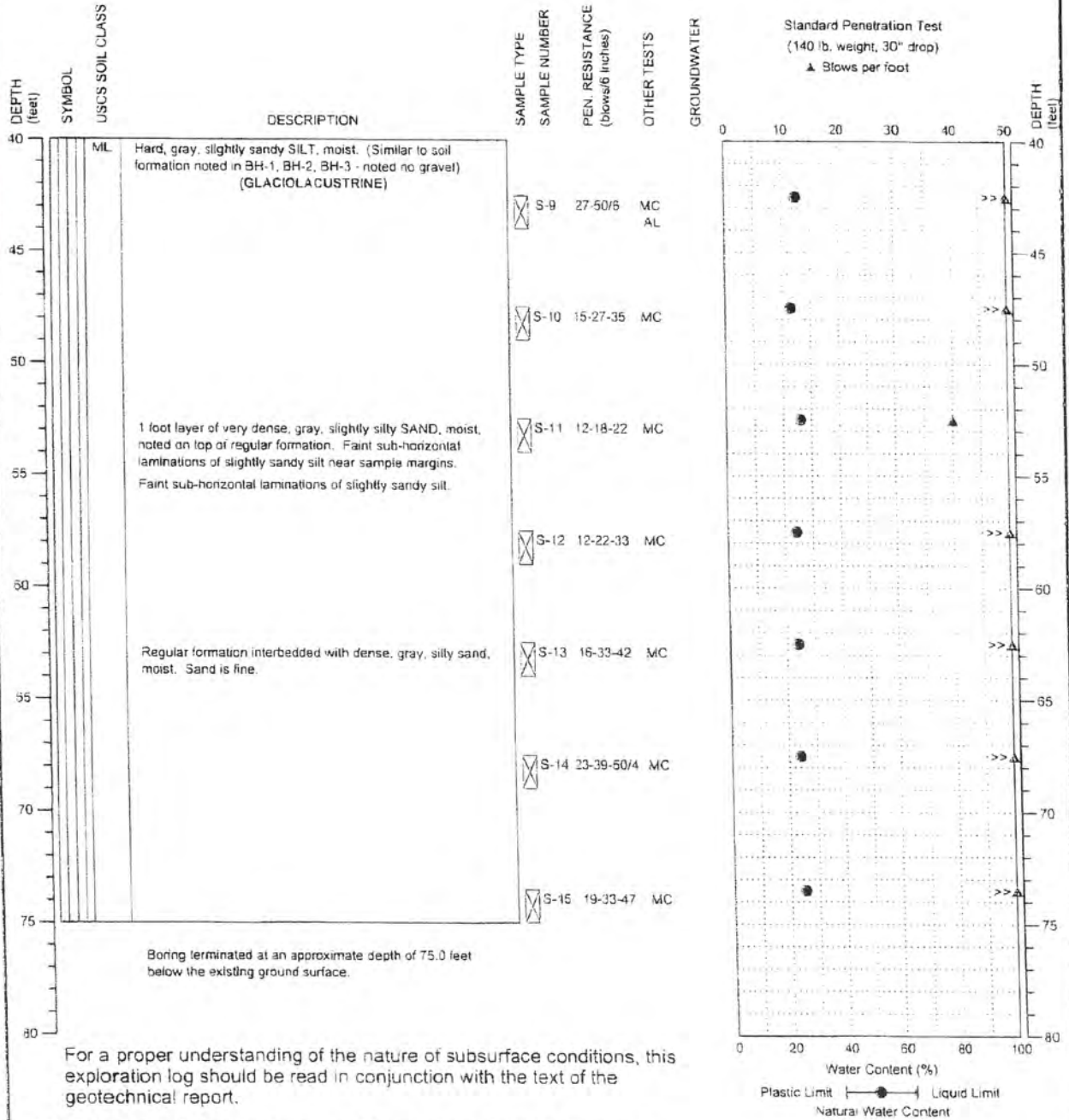
PAGE: 1 of 2

PROJECT NO.: 2006-017

FIGURE: A-5

DRILLING COMPANY: Holt Drilling, Inc.
 DRILLING METHOD: Hollow Stem Auger
 SAMPLING METHOD: SPT with automated trip hammer
 SURFACE ELEVATION: 35 ± feet

LOCATION: N270859 E1217595
 DATE STARTED: 6/28/2006
 DATE COMPLETED: 6/28/2006
 LOGGED BY: J. Speck



For a proper understanding of the nature of subsurface conditions, this exploration log should be read in conjunction with the text of the geotechnical report.

NOTE: This log of subsurface conditions applies only at the specified location and on the date indicated and therefore may not necessarily be indicative of other times and/or locations.



Squamish Pier and Dock Replacement
 Squamish, Washington

BORING:
 BH-4

PAGE: 2 of 2

PROJECT NO.: 2006-017

FIGURE

A-5

APPENDIX B

LABORATORY INVESTIGATION

DRAFT

APPENDIX B

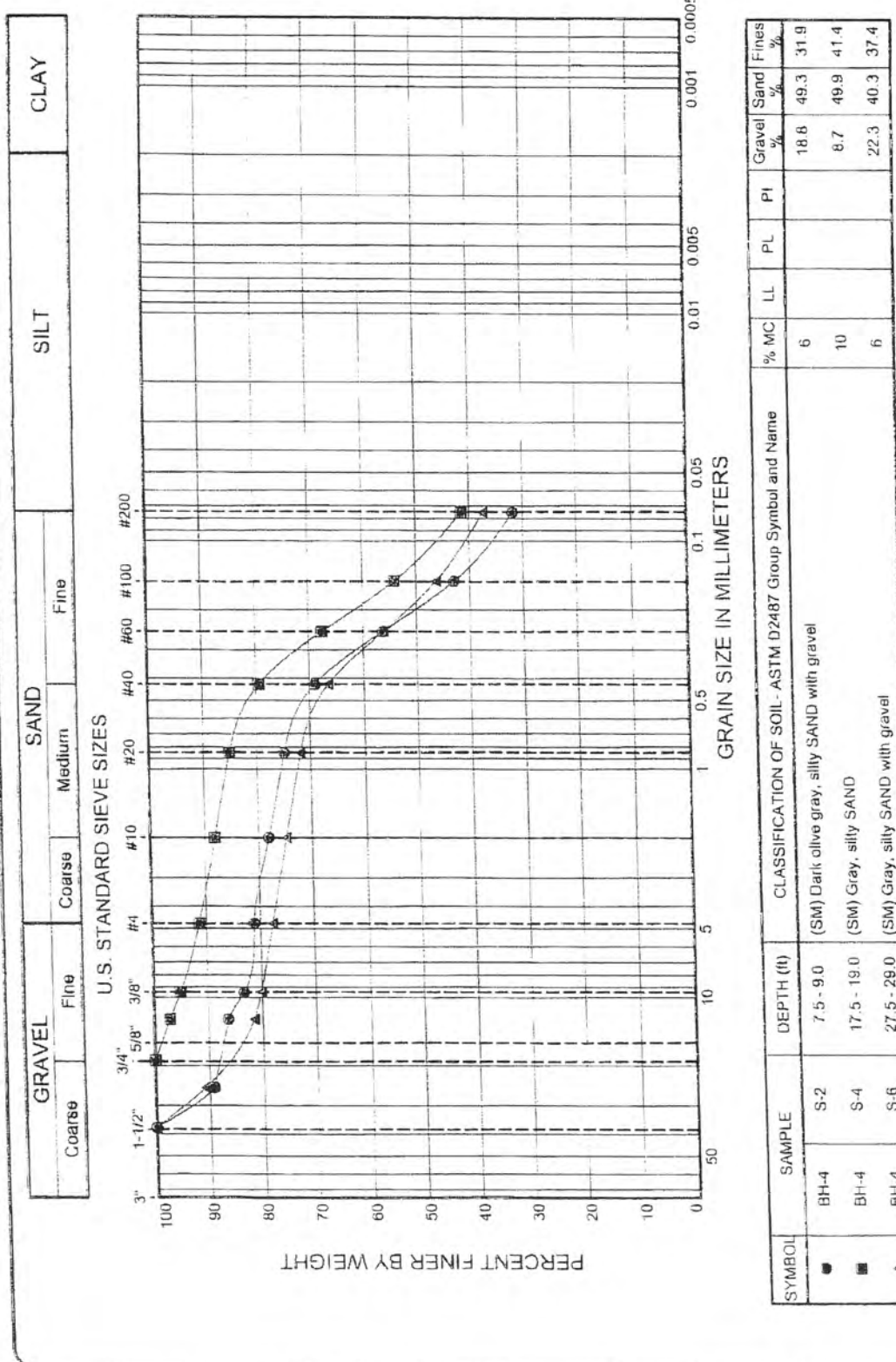
LABORATORY TESTING

Representative soil samples obtained from the explorations were returned to the HWA laboratory for further examination and testing. Laboratory tests were conducted on selected soil samples to characterize relevant engineering properties of the on-site materials. The laboratory testing program was performed in general accordance with appropriate ASTM Standards as outlined below.

MOISTURE CONTENT OF SOIL: The moisture content of selected soil samples (percent by dry mass) was determined in general accordance with ASTM D 2216. The results are shown at the sampled intervals on the appropriate summary logs in Appendix A.

PARTICLE SIZE ANALYSIS OF SOILS: Selected samples were tested to determine the particle distribution of material in general accordance with ASTM D422. The results are summarized on the attached Grain Size Distribution reports, which also provide information regarding the classification of the sample and the moisture content at the time of testing.

LIQUID LIMIT, PLASTIC LIMIT, AND PLASTICITY INDEX OF SOILS (ATTERBERG LIMITS): Selected samples were tested using method ASTM D 4318, multi-point method. The results are reported on the attached Liquid Limit, Plastic Limit, and Plasticity Index reports.

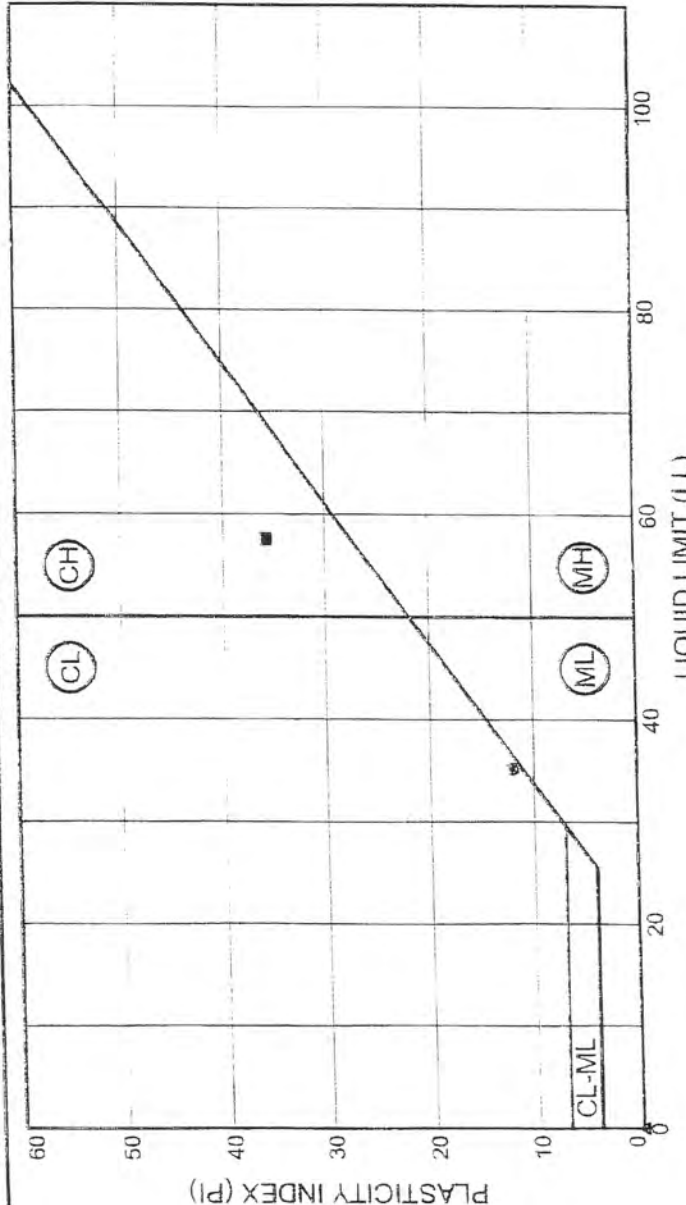


PARTICLE-SIZE ANALYSIS
OF SOILS
METHOD ASTM D422

Suquamish Pier and Dock Replacement
Suquamish, Washington

PROJECT NO.: 2006-017 FIGURE B-1





SYMBOL	SAMPLE	DEPTH (ft)	CLASSIFICATION	% MC	LL	PL	PI	% Fines
●	S-9	42.0 - 43.5	(CL) Gray, lean CLAY	23	35	23	12	
■	S-8	57.0 - 58.5	(CH) Gray, fat CLAY	27	58	22	36	
▲	S-9	42.5 - 44.0	(ML) Gray, SILT	25	NP	NP	NP	

LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX OF SOILS
METHOD ASTM D4318

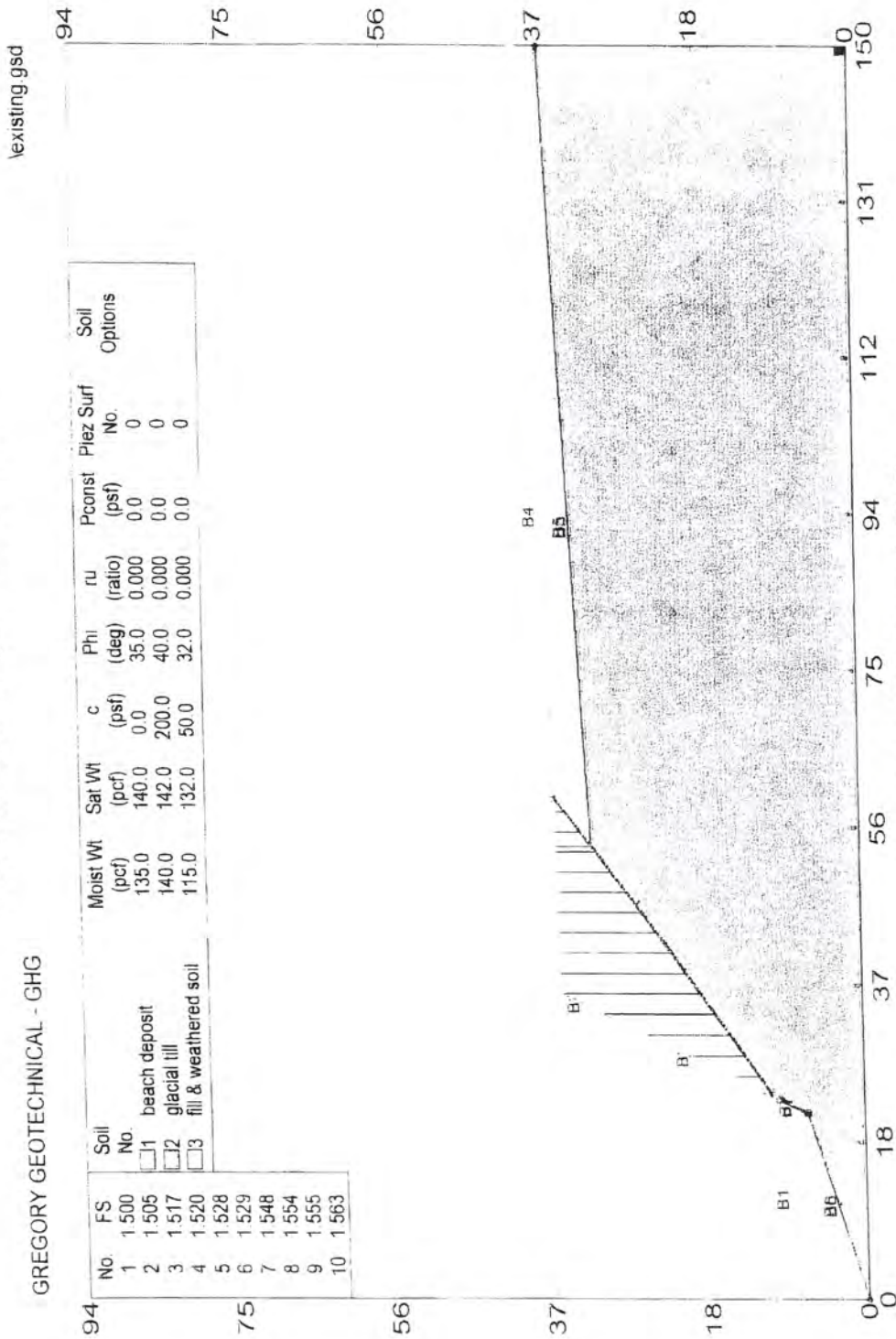
Suquamish Pier and Dock Replacement
Suquamish, Washington

PROJECT NO.: 2006-017 FIGURE: B-2



APPENDIX C
SLOPE STABILITY RESULTS

Suquamish Coastal Bluff Slope Assessment

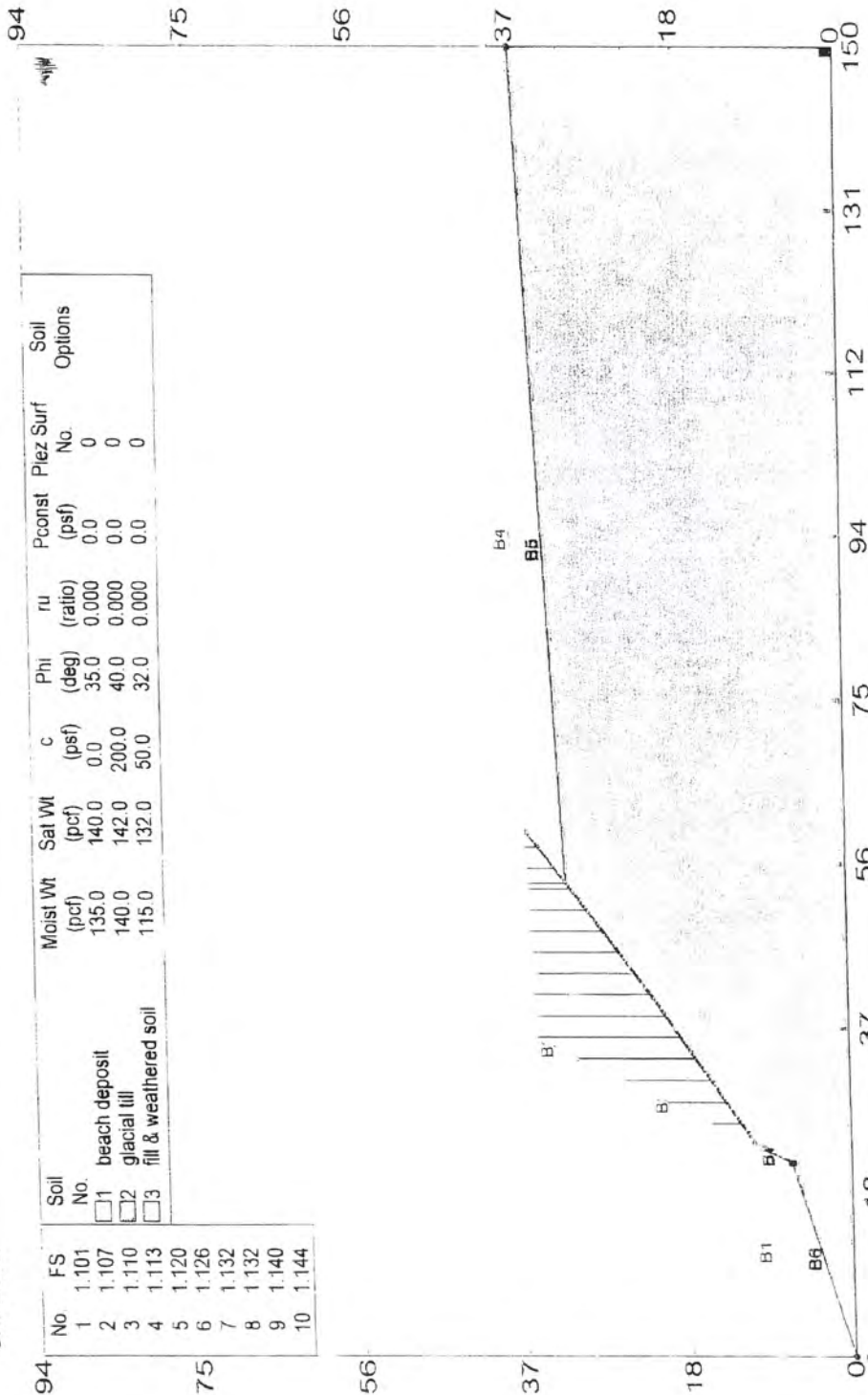


GEOSTASE FS = 1.500
Simplified Bishop Method

Squamish Coastal Bluff Slope Assessment

GREGORY GEOTECHNICAL - GHG

existing gsd



No.	FS	Soil No.	Moist Wt (pcf)	Sat Wt (pcf)	C (psf)	Phi (deg)	tu (ratio)	Pconst (psf)	Piez Surf No.	Soil Options
1	1.101	1	135.0	140.0	0.0	35.0	0.000	0.0	0	
2	1.107	1	140.0	140.0	0.0	35.0	0.000	0.0	0	beach deposit
3	1.110	2	140.0	142.0	200.0	40.0	0.000	0.0	0	glacial till
4	1.113	3	115.0	132.0	50.0	32.0	0.000	0.0	0	fill & weathered soil
5	1.120									
6	1.126									
7	1.132									
8	1.132									
9	1.140									
10	1.144									

GEOSTASE FS = 1.101
 Simplified Bishop Method
 kh = 0.17000



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ATTACHMENT H
INADVERTENT DISCOVERY PLAN



INADVERTENT DISCOVERY PLAN PLAN AND PROCEDURES FOR THE DISCOVERY OF CULTURAL RESOURCES AND HUMAN SKELETAL REMAINS

To request ADA accommodation, including materials in a format for the visually impaired, call Ecology at 360-407-6000 or visit <https://ecology.wa.gov/accessibility>. People with impaired hearing may call Washington Relay Service at 711. People with a speech disability may call TTY at 877-833-6341.

Site Name(s):

Location:

Project Lead/Organization:

County:

If this Inadvertent Discovery Plan (IDP) is for multiple (batched) projects, ensure the location information covers all project areas.

1. INTRODUCTION

The IDP outlines procedures to perform in the event of a discovery of archaeological materials or human remains, in accordance with applicable state and federal laws. An IDP is required, as part of Agency Terms and Conditions for all grants and loans, for any project that creates disturbance above or below the ground. An IDP is not a substitute for a formal cultural resource review (Executive 21-02 or Section 106).

Once completed, **the IDP should always be kept at the project site** during all project activities. All staff, contractors, and volunteers should be familiar with its contents and know where to find it.

2. CULTURAL RESOURCE DISCOVERIES

A cultural resource discovery could be prehistoric or historic. Examples include (see images for further examples):

- An accumulation of shell, burned rocks, or other food related materials.
- Bones, intact or in small pieces.
- An area of charcoal or very dark stained soil with artifacts.
- Stone tools or waste flakes (for example, an arrowhead or stone chips).
- Modified or stripped trees, often cedar or aspen, or other modified natural features, such as rock drawings.
- Agricultural or logging materials that appear older than 50 years. These could include equipment, fencing, canals, spillways, chutes, derelict sawmills, tools, and many other items.
- Clusters of tin cans or bottles, or other debris that appear older than 50 years.
- Old munitions casings. **Always assume these are live and never touch or move.**
- Buried railroad tracks, decking, foundations, or other industrial materials.
- Remnants of homesteading. These could include bricks, nails, household items, toys, food containers, and other items associated with homes or farming sites.

The above list does not cover every possible cultural resource. When in doubt, assume the material is a cultural resource.

3. ON-SITE RESPONSIBILITIES

If any employee, contractor, or subcontractor believes that they have uncovered cultural resources or human remains at any point in the project, take the following steps to ***Stop-Protect-Notify***. **If you suspect that the discovery includes human remains, also follow Sections 5 and 6.**

STEP A: Stop Work.

All work must stop immediately in the vicinity of the discovery.

STEP B: Protect the Discovery.

Leave the discovery and the surrounding area untouched and create a clear, identifiable, and wide boundary (30 feet or larger) with temporary fencing, flagging, stakes, or other clear markings. Provide protection and ensure integrity of the discovery until cleared by the Department of Archaeological and Historical Preservation (DAHP) or a licensed, professional archaeologist.

Do not permit vehicles, equipment, or unauthorized personnel to traverse the discovery site. Do not allow work to resume within the boundary until the requirements of this IDP are met.

STEP C: Notify Project Archaeologist (if applicable).

If the project has an archaeologist, notify that person. If there is a monitoring plan in place, the archaeologist will follow the outlined procedure.

STEP D: Notify Project and Washington Department of Ecology (Ecology) contacts.

Project Lead Contacts

Primary Contact

Name:

Organization:

Phone:

Email:

Alternate Contact

Name:

Organization:

Phone:

Email:

Ecology Contacts (completed by Ecology Project Manager)

Ecology Project Manager

Name:

Program:

Phone:

Email:

Alternate or Cultural Resource Contact

Name:

Program:

Phone:

Email:

STEP E: Ecology will notify DAHP.

Once notified, the Ecology Cultural Resource Contact or the Ecology Project Manager will contact DAHP to report and confirm the discovery. To avoid delay, the Project Lead/Organization will contact DAHP if they are not able to reach Ecology.

DAHP will provide the steps to assist with identification. DAHP, Ecology, and Tribal representatives may coordinate a site visit following any necessary safety protocols. DAHP may also inform the Project Lead/Organization and Ecology of additional steps to further protect the site.

Do not continue work until DAHP has issued an approval for work to proceed in the area of, or near, the discovery.

DAHP Contacts:

Name: Rob Whitlam, PhD
Title: State Archaeologist
Cell: 360-890-2615
Email: Rob.Whitlam@dahp.wa.gov
Main Office: 360-586-3065

Human Remains/Bones:

Name: Guy Tasa, PhD
Title: State Anthropologist
Cell: 360-790-1633 (24/7)
Email: Guy.Tasa@dahp.wa.gov

4. TRIBAL CONTACTS

In the event cultural resources are discovered, the following tribes will be contacted. See Section 10 for Additional Resources.

Tribe:	Tribe:
Name:	Name:
Title:	Title:
Phone:	Phone:
Email:	Email:
Tribe:	Tribe:
Name:	Name:
Title:	Title:
Phone:	Phone:
Email:	Email:

Please provide contact information for additional tribes within your project area, if needed, in Section 11.

5. FURTHER CONTACTS (if applicable)

If the discovery is confirmed by DAHP as a cultural or archaeological resource, or as human remains, and there is a partnering federal or state agency, Ecology or the Project Lead/Organization will ensure the partnering agency is immediately notified.

Federal Agency:

Agency:

Name:

Title:

Phone:

Email:

State Agency:

Agency:

Name:

Title:

Phone:

Email:

6. SPECIAL PROCEDURES FOR THE DISCOVERY OF HUMAN SKELETAL MATERIAL

Any human skeletal remains, regardless of antiquity or ethnic origin, will at all times be treated with dignity and respect. Follow the steps under **Stop-Protect-Notify**. For specific instructions on how to handle a human remains discovery, see: [RCW 68.50.645: Skeletal human remains—Duty to notify—Ground disturbing activities—Coroner determination—Definitions](#).

Suggestion: If you are unsure whether the discovery is human bone or not, contact Guy Tasa with DAHP, for identification and next steps. Do not pick up the discovery.

Guy Tasa, PhD State Physical Anthropologist

Guy.Tasa@dahp.wa.gov

(360) 790-1633 (Cell/Office)

For discoveries that are confirmed or suspected human remains, follow these steps:

1. Notify law enforcement and the Medical Examiner/Coroner using the contacts below. **Do not call 911** unless it is the only number available to you.

Enter contact information below (required):

- Local Medical Examiner or Coroner name and phone:

 - Local Law Enforcement main name and phone:

 - Local Non-Emergency phone number (911 if without a non-emergency number):
2. The Medical Examiner/Coroner (with assistance of law enforcement personnel) will determine if the remains are human or if the discovery site constitutes a crime scene and will notify DAHP.
 3. **DO NOT speak with the media, allow photography or disturbance of the remains, or release any information about the discovery on social media.**
 4. If the remains are determined to be non-forensic, Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection and to shield them from being photographed by others or disturbed.

Further activities:

- Per [RCW 27.44.055](#), [RCW 68.50](#), and [RCW 68.60](#), DAHP will have jurisdiction over non-forensic human remains. Ecology staff will participate in consultation. Organizations may also participate in consultation.
- Documentation of human skeletal remains and funerary objects will be agreed upon through the consultation process described in [RCW 27.44.055](#), [RCW 68.50](#), and [RCW 68.60](#).
- When consultation and documentation activities are complete, work in the discovery area may resume as described in Section 8.

If the project occurs on federal lands (such as a national forest or park or a military reservation) the provisions of the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) apply and the responsible federal agency will follow its provisions. Note that state highways that cross federal lands are on an easement and are not owned by the state.

If the project occurs on non-federal lands, the Project Lead/Organization will comply with applicable state and federal laws, and the above protocol.

7. DOCUMENTATION OF ARCHAEOLOGICAL MATERIALS

Archaeological resources discovered during construction are protected by state law [RCW 27.53](#) and assumed eligible for inclusion in the National Register of Historic Places under Criterion D until a formal Determination of Eligibility is made.

The Project Lead/Organization must ensure that proper documentation and field assessment are made of all discovered cultural resources in cooperation with all parties: the federal agencies (if any), DAHP, Ecology, affected tribes, and the archaeologist.

The archaeologist will record all prehistoric and historic cultural material discovered during project construction on a standard DAHP archaeological site or isolate inventory form. They will photograph site overviews, features, and artifacts and prepare stratigraphic profiles and soil/sediment descriptions for minimal subsurface exposures. They will document discovery locations on scaled site plans and site location maps.

Cultural features, horizons, and artifacts detected in buried sediments may require the archaeologist to conduct further evaluation using hand-dug test units. They will excavate units in a controlled fashion to expose features, collect samples from undisturbed contexts, or to interpret complex stratigraphy. They may also use a test unit or trench excavation to determine if an intact occupation surface is present. They will only use test units when necessary to gather information on the nature, extent, and integrity of subsurface cultural deposits to evaluate the site's significance. They will conduct excavations using standard archaeological techniques to precisely document the location of cultural deposits, artifacts, and features.

The archaeologist will record spatial information, depth of excavation levels, natural and cultural stratigraphy, presence or absence of cultural material, and depth to sterile soil, regolith, or bedrock for each unit on a standard form. They will complete test excavation unit level forms, which will include plan maps for each excavation level and artifact counts and material types, number, and vertical provenience (depth below

surface and stratum association where applicable) for all recovered artifacts. They will draw a stratigraphic profile for at least one wall of each test excavation unit.

The archaeologist will screen sediments excavated for purposes of cultural resources investigation through 1/8-inch mesh, unless soil conditions warrant 1/4-inch mesh.

The archaeologist will analyze, catalogue, and temporarily curate all prehistoric and historic artifacts collected from the surface and from probes and excavation units. The ultimate disposition of cultural materials will be determined in consultation with the federal agencies (if any), DAHP, Ecology, and the affected tribe(s).

Within 90 days of concluding fieldwork, the archaeologist will provide a technical report describing any and all monitoring and resultant archaeological excavations to the Project Lead/Organization, who will forward the report to Ecology, the federal agencies (if any), DAHP, and the affected tribe(s) for review and comment.

If assessment activities expose human remains (burials, isolated teeth, or bones), the archaeologist and Project Lead/Organization will follow the process described in **Section 6**.

8. PROCEEDING WITH WORK

The Project Lead/Organization shall work with the archaeologist, DAHP, and affected tribe(s) to determine the appropriate discovery boundary and where work can continue.

Work may continue at the discovery location only after the process outlined in this plan is followed and the Project Lead/Organization, DAHP, any affected tribe(s), Ecology, and the federal agencies (if any) determine that compliance with state and federal laws is complete.

9. ORGANIZATION RESPONSIBILITY

The Project Lead/Organization is responsible for ensuring:

- This IDP has complete and accurate information.
- This IDP is immediately available to all field staff at the sites and available by request to any party.
- This IDP is implemented to address any discovery at the site.
- That all field staff, contractors, and volunteers are instructed on how to implement this IDP.

10. ADDITIONAL RESOURCES

Informative Video

Ecology recommends that all project staff, contractors, and volunteers view this informative video explaining the value of IDP protocol and what to do in the event of a discovery. The target audience is anyone working on the project who could unexpectedly find cultural resources or human remains while excavating or digging. The video is also posted on DAHP's inadvertent discovery language website.

[Ecology's IDP Video](https://www.youtube.com/watch?v=ioX-4cXfbDY) (<https://www.youtube.com/watch?v=ioX-4cXfbDY>)

Informational Resources

[DAH P \(https://dahp.wa.gov\)](https://dahp.wa.gov)

[Washington State Archeology \(DAH P 2003\)](https://dahp.wa.gov/sites/default/files/Field%20Guide%20to%20WA%20Arch_0.pdf)

[\(https://dahp.wa.gov/sites/default/files/Field%20Guide%20to%20WA%20Arch_0.pdf\)](https://dahp.wa.gov/sites/default/files/Field%20Guide%20to%20WA%20Arch_0.pdf)

[Association of Washington Archaeologists \(https://www.archaeologyinwashington.com\)](https://www.archaeologyinwashington.com)

Potentially Interested Tribes

[Interactive Map of Tribes by Area](https://dahp.wa.gov/archaeology/tribal-consultation-information)

[\(https://dahp.wa.gov/archaeology/tribal-consultation-information\)](https://dahp.wa.gov/archaeology/tribal-consultation-information)

[WSDOT Tribal Contact Website](https://wsdot.wa.gov/tribal/TribalContacts.htm)

[\(https://wsdot.wa.gov/tribal/TribalContacts.htm\)](https://wsdot.wa.gov/tribal/TribalContacts.htm)

11. ADDITIONAL INFORMATION

Please add any additional contact information or other information needed within this IDP.

Implement the IDP if you see...

Chipped stone artifacts.

Examples are:

- Glass-like material.
- Angular material.
- “Unusual” material or shape for the area.
- Regularity of flaking.
- Variability of size.



Stone artifacts from Oregon.



Stone artifacts from Washington.



Biface-knife, scraper, or pre-form found in NE Washington. Thought to be a well knapped object of great antiquity. Courtesy of Methow Salmon Rec. Foundation.

Implement the IDP if you see...

Ground stone artifacts.

Examples are:

- Unusual or unnatural shapes or unusual stone.
- Striations or scratching.
- Etching, perforations, or pecking.
- Regularity in modifications.
- Variability of size, function, or complexity.



Above: Fishing Weight - credit [CRITFC Treaty Fishing Rights website](#).



Artifacts from unknown locations (left and right images).



Implement the IDP if you see...

Bone or shell artifacts, tools, or beads.

Examples are:

- Smooth or carved materials.
- Unusual shape.
- Pointed as if used as a tool.
- Wedge shaped like a “shoehorn”.
- Variability of size.
- Beads from shell (‘dentalium’) or tusk.



Upper Left: *Bone Awls from Oregon.*

Upper Center: *Bone Wedge from California.*

Upper Right: *Plateau dentalium choker and bracelet, from Nez Perce National Historical Park, 19th century, made using Antalis pretiosa shells Credit: Nez Perce - Nez Perce National Historical Park, NEPE 8762, Public Domain.*

Above: *Tooth Pendants. Right: Bone Pendants. Both from Oregon and Washington.*



Implement the IDP if you see...

Culturally modified trees, fiber, or wood artifacts.

Examples are:

- Trees with bark stripped or peeled, carvings, axe cuts, de-limbing, wood removal, and other human modifications.
- Fiber or wood artifacts in a wet environment.
- Variability of size, function, and complexity.



Left and Below: *Culturally modified tree and an old carving on an aspen (Courtesy of DAHP).*

Right, Top to Bottom: *Artifacts from Mud Bay, Olympia: Toy war club, two strand cedar rope, wet basketry.*



Implement the IDP if you see...

Strange, different, or interesting looking dirt, rocks, or shells.

Human activities leave traces in the ground that may or may not have artifacts associated with them. Examples are:

- “Unusual” accumulations of rock (especially fire-cracked rock).
- “Unusual” shaped accumulations of rock (such as a shape similar to a fire ring).
- Charcoal or charcoal-stained soils, burnt-looking soils, or soil that has a “layer cake” appearance.
- Accumulations of shell, bones, or artifacts. Shells may be crushed.
- Look for the “unusual” or out of place (for example, rock piles in areas with otherwise few rocks).



Shell Midden pocket in modern fill discovered in sewer trench.



Underground oven. Courtesy of DAHP.

Shell midden with fire cracked rock.



Hearth excavated near Hamilton, WA.

Implement the IDP if you see...

Historic period artifacts (historic archaeology considered older than 50 years).

Examples are:

- Agricultural or logging equipment. May include equipment, fencing, canals, spillways, chutes, derelict sawmills, tools, etc.
- Domestic items including square or wire nails, amethyst colored glass, or painted stoneware.



Left: Top to Bottom: *Willow pattern serving bowl and slip joint pocket knife discovered during Seattle Smith Cove shantytown (45-KI-1200) excavation.*

Right: *Collections of historic artifacts discovered during excavations in eastern Washington cities.*



Implement the IDP if you see...

Historic period artifacts (historic archaeology considered older than 50 years).

Examples are:

- Railway tokens, coins, and buttons.
- Spectacles, toys, clothing, and personal items.
- Items helping to understand a culture or identity.
- Food containers and dishware.



Main Image: *Dishes, bottles, workboot found at the North Shore Japanese bath house (ofuro) site, Courtesy Bob Muckle, Archaeologist, Capilano University, B.C. This is an example of an above ground resource.*



Right, from Top to Bottom:
Coins, token, spectacles and Montgomery Ward pitchfork toy discovered during Seattle Smith Cove shantytown (45-KI-1200) excavation.



Implement the IDP if you see...

- Old munition casings – if you see ammunition of any type – ***always assume they are live and never touch or move!***
- Tin cans or glass bottles with an older manufacturer's technique – maker's mark, distinct colors such as turquoise, or an older method of opening the container.



Far Left: .303 British cartridge found by a WCC planting crew on Skagit River. Don't ever touch something like this!
Left: Maker's mark on bottom of old bottle.

Right: Old beer can found in Oregon. ACME was owned by Olympia Brewery. Courtesy of Heather Simmons.



Logo employed by Whithall Tatum & Co. between 1924 to 1938 (Lockhart et al. 2016).



Can opening dates, courtesy of W.M. Schroeder.

Implement the IDP if you see...

You see historic foundations or buried structures.

Examples are:

- Foundations.
- Railroad and trolley tracks.
- Remnants of structures.



Counter Clockwise, Left to Right: *Historic structure 45KI924, in WSDOT right of way for SR99 tunnel. Remnants of Smith Cove shantytown (45-KI-1200) discovered during Ecology CSO excavation, City of Spokane historic trolley tracks uncovered during stormwater project, intact foundation of historic home that survived the Great Ellensburg Fire of July 4, 1889, uncovered beneath parking lot in Ellensburg.*

Implement the IDP if you see...

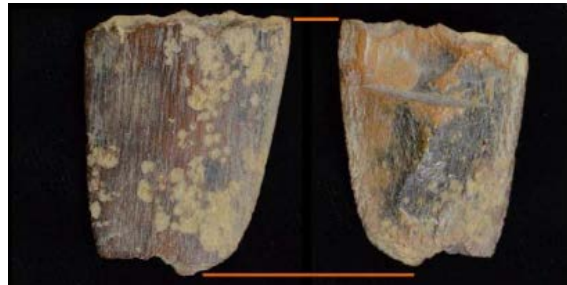
Potential human remains.

Examples are:

- Grave headstones that appear to be older than 50 years.
- Bones or bone tools--intact or in small pieces. It can be difficult to differentiate animal from human so they must be identified by an expert.
- These are all examples of animal bones and are not human.

Center: *Bone wedge tool, courtesy of Smith Cove Shantytown excavation (45KI1200).*

Other images (Top Right, Bottom Left, and Bottom) Center: Courtesy of DAHP.



Directly Above: This is a real discovery at an Ecology sewer project site.

What would you do if you found these items at a site? Who would be the first person you would call?

Hint: Read the plan!

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ATTACHMENT I
TRAFFIC CONTROL PLANS



ROAD CLOSED
250 FEET AHEAD
LOCAL TRAFFIC ONLY

Temporarily cover or remove
STOP SIGN/ONE WAY assembly

Variable Message Sign

SIGN SPACING = X (1)		
RURAL HIGHWAYS	60 / 65 MPH	800' ±
RURAL ROADS	45 / 55 MPH	500' ±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' ± (2)
URBAN STREETS	25 MPH OR LESS	100' ± (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

MINIMUM TAPER LENGTH = L (feet)										
LANE WIDTH (feet)	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
10	105	150	205	270	450	500	550	-	-	-
11	115	165	225	295	495	550	605	660	-	-
12	125	180	245	320	540	600	660	720	-	-

BUFFER DATA										
LONGITUDINAL BUFFER SPACE = B										
SPEED (MPH)	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730
TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R										
HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs.						HOST VEHICLE WEIGHT > 22,000 lbs.				
< 45 MPH	45-55 MPH	> 55 MPH	< 45 MPH	45-55 MPH	> 55 MPH					
100'	123'	172'	74'	100'	150'					
PROTECTIVE VEHICLE (WORK VEHICLE) = R										
NO SPECIFIED DISTANCE REQUIRED										

Legend

Jersey



Date: 11/5/2024 **Author:** Ron Pierce **Project:** Kitsap County Suquamish Regional Stormwater Treatment Facility Project

Comments:
All devices must meet or exceed current MUTCD and Washington State Specifications

Device placement shall be based on posted speed limit (see chart)

Not to scale





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SIGN SPACING = X (1)		
RURAL HIGHWAYS	60 / 65 MPH	800' ±
RURAL ROADS	45 / 55 MPH	500' ±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS, URBAN ARTERIALS, RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200' ± (2)
URBAN STREETS	25 MPH OR LESS	100' ± (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERSECTIONS AND DRIVEWAYS.
 (2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

LANE WIDTH (feet)	MINIMUM TAPER LENGTH = L (feet)									
	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
10	105	150	205	270	450	500	550	-	-	-
11	115	165	225	295	495	550	605	660	-	-
12	125	180	245	320	540	600	660	720	-	-

BUFFER DATA										
LONGITUDINAL BUFFER SPACE = B										
SPEED (MPH)	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730

TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R					
HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs.			HOST VEHICLE WEIGHT > 22,000 lbs.		
< 45 MPH	45-55 MPH	> 55 MPH	< 45 MPH	45-55 MPH	> 55 MPH
100'	123'	172'	74'	100'	150'

PROTECTIVE VEHICLE (WORK VEHICLE) = R
NO SPECIFIED DISTANCE REQUIRED



ROAD CLOSED 250 FEET AHEAD LOCAL TRAFFIC ONLY

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